STRATEGIES IN READING ONLINE AND PRINTED ACADEMIC TEXTS OF ENGLISH MAJOR STUDENTS OF SRINAKHARINWIROT UNIVERSITY

A THESIS

BY

TARNRAPORN SONGSIENGCHAI

Presented in Partial Fulfillment of the Requirements for the

Master of Arts Degree in English

at Srinakharinwirot University

May 2010

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AN ABSTRACT

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The purposes of this study were to investigate reading strategies used by third-year English major students and reading strategies used by high and low proficient when reading online and printed academic texts, and to find out the differences in reading strategy use between high proficient and low proficient students. This study was aimed to find out how high and low proficient students use strategies in reading online and printed academic texts in English. In the quantitative study, 73 third-year English major students were purposively selected and these participants took the Reading Comprehension Test and competed two sets of the questionnaires: the Questionnaire for Strategies in Reading Online Academic Texts and the Questionnaire for Strategies in Reading Printed Academic Texts. In the qualitative study, 3 high and 3 low proficient students were selected to perform reading in the think-aloud sessions. The results of the study were: 1) overall, the students used reading strategies in online academic texts at the medium level. In reading printed academic texts, the students used both Cognitive and Metacognitive Strategies at the medium level. 2) Both high proficient and low proficient students used reading strategies in online academic texts at the medium level. In reading printed academic texts, high proficient students used Cognitive Strategies and Metacognitive Strategies at the high level: whereas, low proficient students used them at the medium level. 3) The use of strategies in reading online and printed academic texts of high and low proficient students was significantly different at the 0.05 level. 4) High proficient students used reading strategies more effectively than the low proficient students.

Both high and low proficient students used various effective reading strategies, but the low proficient students could apply these strategies less effectively. The finding suggested that to develop college students' reading ability, the students with low proficient level should be taught to employ reading strategies that high proficient students use to read both online and printed texts more frequently and automatically.

กลวิธีการอ่านสื่อแบบออนไลน์และเอกสารตีพิมพ์เชิงวิชาการของนิสิตวิชาเอกภาษาอังกฤษ มหาวิทยาลัยศรีนครินทรวิโรฒ

บทคัดย่อ

ของ

ธารราพร ทรงเสี่ยงไชย

เสนอต่อบัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ เพื่อเป็นส่วนหนึ่งของการศึกษา ตามหลักสูตรปริญญาการศึกษามหาบัณฑิต สาขาวิชาภาษาอังกฤษ

พฤษภาคม 2553

ธารราพร ทรงเสี่ยงไชย. (2553). กลวิธีการอ่านสื่อแบบออนไลน์และเอกสารตีพิมพ์เชิงวิชาการของนิสิตวิชาเอกภาษาอังกฤษ มหาวิทยาลัยศรีนครินทรวิโรฒ วิทยานิพนธ์ ศศ.ม. (ภาษาอังกฤษ). กรุงเทพฯ: บัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ. คณะกรรมการควบคุม: ดร. วไลพร ฉายา, ดร. แสงจันทร์ เหมเชื้อ.

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษากลวิธีการอ่านของนิสิตวิชาเอกภาษาอังกฤษชั้นปีที่ 3 และนิสิตที่มีความสามารถในการอ่านสูงและต่ำ ในการอ่านสื่อแบบออนไลน์และเอกสารตีพิมพ์เชิงวิชาการ ศึกษาความแตกต่างระหว่างการใช้กลวิธีในการอ่านของนิสิตที่มีความสามารถในการอ่านสูงและต่ำในการอ่านสื่อออนไลน์และเอกสารตีพิมพ์เชิงวิชาการ กลุ่มตัวอย่างที่ใช้ในส่วนของการวิจัยเชิงปริมาณคือ นิสิตวิชาเอกภาษาอังกฤษชั้นปีที่สามจำนวน 73 คน ในส่วนของการวิจัยเชิงคุณภาพได้แบ่งนิสิตออกเป็น นิสิตที่มีความสามารถในการอ่านสูง จำนวน 3 คนและนิสิตที่มีความสามารถในการอ่านต่ำ จำนวน 3 คน เครื่องมือที่ใช้ในการวิจัยคือ แบบทดสอบความเข้าใจในการอ่าน แบบสอบถามจำนวนสองชุดซึ่งได้แก่ แบบสอบถามกลวิธีการอ่านภาษาอังกฤษแบบออนไลน์ แบบสอบถามกลวิธีการอ่านภาษาอังกฤษเอกสารตีพิมพ์เชิงวิชาการ การคิดดัง (Think-aloud) และการสัมภาษณ์โดยผู้วิจัย ผลการวิจัยพบว่า 1)โดยรวมนิสิตใช้กลวิธีการอ่านแบบออนไลน์ในระดับปานกลาง โดยใช้กลวิธีด้านสนับสนุน (Support Strategies) มากที่สุด รองลงมาเป็นกลวิธีการแก้ปัญหา (Problem Solving Strategies) และกลวิธีองค์รวม (Global Reading Strategies) สำหรับการอ่านเอกสารตีพิมพ์นั้นนิสิตใช้กลวิธีพุทธิปัญญา(Cognitive Strategies) และ กลวิธีอภิปัญญา (Metacognitive Strategies) ในระดับปานกลาง 2) นิสิตที่มีความสามารถด้านการอ่านสูงและนิสิตที่มีความสามารถด้านการอ่านต่ำ ใช้กลวิธีในการอ่านสื่อออนไลน์อยู่ในระดับปานกลาง ส่วนกลวิธีการอ่านเอกสารตีพิมพ์นั้น นิสิตที่มีความสามารถด้านการอ่านระดับสูงใช้กลวิธีพุทธิปัญญาและกลวิธีอภิปัญญาในระดับสูง ในขณะที่นิสิตที่มีความสามารถด้านการอ่านต่ำใช้กลวิธีการอ่านดังกล่าวในระดับปานกลาง 3) การใช้กลวิธีในการอ่านสื่อออนไลน์และเอกสารตีพิมพ์ของนิสิตที่มีความสามารถด้านการอ่านสูงและต่ำแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 4) จากการศึกษาในเชิงคุณภาพพบว่านิสิตที่มีความสามารถในการอ่านสูงมีความสามารถในด้านการใช้กลวิธีในการอ่านอย่างมีประสิทธิภาพมากกว่า แม้ว่านิสิตทั้งสองกลุ่มมีความรู้ในด้านกลวิธีในการอ่าน แต่นิสิตที่มีความสามารถในการอ่านต่ำสามารถประยุกต์ใช้กลวิธีในการอ่านได้อย่างมีประสิทธิภาพเพียงเล็กน้อย ผลการวิจัยครั้งนี้อาจนำไปใช้ในการพัฒนาความสามารถในการอ่านข้อเขียนเชิงวิชาการและสื่อแบบออนไลน์ โดยฝึกกลวิธีในการอ่านข้อเขียนทั้งสองแบบที่ผู้ที่อ่านเก่งใช้ ให้ผู้เรียนสามารถใช้กลวิธีการอ่านดังกล่าวเพิ่มขึ้นและใช้ได้อย่างอัตโนมัติ

The thesis titled

"Strategies in Reading Online and Printed Academic Texts of English Major Students of Srinakharinwirot University"

By

Tarnraporn Songsiengchai

has been approved by the Graduate School as partial fulfillment of the requirements for the Master of Arts degree in English of Srinakharinwirot University.

……..……..…. Dean of Graduate School

(Assoc. Prof. Dr. Somchai Santiwatanakul)

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Tarnraporn Songsiengchai

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CHAPTER I

INTRODUCTION

Background of the Study

English has long been considered a global language used for communication by the majority of people in most countries around the world. To communicate in English effectively and successfully, people need four language skills: listening, reading, speaking and writing. Of all the four skills, reading appears to be the most essential skill for people who learn English as a second and foreign language in the academic setting (Grabe, 1991), and also for readers who do not have an opportunity to further their studies in a formal educational system. Reading is an important tool for English as second language (ESL) learners and English as foreign language (EFL) learners to acquire knowledge in their field, whereas, reading is more important for those in non-formal educational system to self-study for their life long learning. In addition, reading in English is required because it is the language for science, technology, advanced research and so forth (Grabe & Stoller, 2002, p. 2). Therefore, the ability to read in English efficiently will make greater progress and attain greater development in all academic areas for learners both in academic and non-academic contexts (Anderson, 1999, p. 1).

Within the age of information technology, reading in ESL/EFL context is increasingly important because of the Internet context for teaching and learning, and a large number of authentic material resources and information. The huge materials and information are gathered on the Internet in the form of electronic materials such as e-books, e-journals, research articles, as well as the online courses for self-directed learning. Therefore, ESL/EFL learners both in the formal and non-formal educational system all around the world need to develop reading skills to take advantages from

available information from the printed materials and online documents. In academic context, the ability to read in English is essential for students at all levels, particularly university students both undergraduate and graduate students. Those students require the academic reading skills and strategies when they read academic texts of both printed and electronic texts as well as critical literacy skills (Levine, Ferez & Reves, 2002).

However, a number of studies have revealed the reading problems and the quality of reading of ESL/EFL students. Some of the problems those ESL/EFL students encounter are inability to read selectively (Dhieb-Henia, 2003), lack of target language proficiency and vocabulary (Kasper, 1993), unfamiliarity with the content of the texts (Carrell & Floyd, 1987) and inefficient reading strategies (Carrell, 1989). These are factors that may have an influence on ESL/EFL students' reading ability (Tercanlioglu, 2004, p.562).

One of the main difficulties of ESL/EFL students at the university level is related to the nature of reading itself. In 1983, the Michigan Department Education conceptualizes reading as the process of constructing meaning through the text, and the context of the reading situation. In Cross and Paris's definition (1988) reading is a powerful activity requiring the orchestration of a wide variety of cognitive strategies to decode, comprehend and learn from text. Oxford and Crookall (1989) see reading as a complex process of constructing meaning through which readers use strategies to facilitate their comprehension. Goodman (1996) defines reading as an active process in which readers use effective strategies to extract meaning from a text. Such definitions suggest the need to use reading strategies to get comprehension from the text. For ESL or EFL readers, reading appears to be more problematic because in the process of reading means the readers need to construct meaning from a written text.

which is not their native language. In addition, Carrell and Escay (1998) point out that "reading is a receptive language process that starts with linguistic surface representation encoded by a writer and ends with meaning which the reader constructs" (p.12). Anderson, (2000 as cited in Phakiti, 2003) state that reading in a second language is a complex, dynamic and multi-dimensional because it involves interaction among the reader's interlanguage competence (e.g. incomplete, fragment or not-fully developed linguistic, strategic discourse and socio-linguistic competence. Similarly, Cunningham, et.al., (2000 as cited in Wirotanun, 2002) assert that readers also need linguistic and background knowledge, knowledge about vocabulary, and also cultural knowledge, and they also require reading strategies to help achieve reading comprehension when their linguistic and background knowledge is insufficient. These definitions suggest an important role of the interaction between the readers, the text and the linguistic knowledge.

Another cause of difficulty is linked to the inability to adapt reading skills to suit the texts. That is, students have not been taught suitable skills for approaching different kinds of texts. Most importantly, ESL/EFL students need to overcome factors that hinders their comprehension because of differences between L1 and L2 including linguistic knowledge and types of texts (Anderson, 1999). Consequently, to develop ESL/EFL students' reading ability to become proficient readers, the teachers have to teach them reading strategies appropriate for different types of texts. In brief, apart from linguistic and background knowledge and knowledge of vocabulary and types of text, it appears that an essential tool to help the readers to reach the higher level of reading comprehension is to teach them to use reading strategies effectively.

It is important to understand the concept of reading strategies and the role they play on reading comprehension. Cohen (1990) defines reading strategies as mental processes that readers consciously choose to use in accomplishing reading tasks (pp. 83-84). In Carrell (1998) reading strategies are referred to as the actions that readers deliberately select and control to achieved desired goals or objectives. Carrell further describes that reading strategies also include a wide range of tactics that readers use to engage in and comprehend the reading text. Research has also shown that how the readers use reading strategies is related to their effective reading comprehension. Some research has also revealed that reading strategies are the hallmark of effective reading (Alderson, 2000; Brown, 1989; Oxford, 1989; Anderson, 1999; Carrell, 1998).

According to Golinkoff (1975), the reading strategies employed by high and low proficient students are different. High proficient students tend to set goals for their reading. They often note and organize the texts, and create a mental overview or outline of the texts to help them reach their goals. After reading, good readers often think about, or reflect on what they read. On the contrary, low proficient students have difficulty reading the texts. They may have trouble connecting the ideas of texts. In addition, some low proficiency students do not understand texts because they are not familiar with the vocabulary in the text, and have insufficient background knowledge. After reading, they do not think about or reflect what they have read. They almost never seek out further information that is related to the topic.

Similar to the previous studies, Pressery and Afflerbach, (1995 as cited in Carrell, 1998) state that skilled reader or proficient readers are selectively attentive and they know and use many different strategies while reading text. The reading strategies they use while reading such as note-taking, predicting, paraphrasing, making inferences and self-questioning. In an attempt to understand of what they have read, the good readers also

integrate reading strategies across the text. In contrast, less proficient readers often get stuck to the decoding single words, fail to adjust their reading to meet the reading goals or meet the reading purposes. They seldom use self-questioning or self-evaluating strategies to monitor and improve their comprehension. In brief, there are differences in reading strategies used by high and proficient readers. While high proficient readers are usually strategic readers; they use a number of comprehension strategies to get meaning from texts, and they are aware of when and how to use those strategies. In contrast, low proficient readers use few reading strategies to comprehend the meaning from texts, and the use of strategies is usually less effective.

Statement of the Problem

The discussion above has shown that reading strategies are important for readers to build their understanding of the text. In addition, reading strategies have been viewed as characteristics for the efficient reading. ESL/EFL research studies have also considered reading strategies a major tool to help readers increase their reading comprehension. The studies have also shown that language proficiency determines the difference in reading strategy use (Anderson, 1991; Carrell, 1991; Moktari & Reichard, 2002). However, the definitions of reading defined by many researchers suggest that the real reading process occurs when there is an interaction among the reader, text and the reading situation. That is, good readers are the ones who can apply various reading strategies in a variety of reading contexts and types of text. Therefore, it is necessary for college students to be able to use extensive reading strategies appropriate for certain types of text and the reading situations.

English major students at Srinakharinwirot University (SWU) have to take many reading classes, particularly academic reading. It is thus very important for the reading

instructors to understand first which reading strategies proficient students majoring in English use when reading academic texts and how they use them to successfully achieve their goals of reading. Currently, these students also need to read both the online texts and printed texts. However, research on EFL reading in the Thai context at the tertiary level conducted with English major students has been very rare. Therefore, the researcher is interested in exploring reading strategies use in academic situation by English major students when reading online and printed academic texts. This present study also sought to find out reading strategies proficient and less proficient students use in reading academic texts in English. Since the research has revealed that reading strategies are teachable or trainable, it might be possible to teach less proficient students to use those successful reading strategies employed by proficient students, so that they will improve their academic reading ability.

Purposes of the Study

The purposes of this study were to:

1. Investigate reading strategies used by third-year English majors of Srinakharinwirot University (SWU) when reading online and printed academic texts.

2. Examine reading strategies used by high and low proficient third-year students majoring in English when reading online and printed academic texts.

3. Find out the differences in reading strategy use between high and low proficient third-year students majoring in English when reading online and printed academic texts.

4. Discover how high and low proficient students use reading strategies in reading online and printed academic texts in English.

Research Questions

The present study addressed four main research questions:

1. What reading strategies are used by third-year students majoring in English at Srinakharinwirot University (SWU) when reading online and printed academic texts in English?

2. What reading strategies are used by high and low proficient third-year students majoring in English when reading online and printed academic texts?

3. What are the differences in reading strategy use between high and low proficient third-year students majoring in English when reading online and printed academic texts?

4. How do high and low proficient students use reading strategies in reading online and printed academic texts in English?

Significance of the Study

Reading is a complex process required many factors which may affect readers' reading ability. Some of the factors that cause reading difficulties are learner's lack of target language proficiency and vocabulary, unfamiliar with the content or formal schemata of the texts to be read and inefficient reading strategies. Reading strategies have been defined as mental processes or behavior that control and modify the readers' effort to interpret a text, understand words and construct the meaning from the text. These processes help readers to understand more what they have read and also improve their reading skills effectively.

This study explored reading strategies employed in reading online and printed academic texts of third-year English major students at Srinakharinwirot University. The

results of this study were expected to be beneficial to reading instructors in ESL/EFL contexts, particularly in academic reading instruction at the college level.

Firstly, the findings demonstrated the differences in online and printed reading strategies use of English major students and the differences in the use strategies of high and low proficient students. The teacher then can plan the reading lessons to suit the students' proficiency level.

Secondly, the results of the study can be useful for course developers and reading instructors to create or provide activities to train their students to use their reading strategies more effectively.

Scope of the Study

1. This study was limited to third-year English major students in the Faculty of Humanities at Srinakharinwirot University (SWU) enrolled in the first semester of academic year 2009.

2. The study focused on reading strategies and sub-categories based on the literature review on reading online printed academic texts (Moktari & Reichard, 2002; Phakitti, 2002).

3. This study used purposive sampling design in selecting the participants which decreases the generalizability of the findings. The findings then were not generalized to English major students studying in the first, second year and the senior.

Definition of Terms

The following terms were repeatedly used in the study, so they need to be clarified.

1. *Reading strategies* are ways or tactics of processing that readers used intentionally or deliberately to construct meaning or comprehending from the written text.

2. *Reading strategies in reading online academic texts* are the techniques that readers use to interact with electronic texts such as e-journal, e-magazine and information from the internet which are;

2.1 Global Reading Strategies (GRS) are intentionally and carefully planned strategies by learners to monitor their reading such as having a purpose in mind, previewing the text.

2.2 Problem Solving Strategies (PSS) are the strategies that readers use while they are working directly with the text, especially when the text becomes difficult; these strategies include guessing the meaning from unknown words.

2.3 Support Strategies (SS*)* are what readers use to help their comprehension, such as using a dictionary, taking notes, highlighting textual information, or translating from one's mother tongue to the target language.

3. *Reading strategies in reading printed academic texts* are the techniques that readers use to interact with printed texts such as textbooks, articles or research journals.

3.1 Cognitive Reading Strategies (CRS) are mental processes directly concerned with the processing of information in order to learn such as summarizing main information, using dictionary, rereading, using grammatical rules to understand meaning.

3.2 Metacognitive Reading Strategies (MRS) involve the learning process

such as planning and setting purpose in mind, rechecking comprehension when encountering ambiguous information, self-questioning, and evaluating accuracy in reading.

4. *Online academic texts* are academic reading texts on certain topics selected from the Internet. The lengths and difficulty level of the texts are similar to those of the printed academic texts.

5. *Printed academic texts* are academic reading texts on certain topics selected from students' textbook.

CHAPTER II

REVIEW OF LITERATURE

This study aimed to investigate reading strategies of English major students in reading online and printed academic texts. It also examined the differences in reading strategy use of students in reading online and printed academic texts. In addition, the reading strategies used by high and low proficient English major students when reading online and printed academic texts as well as how they use these reading strategies are investigated. This chapter reviewed literature foundation for understanding the prepared study. The topics discussed include; definition of reading, models of the reading process, reading strategies and their classification, cognitive strategies in reading and metacognitive strategies in reading, online reading strategies, reading English for academic purpose, the Internet and English learning, and the differences of online and printed texts. Previous studies on reading online and printed texts were discussed in the final section of the chapter.

Definition of Reading

Many researchers and experts in reading defines reading in several ways, but there is a consensus that reading is a complex cognitive process in which the readers interact with the texts in order to construct the meaning and get comprehension from what they have read. Anderson (1999) states that reading is as an essential skill for ESL or FFL students, and it is the most important skill to master since ESL and EFL readers with strengthened reading skill will make greater progress and attain greater development in all academic areas. He also emphasizes that reading is an active, fluent process which

involves the readers and the reading materials in building meaning. Whereas Harmer (2001) discusses reading is not a passive skill because the reader of written text has to process what he/she reads on the basis of what comes before and after. Moreover, Grabe (1991) points out that the complexity of even defining reading by stating that "a description of reading has to account for notions that fluent reading is rapid, purposeful, interactive, comprehension, flexible and gradually developing." The meaning that one reader gets from text may be different from that of other readers reading the same text.

In conclusion, reading is the process of constructing meaning through the dynamic interaction among the reader's existing knowledge, the information suggested by the written language and the context of the reading situation. According to Dubin (1982), reading seems to be the most attainable language skill for students in countries where English is not widely spoken.

Models of the Reading Process

Many experts in reading have classified the models of reading into three categories which are bottom-up, top-down, and interactive models (Goodman, 1996, Nuttall, 1996, Anderson 1999, and Aebersold and Field, 2000). These models describe what happens when people look at a text, and also what the complementary ways of processing a text are. Readers use them with unconscious processes, or adopt them as conscious strategies when approaching a difficult text.

Bottom-Up Model

Nuttall (1996) states the bottom-up model that the reader builds up a meaning from the black marks on the page; recognizing letters and words, working out sentence structure. Similar to Anderson (1999), he mentions that bottom-up or data-driven models

depend on the information presented by the text, and that information is processed from letter features to letters to words to meaning. Bottom-up approaches are serial models, where the reader begins with the printed word, recognizes graphic stimuli, decodes them to sound, recognizes words and decodes meaning (Alderson, 2000, p. 307). In addition, Aebersold and Field (2000, p. 18), and Carrell (2002, p. 101), state that decoding individual linguistic units (e.g., phonemes, graphemes, words) is a term for this process because the reader constructs the text from the smallest units (letters to words, to phrases to sentences, etc.) and the process of constructing the text from those small units becomes automatic. Beside these, Carrell (2002) mentions that readers also modify their preexisting background knowledge and current prediction on the basis of information encountered in the text. In conclusion, bottom-up models relate to building textual meaning from the smallest units to the largest ones and using the readers' preexisting background knowledge to comprehend the text

Top-Down Model

Aebersold and Filed (2000) conclusion that readers bring a great deal of their knowledge, expectation, assumptions, and questions to the text, and given a basic understanding of vocabulary, they continue to read as long as the text confirms their expectations. Nuttall (1996) also states that readers' intelligence and experience based on the schemata they have acquired can make the predictions to understand the text. This model is used when readers interpret assumptions and draw inferences, or when they try to see the overall purpose of the text or get a rough idea of the pattern of the writers' argument in order to make a reasoned guess at the next step. The top-down model gives a sense of perspective and makes use of all that the reader brings to the text: prior knowledge, common sense, etc. In short, this model is the making of predictions about

new information in the text based on prior experience or background knowledge that readers already know or possess.

Interactive Model

Nuttal (1996) mentions that, in practice, a reader continually shifts from one focus to another, adopt a top-down approach to predict the probable meaning then move to the bottom-up approach to check whether that is really what the writer is saying. This process has been known as interactive reading. According to Nuttall (1996), Anderson (1999), and Alderson (2000), the interactive model combines elements of both bottom-up and top-down models. Both models are important strategies for readers. Successful readers usually display combination of top-down and bottom-up reading (Cohen, 1990). In other words, they use top-down reading to compensate for deficiencies in bottom-up and vice versa. On top of these, Anderson (1999) also cites Grabe's idea relating to the interactive model divided into two concepts; the first concept relates to the interaction that occurs between the reader and the text, while the second concept relates to the interaction between bottom-up and top-down process.

In this model, interactive refers to the interaction between information obtained by means of bottom-up decoding and information provided by means of top-down analysis, both of which depend on certain kinds of prior knowledge and certain kinds of information- processing skills (Eskey, 2002). Moreover, Carrell (2002) also emphasizes that the most efficient processing of text is interactive, a combination of top-down and bottom-up processing modes.

Reading Strategies

Reading strategies are the mental activities that readers use in order to contact meaning from a text (Aebersold and Field, 2000, pp. 15-16). English as a Foreign Language (EFL) or L2 learning strategies are specific actions, behaviors, steps, or techniques that are used often consciously to improve their progress in apprehending, internalizing and using the language (Oxford, 1990). According to Brown (1994), reading comprehension strategies and some strategies are related to bottom-up procedures and others enhance the top-down processes. In addition, Song (1998) states that reading strategies indicate how readers conceive a task, what textual cues they attend to, how hey make sense of what they read, and what they do when they do not understand.

Therefore, the technique to improve reading skills is to use reading strategies that extract information from the text in the most effective way. Alderson (2000) emphasizes that good readers are flexible users of strategies. In other words, the ability of readers to understand a text is crucially dependent on the strategies employed by readers. Reading strategies indicate how readers conceive a task, what textual cues they attend to, how they make a sense of what they read, and what they do when they do not understand.

Classification of Reading Strategies

In the reading strategies research field, many researchers categorized the classification of reading strategies as follows;

Cohen (1990), states that reading strategies can be divided into four types. The first group is *support strategies* such as skimming, scanning, skipping, marking the text, and using a glossary. The second is *paraphrase strategies* such as clarify meaning by simplifying syntax, finding synonyms for words and phrases, looking for propositions or basic ideas, and identifying the function of portions of the text. The third group is

strategies for establishing coherence in text such as looking for organization, using context, and distinguishing the discourse functions in the text. The last group is strategies for *supervising strategy use* such as planning, self-evaluation, identifying misunderstandings, and remediating.

In addition, Anderson (1991) collects reading strategies into five categories. The first type is *supervising strategies* which include recognizing loss of connection, formulating a question, and referring to a previous passage. The second one is *supporting strategies* such as skipping unknown words, visualizing, and skimming. The third group is *paraphrasing strategies* such as paraphrasing, translating, and using cognates. The fourth group is *strategies for establishing coherence in text* such as rereading, using context clues, and reading ahead. The final group is *test-taking strategies* such as guessing without any particular considerations, looking for the answer in chronological order in the passage, and selecting a response that remarked in the text.

Besides, Chavez (1994) classified reading strategies into four levels based on the derivation of meaning. The first level is *supertexual strategies* which help readers expose to the cultural framework of the text. The second level is contextual strategies which reveal the syntactic structure of cohesion underlying the text. The third level is *intratextual strategies*, which aim at understanding individual constituents in the text, especially at the lexical levels. Finally, the fourth level is *subtextaul strategies* which help reader translate text-bond into text-independent meaning.

Moreover, Jimenez et al. (1996) classified reading strategies into three major groups. Firstly, *text-initiated strategies* include, using text structure, summarizing, and rereading. Secondly, *interactive strategies* consist of inferencing, predicting, and questioning. Thirdly, *reader-initiated strategies* comprise visualizing and evaluating and making prior knowledge.

In brief, the classification of reading strategies can be summarized as follows; (a) *supervising strategies* such as predicting, questioning, planning, and referring, (b) *supporting strategies* such as skimming and scanning, visualizing and marking the text, (c) *paraphrasing strategies* such as clarify meaning, translating, looking for the basic idea, (d) *strategies for establishing coherence in text* such as rereading, looking for organization, (e) *test-taking strategies* such as guessing without considerations, looking for the answer in the passage and evaluating.

Strategies for Reading Comprehension

Reading comprehension strategies might be defined as the mental operations or comprehension processes that readers select and apply in order to make sense of what they read (Cohen, 1990). Researchers in this field of reading strategies indicate that when readers encounter difficulties in comprehension, they need to use strategies to overcome the difficulties (Paris et al., 1983).

In later study, Anderson (1999) develops the reading strategies for reading comprehension to help readers read more successfully. He divides them into two groups which include *cognitive reading strategies* (thinking) and *metacognitive reading strategies* (thinking about your thinking or planning).

Cognitive Strategies in Reading

Cognitive strategies are seen as mental processes directly concerned with the processing of information in order to learn which consists of three strategies as follows;

(a) Comprehending Strategies consist of several processes which are; identifying main ideas, author's attitudes or tones, summarizing main information, analyzing author's purposes, guessing the content of a text, translating message into native language,

guessing meaning of unknown words using context clues, using dictionary to clarify indirect meaning, and making inferences based on the available information to connecting important ideas in text.

(b) Memory Strategies are making use of available typographical features such as bold face, italics, pictures, tables or figures in text. Then, reread the texts and take note, underlining main ideas or highlighting important information. Moreover, recognizing previous words or information and paraphrasing or simplifying information are also help readers remember what they read.

(c) Retrieval Strategies are using prior knowledge or experience relevant to the topic, relating new information in text with previously read text, using grammar rules to understand meaning, applying knowledge of word stems, prefixes or suffixes, and recalling reading purposes or task obligation.

Metacognitive Strategies in Reading

The strategies that function to monitor or regulate cognitive strategies are called metacognitive strategies. It involves about the learning process a) Planning for learning, b) Monitoring of comprehension, and (c) Evaluation of learning of learning after the language activity is completed (Skehan, 1993, p.87).

(a) Planning for learning is the way that the readers set reading purposes or goals, and then keep purposes or goals in mind, figure out what needs to be accomplished, identify reading task expectations, plan steps or actions before reading, and finally overview texts before reading.

(b) Monitoring of comprehension are checking if comprehension occurs, checking comprehension when coming across new information, controlling

concentration or attention during reading, noticing when confusion occurs, and double-checking comprehension when encountering ambiguous information.

(c) Evaluation of learning are accessing levels of text difficulty and reading demands, engaging self-questioning while reading, and evaluating accuracy in reading such as via task completion performance.

In addition, metacognitive strategies include "checking the outcome of any attempt to solve a problem, planning one's text move, monitoring the effectiveness of any attempted action, testing, revising, and evaluating one's strategies for learning." (Brown, 1994, p. 115) In other words, metacognitive strategies are used to plan, monitor and regulate the reading as it occurs.

Online Reading Strategies

Online reading strategies are the techniques that readers use to interact with electronic texts such as e-journal, e-magazine and information from the internet (Coiro, 2003). The classification of online reading strategies are common in reading strategies from printed materials, however, these strategies are called in different names. Top-down strategies are the strategies that readers use to predict text content, construct a goal for reading, and self-monitor the reading process; are called *General strategies* (Block, 1986; Block, 1992; Cheng, 1998) or *Global strategies* (Sheorey & Mokhtari, 2001). Bottom-up strategies are the strategies that readers use to understand specific linguistic units; are called *Local strategies* (Block, 1986; Block, 1992) or *Problem-Solving* and *Support strategies* (Sheorey & Mokhtari, 2001). These classifications have sought to identify the metacognitive reading strategies of readers in online reading strategies (Mokhtari & Reichard, 2002; Sheorey & Mokhtari, 2001)

Global strategies are intentional and carefully planned by learners to monitor their reading, such as having a purpose in mind, previewing the text, checking how text content fits its purpose, noting text characteristics like length and organization, and predicting or guessing the text's meaning (i.e. taking an overall view of the online text to see what it is about before reading it or reviewing the online text first by noting its characteristics like length and organization).

Problem-solving strategies are the process that readers use while they are working directly with the text, especially when the text becomes difficult; these strategies include guessing the meaning from unknown words, adjusting one's reading rate, visualizing the information read, resolving conflicting information, and rereading the text to improve comprehension (i.e., stop reading for a moment when stressing or confusing occurred).

Support strategies are what readers use to help their comprehension, such as using a dictionary, taking notes, highlighting textual information, or translating from one's mother tongue to the target language (i.e., taking notes while reading online to understand the texts or using reference materials such as an on-line dictionary to understand what read online).

In the field of online reading strategy' studies, there are some researchers conducted the research in the online reading strategies. For example, Foltz (1993) studied in reading strategies in accessing in paper, hypermedia and multimedia texts. He found that readers used the same strategies in accessing those three types of texts. However, they used more heuristics and signals in hypertext to guide themselves to read the text coherently than they did when reading printed texts. Foltz summarized that text coherence is the essential criterion for hypertext reading material. In addition, Anderson (2003) explored EFL learners' online reading strategies through an online survey of reading strategies, which consists of global reading strategies, problem-solving strategies, and

support strategies. He claimed that the strategies outlined in online survey of reading strategies can help promote the second language readers' online reading abilities and suggests that teachers incorporate strategy and training components in launching online tasks.

In summary, online reading strategies are the methods that readers employ while they read online texts (i.e., e-news, e-journal). When readers read online texts, they apply similar reading strategies as used with printed texts. Nevertheless, the online reading strategies are called differently from the printed reading strategies which are; *global strategies* (e.g., taking an overview of online texts), *problem-solving strategies* (e.g., rereading online texts to understand more), and *support strategies* (e.g., using online dictionary to translate the meaning of the texts).

Reading Strategies of Successful and Less Successful Readers

Several research studies were carried out to examine the differences between good and poor readers in using reading strategies. For example, Paris & Myer (1981) identify that high proficient readers and low proficient readers are equal in their ability to acknowledge useful strategies but high proficient readers are more aware than low proficient readers of harmful strategies that will interfere with their reading.

Olshavsky (1976) found in the study that better high school readers used strategies and more frequently than did poor readers. In a later study in 1978, she found no differences between good and poor high school readers in either the number or the types of strategies used.

Kletzien (1991) conducted strategies used by good and poor readers in reading expository texts of different levels. This study indicated that good and poor readers used the same strategies for the three passages. However, this study clarify that good readers

would try a variety of strategies and they were persistent in trying strategies even when they faced frustration with the materials. Moreover, good readers appeared to be better controlling their strategy use than poor readers, as evidenced by their exchanging types of strategies for reading the passage. Good readers also continued to try different types of strategies to construct meaning of the text.

Anderson (1991) investigated the differences in reading strategy use by adult second language learners. The results revealed that both high and low scoring readers appeared to be using the same kinds of strategies while answering the comprehension questions, however, high scoring students seemed to be applying strategies more effectively and appropriately.

According to Aebersold and Field, they categorized the reading strategies that high proficient readers do when they read text (1997). The ways that most high proficient readers use when reading to help them comprehend texts well are; recognize word quickly, use text features (subheadings, transitions, and etc.), use titles to infer what information might follow, use world knowledge, analyze unfamiliar words, identify the grammatical functions of words, read for meaning or concentrate on constructing meaning, guess about the meaning of the text, evaluate guess and try new guesses if necessary, monitor comprehension, keep the purpose of reading the text in mind, adjust strategies to the purpose for reading, identify or infer main idea, understanding the relationships between the parts of a text, distinguish main idea, tolerate ambiguity in a text, paraphrase, use context to build meaning and aid comprehension, and finally continue reading even when unsuccessful, at least for a while.

In conclusion, high proficient readers seem to read successfully than low proficient readers. They use their reading strategies such as set the purpose of reading, monitor their comprehension or look for meaning to help them comprehend the texts that

they read. In contrast, low proficient students are weak in using previous mentioned strategies. For example, they read without setting the purposes or the goals or they may lack of background knowledge to familiar with the texts. O'Malley & Chamot (1990) suggest that high proficient readers are more able to monitor their comprehension than low proficient readers and they are more aware of the strategies they use than are low proficient readers, and they use them more flexibly. High proficient readers adjust their strategies to the type of text they are reading and to the purpose for which they are reading. They distinguish between important information and details as they read, they use context more efficiently and are able to relate new information with information already stated, as well as to notice inconsistencies in the text and employ strategies to make these inconsistencies understandable (O'Neil, 1992; Paris, Wasik, & Turner, 1991).

The studies of reading strategies of high proficient readers are beneficial for low proficient readers to apply and train the reading strategies of high proficient readers to low proficient readers read successfully.

Reading English for Academic Purpose

The various texts in reading are a reason that readers should know their purpose while they are reading. There are several reading purposes in the modes of language. Wallace (1992) demonstrates the reading purpose as follows:

Reading for survival - It is reading that involves life and death. Survival reading serves immediate needs or wished. An example is to read medical instruction label or traffic sign.

Reading for pleasure - It serves enjoyments such as literature, newspaper or entertainment texts.

Reading for learning - It plays the wider role of extending general knowledge of the word. However, reading for learning is exclusively in related education. It takes place in academic contexts.

Equally, Grabe and Stollor (2002) divided the reading purposes into seven categories as follows:

Reading for search for simple information - It is the ability to read text to find important information such as reading a telephone directory for finding key information.

Reading to skim quickly -It is a common part of many reading and a useful skill in its own right.

Reading to integrate information - It requires readers to decide what information to integrate and how to integrate information.

Reading to write - It requires readers to compose information after they finish reading.

Reading to critique texts - It involves readers to be critical in reading texts.

Reading for general comprehension - It requires readers to be skillful for general understanding.

To sum up, reading for learning and reading to learn from texts are similarity. They involve reading for academic purpose, which focus on learning in English academic texts. They are different from reading other kinds of texts.

The Internet and English Learning

In this digital age, a number of information on the internet is used English language as a mediator to communicate between consumers, notify information, and represent a lot of activities as a source for learning. Thus, it is helpful for learners especially EFL learners, to take advantages of using internet to learn English.

According to Coiro (2003), the Internet has become a very useful device for accomplishing. She outlines three types of texts that readers encounter online which are nonlinear texts, multiple-media texts, and interactive texts. Each of these text types introduces new challenges for readers, especially second language readers.

Wiseman (1992) also indicated that computer technology will only continue to improve and provide new materials and methods for reading instruction. Modern education systems have to provide learners opportunities to learn computers and other technology. Reading will be the major vehicle for teaching effective use of technology.

To teach and learn academic reading effectively, the sources should be in various forms, for instance, (a) Electronic Newspaper or E-news; it is an electronic newspaper that contains refreshable version of traditional paper, (b) Electronic journal or E-journal; it is available on the internet that readers can search for articles. It is organized like a traditional printed journal, and (c) Electronic book or E-book; it is available in digital format that is a system in which characters, graphic and sounds.

The Differences of Online and Printed Texts

Presently, one of the most important tools to help people learn easier is internet. It has influenced the way students to use each material for information searching. Each of materials have different characteristics, therefore a lot of users have different perceptions and preferences of print and electronic materials. Liu (2006) studied about print and electronic resources. It was found that graduate students in a metropolitan university prefer using electronic resources to printed resources because electronic resources are convenient and quick in searching.

In addition, Shetzer and Warschauer (2000), point that online and printed sources have different characteristics. The readers find online sources anytime and everywhere

that support internet. Online sources include hypertexts that combine multimedia documents such as sound and animated symbols whereas printed sources are limited on published documents with linear texts that found in libraries. Coiro (2003) also examined that traditional texts are different from electronic texts. Print and two-dimension graphics are found in traditional texts whereas electronic texts include in\cons, animated symbols and multimedia information.

As previous related research, many studies indicated that reading strategies are important to assist readers' comprehension in reading. As well known in globalization age, reading is not limited only printed texts, but also online texts, so ESL/EFL learners can acquire a lot of knowledge anytime and anywhere by using reading strategies as essential roles to help them comprehend in context efficiently.

Related Research

The researcher divided related researches into two parts, *Research in Reading Online Texts* and *Research in Reading Printed Texts,* which related to a study of reading strategies of EFL students both in Thailand and Foreign countries.

Research in Reading Online Texts

Anderson (2003) studied a research in online reading strategies in a Second/Foreign Language with 247 L2 readers. This research is examined the role of L2 strategies within the context of online reading tasks. 131 learners were studying English as a foreign language, and 116 were studying in an ESL environment. All of participants completed 28 items of the Online Survey of Reading Strategies (OSORS). The findings of this research were the majority of top 12 strategies used by the EFL students were mostly the same as those used by the ESL students. The only one difference was that the EFL

reader reported using the Problem Solving strategies more frequently than did the ESL readers.

Additionally, Mónos (2003) did a research of the English reading strategies of Hungarian university students with implications for reading instruction in academic context. The purpose of this study is to provide of Hungarian university students majoring in English. The participants were 86 native Hungarians majoring in English at the Faculty of Humanities and Arts, University of Debrecen, Hungary who were in the first or second year of their studies and took the English Yardstick Exam at the end of the first year. The instrument of this study was the survey of reading of Hungarian college students (SORS-HU) that consisted of 30 items which measure reading in three categories: global, problem solving and support strategies. All of participants were required to answer the survey of reading strategies of Hungarian college students (SORS-HU). The result of this study revealed that with a preference among the participants for problem solving strategies followed by global and support strategies.

Besides, Jaengsaengthong (2007) conducted a study of online reading strategies used by graduate student at Naresuan University. The participants were 173 English major graduate students. The result indicated that the graduate students used online reading strategies at the medium level. The high proficient students used online reading strategies at the high level whereas the low proficient students used it at the medium level. Finally, the high proficient students used the GLOB strategies and the PROB strategies different from the low proficient students. As a result, it can be summarized that high proficient students can use online reading strategies effectively more than low proficient students.

Research in Reading Printed Texts

Ozek (2002) explored the cognitive reading strategies that ELT students used while reading a text book. The participants were the 1st and the 4th year students at ELT Department at Dicle University. The data were collected from questionnaires was analyzed statistically. The result specified that there are some differences on the effective use of cognitive reading strategies with regard to student's gender, age and proficiency in reading, school source and duration in learning English.

In another research, Cheuawong (2005) accomplished the reading strategies employed in English reading for comprehension by student officers taking Naval Command and staff Course. The researcher used questionnaires to survey. There were 114 participants were required to complete the survey of Reading Strategies. The results of the study can be summarized that firstly, the students realized that presently English was an important language for international communication for both academic and occupational reasons. Secondly, the students used a variety of strategies of reading for comprehension with the average frequency of sometimes. Thirdly, the lack of vocabulary was an obstacle for these student officers reading comprehension. Therefore, most of them often used either English-English or English-Thai dictionaries to search for the right meaning while they were reading. Finally, these students did not have a steady increase in the development of their reading comprehension. Consequently, they were confident that implementing extensive reading in an English course would be beneficial to academic institutes.

Additionally, Wirotanan (2002) conducted the study related to reading strategies used by Thai graduate students. It was found that when reading English, differences in the number and types of strategies used between the groups were found statistically significant. Differences also appear in the variety of strategies used while reading. The

findings also revealed that the high proficiency EFL readers transferred their reading strategies from L1 to L2 only when the texts shared similar linguistic features. The results also showed that both the high and low proficiency EFL readers used strategies when reading a foreign language, but differences existed in how the strategies were used. Factors influencing the differences in use were the result of self-evaluation, outcome expectancy, achievement responsibility, cognitive monitoring, knowledge base, self-esteem, and environment.

In another research, Kamhaeng (2006) conducted reading strategies used by high and low achievement students. This study compared the reading strategies used by 62 fourth-year English major at Faculty of Humanities, Naresuan University. 62 participants were required to complete 30 questions of the survey of Reading Strategiesthat adapted from Mokhtari and Richard 2002 which measure in three categories of reading strategies (global reading strategies, problem strategies and support strategies). The results were the high achievement students had higher level in using reading strategies and global reading strategies (GLOB) than the low achievement had the same level in using Problem Solving strategies (PROB) and Support strategies (SUP). Moreover, the high achievement students use different substrategies from the low achievement students: deciding what to read closely and what to ignore, stopping from time and thinking about what is being read, using context clues, checking understanding when coming across new information asking oneself questions and trying the answer in the reading materials and checking to see if the guessing about the text being right or wrong.

All the previous studied both in Thailand and another countries, it is indicated that reading strategies play an important role for both ESL and EFL learners.

Hence, in this study conducted to explore and compare the number of reading strategies in online and printed academic texts and to observe what types of reading strategies in online and printed academic texts do the third-year student's use.

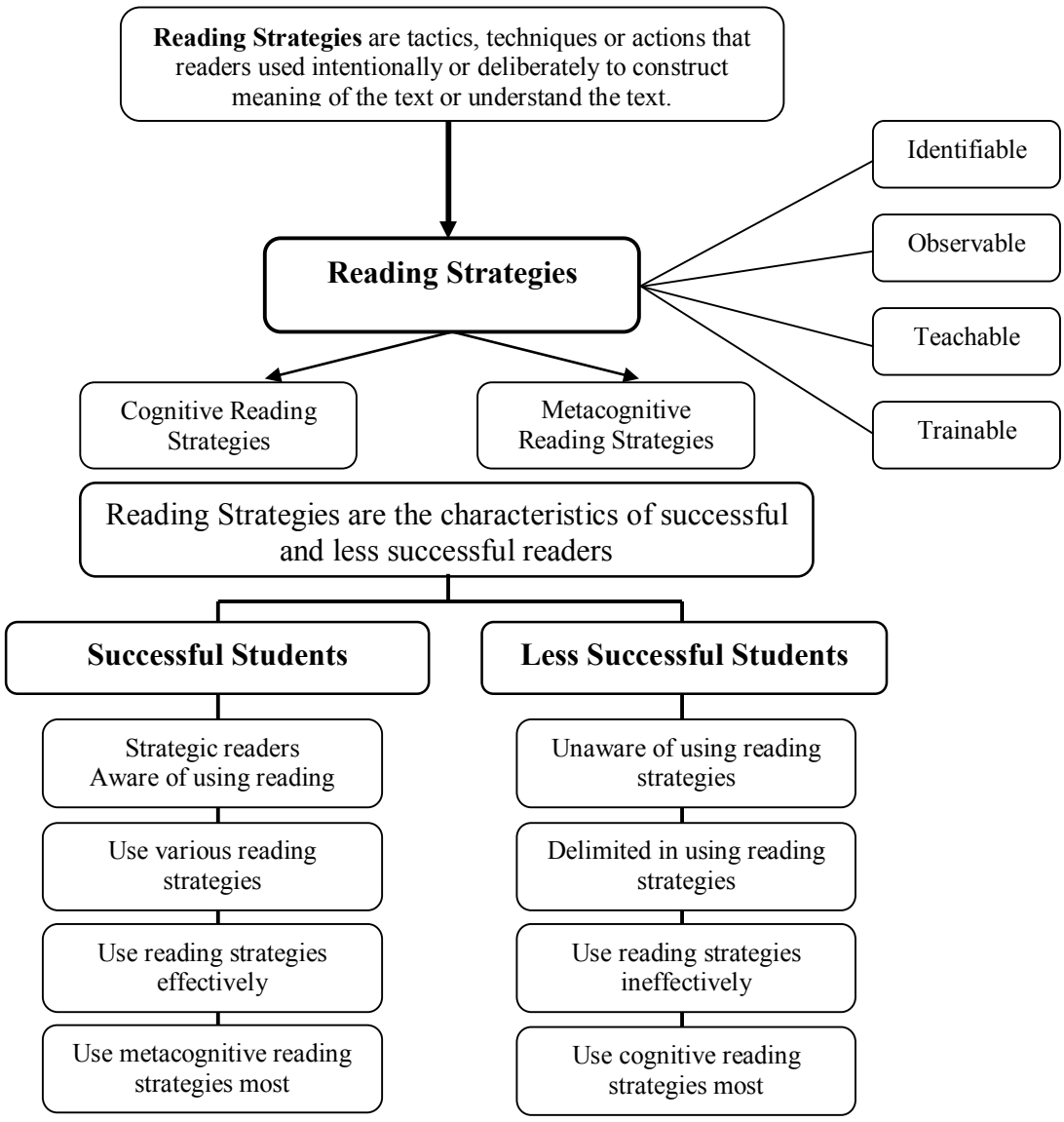

Figure 1 The Conceptual Framework of this Study

CHAPTER III

METHODOLOGY

This study used both quantitative and qualitative methods of data collection and analysis. The main purpose of this study was to investigate reading strategies used by third-year English major students of Srinakharinwirot University in reading online and printed academic texts in English. This study also examined the differences in reading strategies use in reading online and printed academic texts of high and low proficient students. It discovered how high and low proficiency students use reading strategies in reading online and printed academic texts in English. This chapter therefore described the research methodology including research design, the context of the study, population, the research instruments, data collection procedure, and the data analysis.

Research Procedures

Research Design

This present study was a two-phase study combining quantitative and qualitative data collection and analysis. Phase 1 of the study was an exploratory study aiming at investigating reading strategies of third-year English major students employed in reading online and printed texts. To collect quantitative data, first the Reading Comprehension Test was administered. Then the reading scores were used to classify students into high proficient students and low proficient students. After the test, two sets of questionnaires: the Questionnaire for Strategies in Reading Online Academic Texts and the Questionnaire for Strategies in Reading Printed Academic Texts were used to obtain data about reading strategies students use in reading online and printed texts. After the completion of the

questionnaires, six students were selected to perform think-aloud while reading online and printed academic texts.

In phase 2, a case study was conducted to examine how third-year English major students used reading strategies in reading online and printed academic texts. There were six students: three high proficient students and three low proficient students were selected to take part in the think-aloud reading sessions. In think-aloud sessions, students read the online and printed academic texts three times as planned by the researcher. They were trained to read and think-aloud as they practice reading online and printed academic texts. After each think-aloud session ended the students were interviewed immediately.

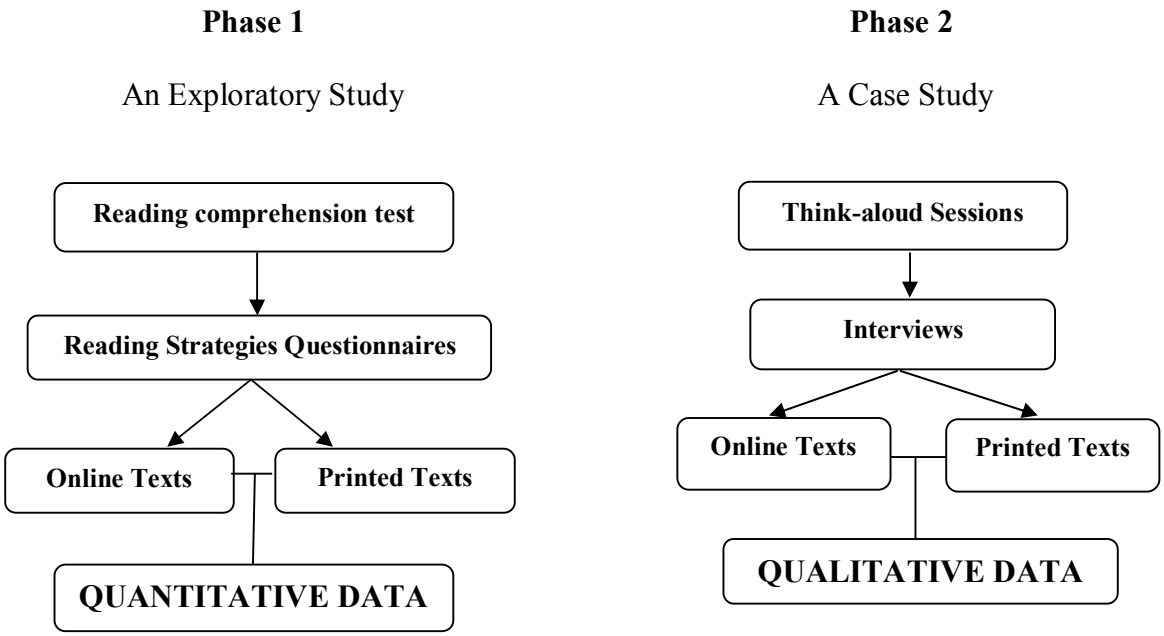

Figure 2 Research Design of the Present Study

Data Collection

The Context of the Study

This study aimed to investigate reading strategies used by third-year English major students used in reading online and printed academic texts in English. The subjects of this study were third-year English majors who enrolled in EN 221 – Reading Techniques in the second year. In the third year, they enrolled in EN301- Reading for Specific Purposes 1 and EN 322 – Reading and Summary. These students also took the advanced reading classes including EN 321 – Analytical and Critical Reading 1 and EN 421 – Analytical and Reading 2 which are designed for English major students either in the first or second semester of each academic year depending on their time table. Therefore, they need to learn how to read successfully and effectively to pass the advanced reading courses. The students are of mixed of English ability.

Population

Target population

The target population of this study was third-year English students majoring in English in the Faculty of Humanities at Srinakharinwirot University (SWU).

Subjects

In phase 1, the subjects of the study consisted of 73 third-year English major students in the Western Language Department, at Srinakharinwirot University. The students were enrolled in their first semester of academic year 2009. The students were of mixture English language ability, that was, both proficient and less proficient. Since they are English majors who passed the National University Entrance Examination, their English proficiency was at the intermediate and high intermediate level.

In phase 2, the researcher selected 6 the students to take part in the reading think-aloud sessions, and they were also divided into two groups: three high proficient students and three low proficient students according to the scores from the reading comprehension test.

Sampling procedure

Since SWU English major students enrolled in their classes through the regular class registration, the subjects were selected from all third-year English majors who enrolled in their first semester of academic year 2009. Therefore, this study used the purposive sampling design in which the participants were selected from their natural formed classes.

Data

The data of this study were of two kinds: quantitative and qualitative data. The quantitative data consisted of scores from the reading comprehension test, self-ratings from two sets of the questionnaires: the Questionnaire for Strategies in Reading Online Academic Texts and the Questionnaire for Strategies in Reading Printed Academic Texts. The qualitative data were the think-aloud protocols from the think-aloud sessions and reading strategies students used in reading online and printed academic texts.

Research Instruments

The instruments used in data collection consist of the Reading Comprehension Test, the Questionnaire for Strategies in Reading Printed Academic Texts and the Questionnaire for Strategies in Reading Online Academic Texts, and the Reading Texts Used in the Think-aloud Sessions. These research tools were elaborated as follows:

1. Reading Comprehension Test

Reading Comprehension Test was used as a test (TOEFL sample test) to classify students into two proficiency levels: high proficient and low proficient students. The TOEFL test has been a well-established language proficiency test which has the most reliability in determining language learners' proficiency (Educational Testing Service (ETS), 1997; Raimes, 1990). The reading comprehension test consisted of 40 multiple-choice items aiming at assessing students' reading comprehension skills such as identifying topics, finding the main ideas and details, using context clues, and making inferences. Since these students have taken the reading comprehension test before, it can be assured that the reading test can measure student's reading proficiency.

2. The Demographic Questionnaire

The background questionnaire was designed to obtain the general background of the students including gender, age, students status, grade of reading course, grade point average and their reading behavior such as the frequency of accessing the online and printed academic texts.

3. The Questionnaire for Strategies in Reading Printed Academic Texts

The purpose of this questionnaire was to attain reading strategies students employ in reading printed academic texts. The student can self-report their reading strategies in the questionnaire introspectively. The questionnaire was designed to direct students' attention to reading strategies and the strategy components; Cognitive and Metacognitive Strategies used in each stage of the reading process. The questionnaire items were adapted from the empirical evidence used in Phakiti (2006). The questionnaire was the five-point Likert scale ranging from 1 to 5 (1 = strongly disagree, 2, = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The respondents were asked to mark on number 1, 2, 3,4 and 5 that describe their own reading performance The categories of reading

strategies asked were adapted from Phakiti's classification (2006). The following tables illustrate the description of main categories with sub-categories of reading strategies based on Phakiti (2006) categorization.

Table 1

The Categories of Cognitive strategies and Numbers of Items Used in the Questionnaire for Strategies in Reading Printed Academic Texts

Cognitive Strategies	Number of Items	Items used in the questionnaire
Comprehending strategies	10	3, 4, 5, 6, 9, 11, 12, 19, 20, 22
Memory Strategies	3	16, 23, 24
Retrieval Strategies	5	1, 10, 15, 27, 30
Total	18	

As shown in Table 1, 19 items refers to sub-strategies that the readers used in Cognitive Strategies. The questionnaire items 3, 4, 5, 6, 9, 11, 12, 19, 20, and 22 refer to sub-strategies that the readers used in Comprehending Strategies**.** The questionnaire items 16, 23, and 24 refer to sub-strategies that the readers used in used in Memory Strategies**.** The questionnaire items 1, 10, 15, 27, and 30 were used in Retrieval Strategies**.**

Table 2

The Categories of Metacognitive Strategies and Numbers of Items Used in the Questionnaire for Strategies in Reading Printed Academic Texts

Metacognitive Strategies	Number of Items	Items used in the questionnaire
Planning Strategies	4	2, 13, 14, 29
Monitoring Strategies	10	7, 8, 17,18, 21, 25, 26, 28, 31, 32
Evaluating Strategies	1	33
Total	15	

As shown in Table 2, 14 items refers to sub-strategies that the readers used in Metacognitive Strategies. The questionnaire item 2, 13, 14, and 29 referred to sub-strategies that the readers used in Planning Strategies**.** The questionnaire items 7, 8, 18, 21, 25, 26, 28, 31, and 32 refer to sub-strategies that the readers used in Monitoring Strategies**.** The questionnaire item 33 is used in Evaluating Strategies**.**

4. The Questionnaire for Strategies in Reading Online Academic Texts

This questionnaire was employed to investigate reading strategies the third-year English major students used in reading online academic texts. The instrument was originally developed by Mokhtari and Sheory (2002) and adapted by Anderson (2003). This questionnaire consisted of 33 items that measure reading strategies and the items. The reading strategies asked in the questionnaire were divided into three categories; global strategies, problem solving strategies, and support strategies. The following tables the content, items of global strategies, problem solving strategies, and support strategies questionnaire based on Mokhtari and Sheory (2002) categorization was illustrated.

Table 3

The Categories of Reading Strategies and Number of Items Used in the Questionnaire for Strategies in Reading Online Academic Texts

Categories of Reading Strategies	**Number of Items**	**Items used in the questionnaire**
Global Reading Strategies	15	1, 2, 3, 5, 6, 8, 10, 16, 18, 21, 22, 24, 25, 28, 30
Problem Solving Strategies	10	9, 11, 13, 15, 17, 20, 26, 29, 31, 32
Support Strategies	8	4, 7, 12, 14, 19, 23, 27, 33
Total	**33**	

From the Table 3, 15 items (1, 2, 3, 5, 6, 8, 10, 16, 18, 21, 22, 24, 25, 28, and 30) referred to sub-strategies that the readers used in Global Reading Strategies. 10 items (9, 11, 13, 15, 17, 20, 26, 29, 31, and 32) referred to sub-strategies that the readers used in Problem- Solving Strategies, and 8 items (4, 7, 12, 14, 19, 23, 27, and 33) referred to sub-strategies that the readers used in Support Strategies.

5. The Reading Texts Used in the Think-aloud Sessions

To obtain more information and discover how the students use the reading strategies while reading both in online and printed academic texts in real situations, think-aloud session were administered for collecting qualitative data. Three passages from the textbooks and three passages from online texts were distributed to the students to perform their think-aloud in each session. The types of genre, topics and content of the passages from both sources were similar. The topics of reading texts selected to construct the lessons were about environment, psychology, and research articles. The readability of the passages was appropriate with the reading proficient level of the participants. The step of reading was based on three stages of reading: pre-reading, while-reading and post-reading, so the researcher obtained what strategies the students used, how and when they use reading strategies when reading both online and printed academic texts (see in Table 4)

Validity and Reliability

To ascertain the validity of the questionnaires, the experts were asked to evaluate the questionnaire. All construct validity, face validity, and content validity were checked. Furthermore, the questions to be asked in the interviews and think-aloud session were examined by the thesis advisor to determine their validity and appropriateness.

The internal consistency reliability of these questionnaires (online and printed reading strategies) were analyzed. The overall Cronbach alpha reliability for these questionnaires was 0.944 and 0.92 accordingly. Since all Cronbach alpha values are larger than 0.70, these questionnaires have a good internal consistency to evaluate student's reading strategy use.

Data Collection Procedure

The data of this study were divided into quantitative and qualitative data. To determine reading strategies the third-year English major students used in reading online and printed academic texts and to find out the differences in reading strategies of high and low proficient readers in reading both types of texts, the data were collected as in the following procedures;

Data collection procedure in phase 1

1. The researcher administered the Reading Comprehension Test was administered in the first week of the semester of the academic year 2009. The scores of the Reading Comprehension Test were used to divide the students into two proficient groups (high and low proficiency).

2. The Questionnaires for Strategies in Reading Online Academic Texts were collected the week after the students had taken the Reading Comprehension Test.

3. The Questionnaire for Strategies in Reading Printed Academic Texts were collected the week after the students completed the first set of the questionnaire.

Data collection procedure in phase 2

To find out how the third-year English major students use reading strategies in reading online and printed academic texts in real reading situation, the data were collected as follows:

1. Three high and three low proficient students were selected according to their reading comprehension test scores to participate in think-aloud sessions.

2. Before starting the think-aloud sessions, the students were oriented and trained to think-aloud while reading both types of texts. The researcher informed the students the purpose of thinking-aloud in the orientation session.

3. Each group of the students, three high and three low proficient students were met the researcher at a scheduled time (see in Table 4).

4. Three online passages and three printed passages were provided for think-aloud sessions. The types of texts are expository texts such as psychology, environments and research articles.

5. While the students think-aloud, they were tape-recorded and after each think-aloud sessions finished, the students were interviewed in the areas of the student's reading performance and reading strategies used in reading online and printed academic texts. All data were audio-taped for transcribing in the analysis procedure.

Table 4

The Scheduled Time for Collecting the Data in the Case Study

Activities	Participants			
	High Proficient Students		**Low Proficient Students**	
	Content	**Hrs.**	**Content**	**Hrs.**
Orientation 1 (Think-aloud session)	Practice Reading the Printed Text Using Think-aloud	2	Practice Reading the Printed Text Using Think-aloud	2
Orientation 2 (Think-aloud session)	Practice Reading the Online Text using Think-aloud	2	Practice Reading the Online Text Using Think-aloud	2
Think-aloud sessions Printed Texts	Passage 1 (psychology)	2	Passage 1 (psychology)	2
	Passage 2 (environments)	2	Passage 2 (environments)	2
	Passage 3 (research article)	2	Passage 3 (research article)	2
Think-aloud sessions Online Texts	Passage 1 (psychology)	2	Passage 1 (psychology)	2
	Passage 2 (environments)	2	Passage 2 (environments)	2
	Passage 3 (research article)	2	Passage 3 (research article)	2
Total		**16**		**16**

As shown in Table 4, the high proficient students and low proficient students attended orientation 1 and orientation 2, to practice reading the printed text and online text using think-aloud techniques. In addition finding how high proficient students use reading strategies in reading online and printed texts in English, the students were required to read 3 passages from online websites and 3 passages from printed texts. The high proficient students attended the think-aloud session 6 times. The first section is for online reading passage 1 (psychology), passage 2 (environments), and passage 3 (research article). The second section is for printed texts passage 1 (psychology), passage 2

(environments), and passage 3 (research article) each of which lasted approximately for 2 hours. It's total 8 times and 16 hours.

Consequently, students took turn thinking aloud as they read a text. While the first student was thinking aloud, the second and third students listen and record what the first student said. Then students changed roles so that each partner has a chance to think aloud and to observe the process. Next, students reflected on the process together, share things they tried and discussed what worked well for them and what didn't. They were allowed to think aloud while reading and discussion to comprehend the text. While reading think-aloud, the researcher was tape-recorded and transcribed all data later.

Data Analysis

The data were analyzed quantitatively and qualitatively as follows;

Quantitative Data Analysis

This study aimed to examine reading strategies of third-year students majoring in English of the Faculty of Humanities at Srinakharinwirot University while reading online and printed academic texts. The data, self-rating gained through the Reading Strategies Questionnaire and the survey of Online Reading Strategies will be analyzed quantitatively as follows;

The data, self-ratings gained through the Questionnaire for Strategies in Reading Online and Printed Academic Texts were analyzed as follows:

1. Counted the frequency of the ratings from the questionnaires belonging to the students
2. Used descriptive statistics to determine Mean and Standard Deviation.

Mean scores of all participants for the use of strategies in reading both types of academic texts were ranged as the following (Oxford, 1990):

Rate	Meaning
Mean of 3.5 or higher	High
Mean of 2.5 to 3.4	Medium
Mean of 2.4 or lower	Low

3. Divided the students into high and low proficient students according to their reading comprehension scores, and then counts the frequency and the ratings of the reading strategies that students use in reading online and printed texts. The Mean and Standard Deviation of each strategy were calculated and tabulated to compare the differences between the reading strategies used by two groups of the students.

The results revealed the level and the differences of using reading strategies students between high proficient and low proficient students.

Qualitative Data Analysis

1. To find how high and low proficient students used reading strategies in reading online and printed academic texts. The think–aloud protocols were transcribed by the researcher. Then it was coded and classified into the group of strategies. The data were divided into two parts (a) types of reading strategies in online and printed academic texts used, and the way these strategies are used and (b) how English major students at SWU with high and low proficiency use reading strategies differently. All ambiguous answers were rechecked with the participants.

The results revealed how the proficient and low proficient students use reading strategies

CHAPTER IV

FINDINGS

This study was conducted to investigate reading strategies used in online and printed academic texts of third-year students majoring in English at Srinakharinwirot University. The study also aimed to find out the differences in reading strategy use between high and low proficient third-year students majoring in English when reading online and printed academic texts. This chapter then presents the results of the study into two sections. The first section reports the quantitative results of the study, and the second sections describes the qualitative results of the study of the case study.

Quantitative Results of the Study

The first phase of the study was conducted to answer the following research questions: 1) What reading strategies are used by third-year students majoring in English at Srinakharinwirot University (SWU) when reading online and printed academic texts in English? 2) What reading strategies are used by high and low proficient third-year students majoring in English when reading online and printed academic texts? and 3) What are the differences in reading strategy use between high and low proficient third-year students majoring in English when reading online and printed academic texts?

Analysis of students' response to the two sets of the questionnaires: The Questionnaire for Strategies in Reading Online Academic Text and the Questionnaire for Strategies in Reading Printed Academic Text were examined. The first part showed the results of the background information of the 73 respondents, the frequency of academic reading and type of online and printed reading texts.

Background Information of the Respondents

Table 5 presents the background information of the respondents including sex, age, grade of previous reading course, and grade point average (GPA).

Table 5

Background Information of the Respondents

General Information	Third-Year English Major Students (N=73)	
	Number of students	Percentage (%)
1. Sex		
Male	26	35.60
Female	47	64.40
2. Age		
19	2	2.74
20	47	64.40
21	22	30.14
22	1	1.37
23	1	1.37
3. Grades of Reading Course		
A	7	9.60
B+	15	20.56
B	33	45.20
C+	12	16.44
C	6	8.20
4. Grade Point Average		
2.5 – 2.99	17	23.29
3.0 – 3.49	53	72.60
3.5 – 4.00	3	4.11

Table 5 shows that 35.50% of the participants were males and 64.40 % were females. In terms of the grades of previous reading course, 9.60% of the participants got A, 20.56% got B+, 45.20 % got B, 16.44 % got C+, and 8.20% got C. For grade point average (GPA), 23.29% of the participants had GPA from 2.5 to 2.99, 72.60% had GPA from 3.0 to 3.49, and 23.29% had GPA from 3.50 to 4.00.

The researcher also explored the frequency of reading both academic and printed academic texts in English daily. Table 6 illustrates the frequency of reading online and printed academic texts by third-year English major students.

Table 6

The Frequency of Reading in Online and Printed Academic Texts by the Third-Year Students Majoring in English

Frequency	Third-Year English Major Students (N=73)			
	Reading Online Academic Texts		Reading Printed Academic Texts	
	Number of students	Percentage (%)	Number of students	Percentage (%)
Always	8	11	12	16.43
Often	26	35.60	30	41.10
Rarely	39	53.40	31	42.47
Total	**73**	**100**	**73**	**100**

Table 6 shows that 11% of the participants always read online academic texts while 16.43% always read printed academic texts. In addition, 26% of them sometimes read online academic texts while 41.10 % sometimes read printed academic texts. Also, 53.40% of them rarely read online academic texts while 42.47 % rarely read printed academic texts**.**

Strategies Used in Reading Online and Printed Academic Texts of Third-Year Students Majoring in English

The data ratings from the two sets of the questionnaire reported by 73 respondents were analyzed to examine the reading strategies third-year English majors used when reading online and printed academic texts. The level of use was also interpreted based on the criteria derived from Oxford (1990) as follows:

Ratings	Level
Mean of 3.50 or higher	High
Mean of 2.50 to 3.40	Medium
Mean of 2.40 or lower	Low

The results revealed that third-year students majoring in English employed Global Reading Strategies, Problem Solving Strategies, and Support Strategies at the medium level when reading online academic texts; similarly, when reading printed academic texts, Cognitive Strategies and Metacognitive Strategies were employed at the medium level.

Table 7 shows the means and standard deviations of reading strategies used by third-year English major students in reading online academic texts and Table 8 presents the means and standard deviations of strategies used by third-year English major students in reading printed academic texts.

Table 7

Means, Standard Deviations and Level of Use of Strategies by Third-year English Major Students in Reading Online Academic Texts

Reading Strategies	Third Year English Major Students (N=73)		
	Mean	**S.D.**	**Level**
Global Reading Strategies	3.13	0.36	Medium
Problem Solving Strategies	3.15	0.40	Medium
Support Strategies	3.18	0.46	Medium
Overall	**3.16**	**0.36**	**Medium**

According to Table 7, overall, third-year English major student used reading strategies in online academic texts at the medium level with the means of 3.16. When each type of strategies were analyzed, it was found that the students used Problem Solving Strategies, Global Reading Strategies, and Support Strategies at the medium level with the means of 3.13, 3.15, and 3.18 respectively.

Table 8

Means, Standard Deviations and Level f Use of Strategies by Third-year English Major Students in Reading Printed Academic Texts

Reading Strategies	Third Year English Major Students (N=73)		
	Mean	**S.D.**	**Level**
Cognitive Strategies	3.31	0.42	Medium
Metacognitive Strategies	3.26	0.44	Medium
Overall	**3.28**	**0.41**	**Medium**

According to Table 8, third-year English major students used Cognitive and Metacognitive Strategies in reading printed academic texts at the medium level. However, the students applied Cognitive Strategies more often than Metacognitive Strategies. The mean of Cognitive Strategies used was 3.31 while the mean of Metacognitive Strategies used was 3.26.

To obtain more insightful information about the use of reading strategies in reading online and printed academic texts, the researcher also analyzed the data based on each item of both questionnaires: the Questionnaire for Strategies in Reading Online Academic Texts and the Questionnaire for Strategies in Reading Printed Academic Texts The results were shown in Table 9 and Table 10.

Table 9 illustrates the means and standard deviations of reading strategies used by third-year English major students in reading online academic texts.

Table 9

Means and Standard Deviations of Individual Reading Strategies Used by Third-year English Major Students in Reading Online Academic Texts

Item No.	Online Reading Strategies	Mean	S.D.	Level
Global reading strategies				
1	I have a purpose in mind when I read online.	3.43	0.84	High
2	I participate in live chat with other learners of English.	2.88	0.91	Medium
3	I take notes while reading online to help me understand what I read.	2.15	0.80	Low
5	I take an overall view of the online text to see what it is about before reading it.	3.48	0.96	High
6	When online text become difficult, I read aloud to help me understand what I read.	2.60	1.10	Medium
8	I read slowly and carefully to make sure I understand what I am reading online.	3.65	0.86	High
10	I try to get back on track when I lose concentration.	3.48	0.91	Medium

Table 9 *(Continued)*

Item No.	Online Reading Strategies	Mean	S.D.	Level
16	I use tables, figures, and pictures in the online text.	3.05	0.88	Medium
18	I use context clues to help me better understand what I am reading online.	3.48	0.91	Medium
21	I use typographical features like bold face and italics to identify key information.	2.88	1.02	Medium
22	I critically analyze and evaluate the information presented in the online text.	2.75	0.67	Medium
24	I check my understanding when I come across new information.	3.28	0.75	Medium
25	I try to guess what the content of the online text is about when I read.	3.55	0.93	High
28	I check to see if my guesses about the online text are right or wrong.	3.18	0.87	Medium
30	I scan the online text to get a basic idea of whether it will serve my purpose before choosing to read it.	3.23	0.86	Medium
Problem solving strategies				
9	I review the online text first by nothing its characteristics like length and organization	2.48	0.88	Low
11	I printed out a hard of copy of the online text then underline or circle information to help me remember it.	2.60	0.90	Medium
13	I adjust my reading speed according to what I am reading online.	3.05	0.81	Medium
15	I stop reading for a moment when I am feeling stressed or confused.	2.90	0.74	Medium
17	I stop from time and think about what I am reading online.	2.83	0.96	Medium
20	I try to picture or visualize information to help remember what I read online.	3.50	1.11	High
26	When online text becomes difficult, I re-read it to increase my understanding.	3.75	0.98	High
29	When I read online, I guess the meaning of unknown word or phrases.	3.83	0.84	High
31	I critically evaluate the online text before choosing to use information I read.	3.10	0.74	Medium
32	I can distinguish between fact and opinion in online texts.	3.48	0.78	Medium
Support strategies				
4	I think about what I know to help me understand what I read online.	3.35	0.74	Medium
7	I think about whether the content of the online text fits my reading purpose.	3.28	0.85	Medium
12	When reading online text, I think about information in both English and my mother tongue.	2.95	0.88	Medium

Table 9 *(Continued)*

Item No.	Online Reading Strategies	Mean	S.D.	Level
14	I use reference materials (e.g. an on-line dictionary) to help me understand what read online.	3.60	1.24	High
19	I paraphrase (restate ideas in my own words) to better understand what I read online.	3.13	1.02	Medium
23	I go back and forth in the online text to find relationships among ideas in it.	3.10	0.81	Medium
27	I ask myself question I like to have answered in the online text	2.78	0.80	Medium
33	When reading online, I translate from English into my native language.	3.28	1.06	Medium
	Overall	**3.16**	**0.36**	**Medium**

With regard to the individual strategy items from the questionnaire as shown in Table 9, the mean scores of the Global Reading Strategies ranged from a high of 3.65 to a low of 2.15 showing the overall, the students employed the Global Reading Strategies at the medium level with the mean of 3.13. They employed those strategies on the item number 1, 5, 8, and 25 at the high level. Besides, they used the strategies on the item number 2, 6, 10, 16, 18, 21, 24, 28, and 30 at the medium level.

In addition, the use of Problem Solving Strategies ranged from a high of 3.83 to a low of 2.48. The students used these strategies at the medium level with the mean of 3.15. They frequently used the strategies on the item number 20, 26, and 29 at the high level, and they used the strategies on the item number 11, 13, 15, 17, 31, and 32 at the medium level, and they used the strategy on the item number 9 at the low level. For Support Strategies, the students used them at the medium level with the mean 3.18. The students applied the strategy on the item number 14 at the high level. In addition, they used the strategies on the item number 4, 7, 12, 19, 23, 27, and 33 at the medium level.

Table 10 indicates the means and standard deviations of reading strategies used by third-year English major students in reading printed academic texts

Table 10

Means and Standard Deviations of Individual Reading Strategies Used by Third-year English Major Students in Reading Printed Academic Texts

Item No.	Printed Reading Strategies	Mean	S.D.	Level
Cognitive strategies				
Comprehending strategies				
3	While reading, I look will predict the content of the text.	3.33	1.07	Medium
4	When I read, I will recognize the failure/success to understand a portion of the text.	2.93	0.92	Medium
5	When I read, I will pay more attention to the meaning of the reading passage.	3.68	0.83	High
6	When I read, I will pay more attention to the meaning of each individual word.	3.10	1.19	Medium
9	While reading, I will identify the grammatical function of unknown word before guessing the meaning.	2.63	0.98	Medium
11	While reading, I will use an English –English dictionary to find the meaning of unknown words.	2.83	1.15	Medium
12	While reading, I will use an English –Thai dictionary to find the meaning of unknown words.	3.73	1.15	High
19	When I read, I will read word by word.	2.75	0.95	Medium
20	When I read, I will scan for useful words or phrases.	3.45	1.04	Medium
22	When I read, I will translate the words or sentences into Thai.	3.23	1.10	Medium
Memories Strategies				
16	When I read, I will imagine the image and sound described in the article.	3.85	0.95	High
23	When I read, I will use paraphrasing to help comprehension.	3.10	0.87	Medium
24	When I don't understand texts, I will remind myself by underlining the words or phrases.	3.50	1.11	High
Retrieval Strategies				
1	Before reading, I look at the picture or diagrams along with what is under the pictures.	3.85	0.98	High
10	While reading, I will use word roots and affixes (prefixes and suffixes) to understand the meaning words.	3.25	1.06	Medium

Table 10 *(Continued)*

Item No.	Printed Reading Strategies	Mean	S.D.	Level
15	When I read, I will look for transitional words that help explain the relationship between sentences such as although, due to, and so.	3.53	1.09	High
27	When I read, I will use contextual rules to interpret a word or phrase.	3.13	0.56	Medium
30	When I read, I will use background knowledge to help comprehension.	3.75	0.74	High
Metacognitive Strategies				
Planning Strategies				
2	Before reading, I read the introduction and conclusion of the passage to figure out what the passage is about.	3.28	1.06	Medium
13	When I read, I will skim the whole text for the main idea.	3.28	0.93	Medium
14	When I read, I will read a phrase or sentences at a time.	3.43	0.68	Medium
29	When I read, I will read ahead for further clues.	3.30	0.82	Medium
Monitoring Strategies				
7	While reading, I break down larger clauses into smaller parts to help me understand difficult sentences in the passage.	3.23	0.80	Medium
8	While reading, I will adjust reading rate to increase comprehension.	3.18	0.81	Medium
17	When I read, I will analyze the syntactical structure of the sentences.	3.10	0.87	Medium
18	When I read, I will pay attention to every detail.	2.85	0.77	Medium
21	When I read, I will re-consider the difficult part of the article to help me understand its meaning.	3.43	0.75	Medium
25	I frequently check if I don't understand the contents.	3.53	1.01	High
26	When the texts are ambiguous, I will recheck it for comprehension.	3.25	0.78	Medium
28	When I read, I will respond to the genre and organization of the text.	3.00	0.72	Medium
31	When I read, I will analyze the grammatical structure to help comprehension.	3.10	0.93	Medium
32	When I read, I will use signals words to help comprehension.	3.58	0.81	High
Evaluating strategies				
33	While reading, I critically analyze and evaluate the information appeared in the texts.	3.35	0.74	Medium
	Overall	**3.28**	**0.41**	**Medium**

According to the Table 10, overall, the students used the Comprehending Strategies ranged from at the medium level with the mean of 3.16. The students employed the strategies on the item number 5 and 12 at the high level; whereas, they employed the strategies on the item number 3, 4, 6, 9, 11, 19, 20, and 22 at the medium level. It was also found that the students used Memories Strategies at the medium level with the mean of 3.48. They applied these strategies on the item number 16 and 24 at the high level; whereas, they used the strategy on the item number 24 at the medium level. The students employed Retrieval Strategies t at the high level with the mean of 3.50. They frequently used these strategies on the item number 1, 15, and 30 at the high level while they applied the strategies on the item number 10 and 27 at the medium level.

For Metacognitive Strategies, the students used them at the medium level with the mean of 3.32. They used planning strategies at the medium level. In Memory Strategies, the item number 25 and 32 were used at the high level; however, the item number 7, 8, 17, 21, 26, 28, and 31 were used at the medium level. Finally, the Evaluating Strategy on the item number 33 was used at the medium level with mean of 3.35.

To examine the differences in reading strategy use between high proficient and low proficient third-year majoring in English when reading online and printed academic texts, the researcher analyzed the data, the self-ratings reported by the high and low proficient students and compared the reading strategies they used when reading online academic texts and printed academic texts for each group of the students. The results were presented in Table 11 and 12.

Table 11

The Overall Means, Standard Deviations, Mean Differences and Level of Use of Reading Strategies by High Proficient Students and Low Proficient Students in Reading Online and Printed Academic Texts

Reading Strategies	High Proficient Students (N=20)		Level	Low Proficient Students (N=20)		Level	t-value	p
	Mean	S.D.		Mean	S.D.			
Online	3.48	0.14	Medium	2.83	0.18	Medium	12.724	0.001*
Printed	3.66	0.15	High	2.91	0.16	Medium	15.156	0.001*

Table 11 shows the overall means, standard deviations, t-value and p-value of reading strategies used by high and low proficient students in reading online and printed academic texts. High proficient students used online reading strategies and reading strategies in printed academics texts more than low proficient students with the statistically significant difference at 0.05 level ($p<0.001$).

Table 12

Means, Standard Deviations, Mean Differences, and Level of Use of Reading Strategies by High Proficient Students and Low Proficient Students in Reading Online Academic Texts

Reading Strategies	High Proficient Students (N=20)		Level	Low Proficient Students (N=20)		Level	t-value	p
	Mean	S.D.		Mean	S.D.			
Global Reading Strategies	3.42	0.22	Medium	2.85	0.23	Medium	7.948	0.001*
Problem Solving Strategies	3.45	0.23	Medium	2.85	0.29	Medium	7.282	0.001*
Support Strategies	3.56	0.22	High	2.80	0.29	Medium	9.238	0.001*
Overall	**3.48**	**0.14**	**Medium**	**2.83**	**0.18**	**Medium**	**12.724**	**0.001***

Table 12 shows that high proficient students used online reading strategies at the high level with the mean of 3.66 while low proficient students used it at the medium level with the mean score of 2.91. When each type of strategies was examined, it was found that high proficient students used support strategies at the high level and used global strategies and problem strategies at the medium, but low proficient students used it at the low level.

Table 13

Means and Standard Deviations and mean Differences and the Level of Use of Sub-categories of Cognitive and Metacognitive Strategies by High and Low Proficient Students in Reading Printed Academic Texts

Reading Strategies	High Proficient Students (N=20)		Level	Low Proficient Students (N=20)		Level	t-value	p
	Mean	S.D.		Mean	S.D.			
Comprehending strategies	3.50	0.24		2.83	0.31		7.650	0.001*
Memory strategies	3.93	0.40	High	3.03	0.32	Medium	7.893	0.001*
Retrieval strategies	3.91	0.35		3.09	0.31		7.841	0.001*
Cognitive strategies	**3.68**	**0.16**	**High**	**2.94**	**0.22**	**Medium**	**12.110**	**0.001***
Planning strategies	3.78	0.42		2.86	0.26		8.230	0.001*
Monitoring strategies	3.55	0.27	High	2.90	0.21	Medium	8.420	0.001*
Evaluating strategies	3.85	0.67		2.85	0.37		5.851	0.001*
Metacognitive strategies	**3.63**	**0.25**	**High**	**2.88**	**0.18**	**Medium**	**10.826**	**0.001***
Overall	**3.66**	**0.15**	**High**	**2.91**	**0.16**	**Medium**	**15.156**	**0.001***

Table 13demonstrates arithmetic means, standard deviations, t-value and p-value of sub-categories of Cognitive and Metacognitive Strategies used by high proficient students and low proficient students in reading printed academic texts. Overall, high

proficient students and low proficient students used Cognitive Strategies more often than Metacognitive Strategies. In addition, high proficient students used Comprehending Strategies, Memory Strategies and Retrieval Strategies at the high level with the mean scores of 3.50, 3.93, and 3.91 accordingly; whereas, low proficient students used Comprehending Strategies, Memory Strategies and Retrieval Strategies at the medium level with the mean scores of 2.83, 3.03, and 3.09. Additionally, high proficient students used Planning Strategies, Monitoring Strategies and Evaluating Strategies at the high level with the means of 3.78, 3.55, and 3.85 correspondingly while low proficient students used those strategies at the medium level with the mean 2.86, 2.90, and 2.85 respectively.

Qualitative Results of the Study

In the qualitative study, the researcher aimed to find out how high and low proficient students use strategies in reading online and printed academic texts in English. The data were collected from three high proficient students and three low proficient students majoring in English. The participants had been assigned to think aloud while reading three online and printed academic texts. Furthermore, the researcher interviewed the participants to ensure that they used reading strategies revealed in their think-aloud sessions. All data think-aloud transcriptions were analyzed based on the categories of reading strategies in the literature review (Moktari & Sheorey, 2002; Phakitti, 2006). Table 14 shows the overall strategies that high and low proficient students used in reading online academic texts, and Table 15 shows the overall strategies that high and low proficient students used in reading printed academic texts in the think-aloud sessions.

Table 14

Strategies Used by High and Low Proficient Students in Reading Online Academic Texts in the Think-aloud Sessions

Reading Strategies	Online Academic Texts	
	High Proficient Students	**Low Proficient Students**
Global Reading Strategies	Scanning the text Focusing on the main point Using context clue to guess the meaning	Scanning the text - -
Problem Solving Strategies	Using background knowledge Rereading Using grammatical rules	- Rereading -
Support Strategies	- - -	Taking notes Using dictionary Translating English into Thai

According to Table 14, it shows that when high proficient students read online academic texts, they used Global Reading Strategies including scanning the text, focusing on the main point, using context clues to guess the meaning. The students also used Problem Solving Strategies including using background knowledge, rereading, and using grammatical rules). However, they did not use Support Strategies when reading online academic texts. For low proficient students, they used fewer strategies than the high proficient students. That is, they used one Global Reading Strategy, scanning the text, and one Problem Solving Strategy, rereading. However, the result revealed that low proficient students used all the Support Strategies including taking note, using dictionary and translating English into Thai.

Table 15

Strategies Used by High and Low Proficient Students in Reading Printed Academic Texts in the Think-Aloud Sessions

Reading Strategies	Printed Academic Texts	
	High Proficient Students	**Low Proficient Students**
Cognitive Strategies	Using background knowledge - - -	- Taking notes Using dictionary Translating English into Thai
Metacognitive Strategies	Scanning the text Rereading Focusing on the main point Using grammatical rules Using context clue to guess the meaning	Scanning the text Rereading - - -

According to Table 15 above, it indicates that high proficient students used Cognitive Strategies, using background knowledge when they read printed academic text. Interestingly, high proficient students mostly used Metacognitive Strategies including scanning the text, rereading, focusing on the main point, and using grammatical rules, using context clue to guess the meaning. For low proficient students, they used Cognitive Strategies most including taking notes, using the dictionary, and translating English into Thai. In addition, the low proficient students used a few Metacogniitive Strategies. They scanned and reread the texts when reading printed academic texts.

Table 16 and 17 are some examples of the think-aloud protocols and interview data obtained in think-aloud sessions when high and low proficient students were assigned to read online and printed academic texts.

Table 16

Examples of Think-aloud Protocols and Interview Transcriptions of High and Low Proficient Students in Reading Online Academic Texts

Strategies	High Proficient Students	Low Proficient Students
Global Reading Strategies		
Scanning the text	"I scan whether there are difficult words in this text." ***(Used)***	"I read the questions before start reading the text. Then I scan to get overall idea." ***(Used)***
	"I scan the whole passage to find the answer first. Then I read for main idea and read it thoroughly" ***(Used)***	"If the text is easy I will read ahead. However, if the text is about science or very difficult, I will scan text before I read in depth." ***(Used)***
Focusing on the main point	"I read roughly but I don't understand I will read for main idea to guess what the text is." ***(Used)***	"I don't focus on the main or supporting idea. I just read through the text to get the answer or understanding the text." ***(Did not use)***
	"I look at the main point and then set my purpose of the reading" ***(Used)***	"This text is too long how I can find the main idea. I think I will read another paragraph to understand the content." ***(Did not use)***
Using context clue to guess the meaning	"I use several clues. I often use the entire sentence to explain some the unknown words." ***(Used)***	"I rarely used it. I didn't know what is the clue of this word I prefer use dictionary to check it." ***(Did not use)***
	"I use context to help me understand this word and I found that its meaning is negative. In my opinion, it's not necessary to find the meaning because I still understand the whole paragraph." ***(Used)***	"I didn't guess the meaning of the text around the words. When I didn't know the words I used online dictionary." ***(Did not use)***

Table 16 *(Continued)*

Strategies	High Proficient Students	Low Proficient Students
Problem Solving Strategies		
Using background knowledge	"I think my background knowledge help me to read this text rapidly." ***(Used)***	"I didn't use my background knowledge in this text because I don't know have at all. Huh…I think this text is quite difficult and long." ***(Did not use)***
	"I have read this related article. So, I can understand this text easily because I can guess the overall idea. I can read this text continually and rapidly" ***(Used)***	"I didn't use my knowledge to find main idea and my own word tank about global warming. I have learnt this topic very little." ***(Did not use)***
Rereading	"I go back to read it again but I read gradually to check whether I understand clearly. I think I didn't lose concentration." ***(Used)***	If the text becomes difficult, I will re-read the text to clarify details. Right I read slower and sometimes stop to think about what I've read." ***(Did not use)***
	"I went back to read again but it's not often." ***(Used)***	I usually read back and forth or reread some paragraph If the text is difficult" ***(Did not use)***
Using grammatical rules	"I look for the transition and conjunction in the text to see the connection of the text. It help me read rapidly." ***(Used)***	"When the text is more complex I read through the end of the text. I didn't use the knowledge of grammatical rules to understand it." ***(Did not use)***
Support Strategies		
Taking note	"I didn't take any notes because this is an online text so I can find the meaning immediately." ***(Did not use)***	"I wrote some unknown words down or complex sentences to translate it later." ***(Used)***
	"I didn't because I can find the meaning from online dictionary" ***(Did not use)***	

Table 16 *(Continued)*

Strategies	High Proficient Students	Low Proficient Students
Using the dictionary	I didn't use it because I can guess the meaning. It's not a problem to answer the question." ***(Did not use)***	"When I found the difficult text, I will stop to open dictionary and then I reread that sentences and continued." ***(Used)***
	If I see unfamiliar words, I will guess the meaning by reading the next sentence. or context clues. I didn't use dictionary in this text." ***(Did not use)***	"I often look for the meaning in the dictionary especially online dictionary because I can search for the meaning right away. I think it help to read continuously." ***(Used)***
Translating English into Thai	"I can understand this text immediately when I read, except some difficult sentences I have to focus and translate word by word. This may help me understand better." ***(Did not use)***	"Actually, I didn't but I try to translate few words after reading." ***(Used)***
	"I didn't do it because I can understand the main point of this text without translation." ***(Did not use)***	"I did. I translate text into Thai while reading because there are some unclear sentences that I have to focus on otherwise I would not understand it." ***(Used)***

Table 17

Examples of Think-aloud Protocols and Interview Transcriptions of High and Low Proficient Students in Reading Printed Academic Texts

Strategies	High Proficient Students	Low Proficient Students
Cognitive strategies		
Using background knowledge	"Actually, I think that the background knowledge in reading can help reader read well and understand more clearly."***(Used)***	"I didn't use my background knowledge in this text because I don't know have at all. Huh…I think this text is quite difficult and long." ***(Did not use)***
	"I use my background knowledge and the picture of the text. Then, I see what the text is about. It can be noticed from the title which is clearly that the animals are going to extinct and the first sentence is the main idea of this text." ***(Used)***	"I think using background knowledge help me to read this text easier. I can guess the overall idea even I don't understand this text much." ***(Used)***
Taking note	"I rarely take note while reading but I underlined only the words that I didn't know or the main point."	"I didn't take any notes but I often underline every unfamiliar word or some sentences that I didn't understand. Then go back and read again." ***(Used)***
	"It depends on text which is difficult or not. Sometime I don't take any note."	"Yes. I wrote some unknown words down or complex sentences to translate it later." ***(Used)***
Using the dictionary	"Not only use dictionary, I also look for another supporting detail in the next sentence." ***(Did not use)***	"I find the meaning in the dictionary immediately because I really don't know what it is. I'm not sure whether the next sentences will clarify its meaning."***(Used)***

Table 17 *(Continued)*

Strategies	High Proficient Students	Low Proficient Students
Using dictionary	"According to technical term, I use dictionary to help me understand but sometime I look the word or the sentence in parentheses or comma. I can assume what the text is without translating the meaning." ***(Did not use)***	"Reading this text, there are a lot of technical terms so I often open dictionary to clarify its meaning, otherwise, I won't understand the text." ***(Used)***
Translating English into Thai	"I can understand this text immediately when I read, except some difficult sentences I have to focus and translate word by word. This may help me understand better." ***(Did not use***	"When I read I usually translate into Thai because I think I can understand the text better but if the text is not difficult I will use my prior knowledge to predict it" ***(Used)***
	"Not at all. Because I can see the meaning in the following sentences or looking the punctuation or comma to clarify the meaning." ***(Did not use)***	"When I read I think about meaning in Thai but I prefer open dictionary to translate difficult words." ***(Used)***
	"I don't have to translate it because this text is not difficult. When I start reading, I can get the main point." ***(Did not use)***	
Metacognitive strategies		
Scanning the text	"I scan text first then look in depth later because I will not waste time"***(Used)***	"Sometime I scan the text and continue to read the text slowly until the end" ***(Used)***
	"I read title, scan the whole text and check main idea of each paragraph because this text is quite long." ***(Used)***	"I scan the text first to see what the scope of the text is and read it roughly." ***(Used)***
	"I usually scan the text and then I will read again and find the answer and underline the main point."***(Used)***	"Before I read I scan the entire text and check how long the text is. Then I read in every detail in the text." ***(Used)***

Table 17 *(Continued)*

Strategies	High Proficient Students	Low Proficient Students
Focusing on the main point	"I read roughly but I don't understand I will read for main idea to guess what the text is." ***(Used)***	"I rarely find main idea after I read because I have to read the whole text to find it." ***(Did not use)***
	"I look at the main point and then set my purpose of the reading" ***(Used)***	"This text is too long how I can find the main idea. I think I will read another paragraph to understand the content." ***(Did not use)***
Rereading	"First I reread it twice and then I read and read aloud that words slowly." ***(Used)***	"I reread the passage again if the text is not very long. I will reread and skip if I don't understand." ***(Used)***
	"I will lose concentration when I read long sentences because I may confuse with the modifier. I have to reread it to understand better." ***(Used)***	"Yes. I reread the whole text again to understand the confusion part because this text has a lot of difficult word." ***(Used)***
	"I go back to read it again but I read gradually to check whether I understand clearly." ***(Used)***	"I usually reread the previous sentence when the confusion occurred. If I really don't understand the text, sometimes I skip or stop and read another paragraph." ***(Used)***
Using grammatical rules	"It's no need to know every meaning of those words because hyphen is a keyword that explains which part of the body will active when laughing." ***(Used)***	"I saw comma in this paragraph but I couldn't know what this sentence means."***(Did not use)***
	"I see, there is the definition here, look at the comma. That's the nervous system, the endocrine system, and the immune system." ***(Used)***	"I rarely use the grammatical rules to get the meaning even I know that it's important way to help me understand text. I prefer read line by line until the end." ***(Did not use)***

Table 17 *(Continued)*

Strategies	High Proficient Students	Low Proficient Students
Using grammatical rules	"I can use grammatical rules such as transition or conjunction to understand the connection of the text. In contrast, if I don't know the grammatical rules at all, I can't guess what the meaning of that word is."***(Used)***	"Sometimes, I miss the punctuation or transitional words. I rarely notice it when I read the text." ***(Did not use)***
Using context clue to guess the meaning	"I won't define the meaning but I will use clues in the text to help me understand text. Even I don't define the meaning, I can understand the word without focusing in one point." ***(Used)***	"There are a lot of difficult words here. I don't understand it. I have to open dictionary again to continue reading." ***(Did not use)***
	"If I can't translate it at all or that word is related to the important detail, I will use dictionary. If not, I will find the clue instead to save my time." ***(Used)***	"What "arousal is? I have to use dictionary again. How difficult it is." ***(Did not use)***
	"Right. I will use dictionary if the questions need the meaning. If not I will guess the meaning by reading the next sentence or context clues."***(Used)***	"I like to open dictionary than look for the clues because I don't know where it is. Anyway, sometimes I can find it if the text is not complicated" ***(Did not use)***

Summary of the Chapter

Chapter 4 presents the results of this study in two parts: the quantitative part and the qualitative part. First, in the quantitative part, the results obtained from the Questionnaire for Strategies Used in Reading Online Academic Texts and the Questionnaire for Strategies Used in Reading Printed Academic Texts showed the strategies third-year students majoring in English employed in reading online and printed academic texts. Next, the differences in reading strategy use in reading online and printed academic texts between the high proficient students and the low proficient students were compared. The results revealed that in reading online academic texts, third-year students used Global Reading Strategies, Problem-Solving Strategies and Support Strategies at the medium level, but they used Support Strategies the most. In addition, the third-year students used Cognitive Strategies more frequently than Metacognitives Strategies. They appeared to use the Retrieval Strategies at the high level; whereas, they used Comprehending Strategies and Memory Strategies at the medium level.

When comparing between the strategies used in reading online and printed academic texts, it was found that in reading online text, high proficient students used Support Strategies at the high level while low proficient students used them at the medium level. Furthermore, they both used Problem Solving Strategies and Global Strategies at the medium level. In reading printed texts, high proficient students used Cognitive Strategies and Metacognitive Strategies at the high level; whereas, low proficient students used them at the medium level. However, both high and low proficient students used Cognitive Strategies more often than Metacognitive Strategies. The use of reading strategies in reading online and printed materials by high proficient students and low proficient students was significantly different at the 0.05 level.

In qualitative part, the strategies that high and low proficient students used in reading online and printed academic texts consisted of these following strategies, scanning the text, using background knowledge, rereading, using context clue to guessing the meaning, using grammatical rules to comprehend the text, using the dictionary to clarify the unknown words, translating English into Thai, taking note while reading. In addition, it was found that the high proficient students appeared to use various strategies more effectively and appropriately than the low proficient students do when reading online and printed academic texts. The low proficient students applied few reading strategies to comprehend the meaning from the texts. Moreover, they often get troubled with understanding the unfamiliar words or fail to adjust their reading strategies to help them understand the texts.

Chapter 5 summarizes the results of the study and offers the discussion and implications. Some recommendations for the future research are also proposed.

CHAPTER V

CONCLUSION AND DISCUSSION

The main purpose of this study was to investigate strategies used in reading online and printed academic texts of third-year students majoring in English at Srinakharinwirot University. The focus of this study concerned three issues: 1) reading strategies students used when reading online and printed academic texts, 2) strategies high and low proficient students used in reading online and printed academic texts and the differences between reading strategies used by high and low proficient students for each type of texts., and 3) how high and low proficient students use those strategies while reading. This chapter presents the conclusion and significant findings as well as the discussion of the findings. It also presents the implications and the recommendations for further research studies.

Conclusion

The purpose of this study was to investigate reading strategies used in reading online and printed academic texts of third-year students majoring in English at Srinakharinwirot. The study was a two-phase study combining quantitative and qualitative data collection and analysis. Seventy-three third-year English major students who were enrolled in the academic year 2009 at Srinakharinwirot University were purposively selected as the sources of data of the study. To collect quantitative data, first the reading comprehension test was administered. Then the students were classified into high proficient students and low proficient students according to the reading scores. After the test, two sets of questionnaires: 1) the Questionnaire for Strategies in Reading Online

Academic Texts and 2) the Questionnaire for Strategies in Reading Printed Academic Texts were used to obtain data, reading strategies students use in reading online and printed academic texts. In qualitative data, six students: three high proficient students and three low proficient students were selected to take part in the think-aloud reading sessions. In think-aloud sessions, students read the online and printed academic texts three times as planned by the researcher. After each think-aloud session ended, the students were interviewed immediately.

The findings in quantitative study showed that in reading online academic texts, third-year students used Global Reading Strategies, Problem Reading Strategies and Support Strategies at the medium level. In reading printed academic texts, the third-year students used Cognitive Strategies more frequently than Metacognitives Strategies. They appeared to use the Retrieval Strategies at the high level; whereas, they used Comprehending Strategies and Memory Strategies at the medium level.

The results of the study also revealed that the use of strategies by high and low proficient students in reading online and printed academic texts. It was found that in reading online academic texts, high proficient students used Support Strategies at the high level while low proficient students used Support Strategies at the medium level. Furthermore, both high and low proficient students both used Problem Solving and Global Reading Strategies at the medium level. In addition, high proficient students used Cognitive Strategies and Metacognitive Strategies at the high level; whereas, low proficient students used CS and MS at the medium level. However, both of them use Cognitive Strategies more often than Metacognitive Strategies. The use of reading strategies in reading online and printed academic texts by high proficient students and low proficient students was significantly different at the 0.05 level.

The findings in qualitative study revealed that the high proficient students are likely to use various strategies more effectively and appropriately than the low proficient students do when reading online and printed academic texts. The low proficient students apply few reading strategies to comprehend the meaning from the texts. They also often have problems in understanding the unfamiliar words or fail to adjust their reading strategies to help them comprehend the texts.

Discussion in Quantitative Study

Strategies used in Reading Online Academic Texts

An investigation of strategies used in reading online academic texts of third-year English majors revealed that there were slightly different in the use of three main categories of reading strategies. They used these three reading strategies: Global Strategies, Problem Solving Strategies, and Support Strategies at the medium level. However, the students used Support Strategies the most. That is, they tended to use the dictionary, take notes or underline unknown words to help them comprehend the texts. In addition, the students used the Global Reading Strategies (e.g. set purpose in mind, predicting or guessing the text's meaning and using context clues to guess the meaning) and Problem Solving Strategies (stop reading for a moment when stressing or confusing occurred). The findings of the study were in line with the results of previous studies (Sheorey & Mokthari, 2001; Mokhtari, & Sheorey, 2002; Huang et al., 2009) which showed that the students tended to use the Support Strategies to help them to easily understand the meaning or communicate information quickly while they read online academic texts. For most students, the difficulty understanding the text comes from unknown words, so the possible way for them to get the

meaning from the difficult text is to use the dictionary to look up for the unfamiliar words. They then try to translate from English into their native language. The Support Strategies help the students to comprehend the meaning of the texts

Strategies used in Reading Printed Academic Texts

In reading printed academic texts, the results showed that the students employed Cognitive Strategies and Metacognitive Strategies at the medium level, but they used Cognitive Strategies more often than Metacognitive Strategies. The Cognitive Strategies are strategies that ones have learned, and they use these strategies such as summarizing main information, using the dictionary, rereading, and using grammatical rules to understand meaning to directly process information in order to understand the text. The sub-category that the students used most were Retrieval Strategies such as using grammar rules to understand meaning or recalling reading purposes and using prior knowledge to help comprehension. Moreover, they also applied the Comprehending Strategies (e.g. using dictionary, translating text into native language or summarizing main information) and Memory Strategies (e.g. note-taking, paraphrasing or rereading) nearly to Retrieval Strategies. This can be summarized that the students preferred to use strategies such as scanning the texts, using grammatical rules, looking for transitional words, using the dictionary, rereading and summarizing to accomplish their reading comprehension. To achieve in reading strategies use, some researchers suggested that it depends on the flexibility in using strategies of each reader according to the purpose of the contexts (Sheorey & Mokthari, 2001; Mokhtari, K. & Sheorey, R., 2002; Anderson, 2003).

The Differences in the Use of Strategies Between High and Low Proficient Students When Reading Online Academic Texts

The strategies that high proficient students used more than low proficient students when reading online academic texts were Support Strategies (e.g. using the dictionary, taking notes or underlining unknown words. Aside from this, both groups of the students employed the Global Reading Strategies (e.g. using context clues to guess the meaning, find the main idea of the texts, read critically) and Problem Solving Strategies at the same level. This can be explained that high and low proficient students have the same repertoire of reading strategies. They both know the strategies to apply when reading, but it seemed that low proficient can apply those strategies less effectively.

The Differences in the Use of Strategies Between High and Low Proficient Stude*nts *When Reading Printed Texts

In reading printed academic texts, high proficient students used the Cognitive strategies (Comprehending Strategies, Memories Strategies, and Retrieval Strategies) and Metacognitive Strategies (Planning Strategies, Monitoring Strategies, and Evaluating Strategies) more highly than low proficient students. This result can be explained that high proficient students applied reading strategies such as note-taking, predicting, paraphrasing, making inferences, self-questioning, setting purposes in mind, finding the main idea, and using signal words to understand of what they have read. However, the reading strategies use of low proficient students was less effectively. The plausible explanation is that they usually have problems with interpreting single word or fail to adjust their reading goals or purposes.

Discussion in Qualitative Study

According to Research Question 4, "How do high and low proficiency students use reading strategies in reading online and printed academic texts in English?" the result can be discussed as follows:

When high and low proficient students read online academic texts in real situation (think-aloud protocol), the reading strategies that high proficient student used were scanning the text, using background knowledge, focusing on the main point, using context clue to guess the meaning, rereading, using grammatical rules while low proficient students used scanning text, taking note, rereading, using dictionary and translating. The results showed that high proficient used several reading strategies more skillfully. They applied their reading strategies when they faced with the difficult text or unknown words. For example, they focused on the main point while reading to understand the concept of the text, and when they saw the unknown words they tried not to use the dictionary to clarify the meaning, but they continued reading other sentences or used the context or looked for the clues to help them to understand the unknown words.

In contrast, low proficient students were less capable of using reading strategies when reading online academic texts. For instance, they rarely found the main point or idea of the text or using their background knowledge to help understand the text. They only read through the end of each part of the text, and sometimes they lost concentration while reading because they focused on decoding the meaning of the unknown words. They tended to use the dictionary when they faced this problem. This finding was consistent with the results of Carrell's (1998) and Kletzien's (1991) studies which indicated that the low proficient students were likely to focus on reading as a word-level decoding-process rather than meaning-making process. They did not employ the strategies that high proficient students used to get their comprehension. Although some

strategies that high and low proficient students used are in common, they used them with different purposes. For examples; 1) when scanning the text, low proficient students scanned the text to look for an overall idea and then they continued to read the entire text slowly. Whereas high proficient students scanned the whole text to find the main idea of each paragraph and guessed what the text was about. 2) When they used rereading, low proficient students reread the passage after their first reading. Then they read it again from the beginning to the end of the passage. They indicated that they would comprehend the content better. On the other hand, the high proficient students reread only the main point or the topic of the text and focused on the point that confused them.

In reading printed academic texts, the strategies that high proficient students used in real situation (think-aloud protocol) were scanning the text, using background knowledge, focusing on the main point, using context clue to guess the meaning, rereading, using grammatical rules. Whereas low proficient students used few strategies including scanning text, taking note, rereading, using the dictionary and translating English into Thai. The results showed that high proficient students use various strategies when they read printed academic texts. High proficient students used their background knowledge, grammatical rules or context clues to comprehend the texts; whereas, low proficient students did not apply these strategies when they read printed academic texts. When the texts become more difficult, low proficient often had trouble with it. They mostly focused on the meaning of unknown words instead of the main idea of the texts. Moreover, they did not apply strategies such as guessing the difficult words from the clue than using the dictionary directly. However high proficient students had no problem in comprehending English text, but sometimes translating when they found difficult texts or very long and complicated sentences that needed to focus on, or used other strategies such as using context clues to predict the meaning.

The plausible reason might be that they can control their cognitive processes in reading to enhance their reading ability. On the contrary, the low proficient student revealed that when they read the difficult passage, they had to translate text into Thai because they did not understand the English passage especially complicated sentences or some unknown words. The plausible reason for them to use reading strategies less effectively are having no sufficient background knowledge about the topic of a text, having trouble with connecting the ideas, and encountering with unfamiliar vocabulary.

Conclusion

In conclusion, the results of the quantitative data revealed that the high proficient students tended to apply the Support Strategies more than Global Reading Strategies and Problem Solving Strategies when reading online academic texts. Moreover, they most likely used the Cognitive Strategies more than Meatacognitive Strategies when reading printed academic texts. On the other hand, the results of qualitative data are different. When they read online and printed academic texts in real situation, the high proficient students employed Metacognitive Strategies (Global Reading Strategies and Problem Solving Strategies) more than the low proficient students did. The low proficient students often had troubled with the unfamiliar vocabularies or did not understand the content of the text much. They most likely used simple strategies such as translating into Thai, using dictionary, and rereading the whole text more than applying their reading strategies effectively as the high proficient students did when reading online and printed academic text. Therefore, to develop students' reading ability, the students with low proficient level should be taught to employ reading strategies that high proficient students use to read both online and printed texts more frequently and automatically.

Limitations of the Study

The participants of this study were limited to the third-year English major students in the Department of Western Languages at Srinakharinwirot University in Bangkok (SWU), who enrolled in the first semester of academic year 2009. This study focused on reading strategies: Cognitive Strategies and Metacognitive Strategies used in reading online and printed academic texts. Finally, this study used purposive sampling design which decreases the generalizability of the findings. The findings then were not generalized to English major students studying in the first, second year and the senior.

Implications of the Study

This study investigated the reading strategies used in online and printed academic texts of English major students. The result of this study demonstrated that using the variety of reading strategies is essential for the students to comprehend English contexts effectively (especially, academic texts). To develop students' reading ability, the low proficient students should be trained to employ reading strategies that high proficient students used in reading both online and printed texts more frequently and automatically. The teachers should provide activities or encourage the low proficient students to learn and practice their reading strategies, so their reading ability may gradually improve and they can use the reading strategies to read more strategically.

Recommendations for Further Studies

The present study explored the reading strategies used in online and printed academic texts. Therefore, it would be interesting to conduct the further study by exploring reading strategies students use in different types of text such as narrative texts,

persuasive text or informative text. In addition, comparative studies on reading strategies (online and printed texts) used between male and female readers are recommended. . The result will be beneficial for teachers to teach their students in using reading strategies appropriately. Therefore, they can apply these strategies to improve their reading comprehension effectively.

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APPENDICES

APPENDIX A

The Questionnaire for Strategies in Reading Online Academic Texts

APPENDIX A

QUESTIONNAIRE FOR STRATEGIES IN READING ONLINE ACADEMIC TEXTS

Adapted from Kouider Mokhtari and Ravi Sheorey, 2002

Directions: The purpose of this questionnaire is to collect information about the various strategies you use when you read online academic texts in English (e.g., surfing the Internet, doing online research, etc.).

The questionnaire is divided into two parts:

Part I: General background information about the respondents

Part II: The questionnaire for strategies in reading online academic texts employed by the respondents

Part I

General background information about the respondents

Instruction: Please give the information by ticking **(/)** in the box ☐ for each item.

1. Sex: ☐ Male ☐ Female

2. Age: _____

3. Student Status: ☐ Weekday Students

4. Class: ☐ 1 ☐ 2 ☐ 3 ☐ 4

5. Grade of Reading Course: _____

6. Grade Point Average (GPA.): _____

7. How often do you read online academic text in English such as, doing on-line research, e- journal, e-news, etc.) each day?

☐ Always ☐ Often ☐ Rarely ☐ Never

Part II

The Questionnaire for Strategies in Reading Online Academic Texts employed by the respondents

Instructions: After reading each statement, please indicate by ticking (/) the number (1, 2, 3, 4, or 5) which applies to you. Each statement is followed by five numbers, 1, 2, 3, 4, and 5, and each number means the following:

1 = Never
2 = Seldom
3 = Sometimes
4 = Often
5 = Very Often

No.	Strategies in Reading Online Academic Texts	Frequency Rank				
		1	2	3	4	5
1	I have a purpose in mind when I read online.					
2	I participate in live chat with other learners of English.					
3	I take notes while reading online to help me understand what I read					
4	I think about what I know to help me understand what I read online.					
5	I take an overall view of the online text to see what it is about before reading it.					
6	When online text becomes difficult, I read aloud to help me understand what I read.					
7	I think about whether the content of the online text fits my reading purpose.					
8	I read slowly and carefully to make sure I understand what I am reading online.					
9	I review the online text first by noting its characteristics like length and organization.					

No.	Strategies in Reading Online Academic Texts	Frequency Rank				
		1	2	3	4	5
10	I try to get back on track when I lose concentration.					
11	I print out a hard copy of the online text then underline or circle information to help me remember it.					
12	When reading online text, I think about information in both English and my mother tongue.					
13	I adjust my reading speed according to what I am reading online.					
14	I use reference materials (e.g. an on-line dictionary) to help me understand what read online.					
15	I stop reading for a moment when I am feeling stressed or confused.					
16	I use tables, figures, and pictures in the online text to increase my understanding.					
17	I stop from time to time and think about what I am reading online.					
18	I use context clues to help me better understand what I am reading online.					
19	I paraphrase (restate ideas in my own words) to better understand what I read online.					
20	I try to picture or visualize information to help remember what I read online.					
21	I use typographical features like bold face and italics to identify key information.					
22	I critically analyze and evaluate the information presented in the online text.					
23	I go back and forth in the online text to find relationships among ideas in it.					

No.	Strategies in Reading Online Academic Texts	Frequency Rank				
		1	2	3	4	5
24	I check my understanding when I come across new information.					
25	I try to guess what the content of the online text is about when I read.					
26	When online text becomes difficult, I re-read it to increase my understanding.					
27	I ask myself questions I like to have answered in the online text.					
28	I check to see if my guesses about the online text are right or wrong.					
29	When I read online, I guess the meaning of unknown words or phrases.					
30	I scan the online text to get a basic idea of whether it will serve my purposes before choosing to read it.					
31	I critically evaluate the on-line text before choosing to use information I read.					
32	I can distinguish between fact and opinion in online texts.					
33	When reading online, I translate from English into my native language.					

APPENDIX B

The Questionnaire for Strategies in Reading Printed Academic Texts

APPENDIX B

QUESTIONNAIRE FOR STRATEGIES IN READING PRINTED ACADEMIC TEXTS

Based on Aek Phakiti, 2006

Directions: The purpose of this questionnaire is to collect information about the various strategies you use when you read printed academic texts in English.

The questionnaire is divided into two parts:

Part I: General background information about the respondents

Part II: The questionnaire for strategies in reading printed academic texts employed by the respondents

Part I

General background information about the respondents

Instruction: Please give the information by ticking **(/)** in the box □ for each item.

1. Sex: □ Male □ Female
2. Age: _____
3. Student Status: □ Weekday Students
4. Class: □ 1 □ 2 □ 3 □ 4
5. Grade of Reading Course: _____
6. Grade Point Average (GPA.): _____
7. How often do you read English in printed form such as, textbooks or research journal each day?

   □ Always □ Often □ Rarely □ Never

Part II

Questionnaire for Strategies in Reading Printed Academic Texts employed by the respondents

Instructions: After reading each statement, please indicate by ticking **(/)** the number (1, 2, 3, 4, or 5) which applies to you. Each statement is followed by five numbers, 1, 2, 3, 4, and 5, and each number means the following:

1 = Never
2 = Seldom
3 = Sometimes
4 = Often
5 = Very Often

No.	Strategies in Reading Printed Academic Texts	Frequency Rank				
		1	2	3	4	5
1	Before reading, I look at the pictures or diagrams along with what is under the pictures.					
2	Before reading, I read the introduction and conclusion of the passage to figure out what the passage is about.					
3	While reading, I will predict the content of the text.					
4	When I read, I will recognize the failure/ success to understand a portion of the text.					
5	When I read, I will pay more attention to the meaning of the reading passage.					
6	While reading, I will pay more attention to the meaning of each individual word.					
7	While reading, I break down larger clauses into smaller parts to help me understand difficult sentences in the passage.					
8	While reading, I will adjust reading rate to increase comprehension.					
9	While reading, I will identify the grammatical function of an unknown word before guessing the meaning.					

No.	Strategies in Reading Printed Academic Texts	Frequency Rank				
		1	2	3	4	5
10	While reading, I will use word roots and affixes (prefixes and suffixes) to understand the meaning words.					
11	While reading, I will use an English-English dictionary to find the meaning of unknown words.					
12	While reading, I will use an English-Thai dictionary to find the meaning of unknown words.					
13	When I read, I will skim the whole text for the main idea.					
14	When I read, I will read a phrase or a sentence at a time.					
15	When I read, I will look for transitional words that help explain the relationship between sentences such as *although, due to, and so.*					
16	When I read, I will imagine the image and sound described in the article.					
17	When I read, I will analyze the syntactical structure of the sentences.					
18	When I read, I will pay attention to every detail.					
19	When I read, I will read word by word.					
20	When I read, I will scan for useful words or phrases.					
21	When I read, I will re-consider the difficult part of the article to help me understand its meaning.					
22	When I read, I will translate the words or sentences into Thai.					
23	When I read, I will use paraphrasing to help comprehension.					

No.	Strategies in Reading Printed Academic Texts	Frequency Rank				
		1	2	3	4	5
24	When I don't understand texts, I will remind myself by underlining the words or phrases.					
25	I frequently check if I don't understand the contents.					
26	When the texts are ambiguous, I will recheck it for comprehension.					
27	When I read, I will use contextual rules to interpret a word or phrase.					
28	When I read, I will respond to the genre and organization of the text.					
29	When I read, I will read ahead for further clues.					
30	When I read, I will use background knowledge to help comprehension.					
31	When I read, I will analyze the grammatical structure to help comprehension.					
32	When I read, I will use signal words to help comprehension.					
33	While reading, I critically analyze and evaluate the information appeared in the texts.					

APPENDIX C

Sample of Online and Printed Academic Texts

Online Academic Text

About.com
Stress Management

Server not found

Cover Yourself.
There's a convenient new way to shop for health insurance and compare options.
It's fast, confidential and free. Go to UCompareHealthCare.com
UCompare

- Share
- Print Print

- Free Stress Management Newsletter! Enter email address Sign Up
- Discuss in my Forum

Stress and Noise Pollution: How You May Be At Risk

Environmental Noise May Be More Stressful Than You Realize

By Elizabeth Scott, M.S., About.com Guide

Updated: November 17, 2007

About.com Health's Disease and Condition content is reviewed by the Medical Review Board

See More About: noise pollution environment stress healthy living productivity school success

What Is Noise Pollution?

Noise pollution can be defined as intrusive noise that disrupts, distracts, or detracts from regular functioning. And while people mainly think of noise pollution as a problem of the big cities, with the competing sounds of more people in a smaller space, noise pollution can also be found in suburban neighborhoods (in the form of leaf blowers, lawn mowers, and home construction) and even individual homes and offices at levels that can have a negative impact on your health and productivity.

Traffic is a significant source of noise pollution- -and stress! ©iStockPhoto.com

Causes of Noise Pollution

While there are many different sources of noise pollution, there are some main culprits that have been researched and found to have a negative impact on health. They include the following:

- **Airplanes**—It's been well-documented that noise pollution from airplanes has a significant negative impact on the health and wellbeing of those who live close to airports. This can include heart disease, high blood pressure and chronic stress. (About.com's Environment Guide has more information on the effects of airports and noise pollution.)
- **Cars**--One of the complaints of those who live in big cities or on busy streets is the disruption from the sounds of traffic. Interestingly, though, even low levels of traffic noise can be damaging to people, and traffic noise is one of the most commonly experienced contributors to noise pollution.
- **Workplace Noise**—Most of us may think of loud assembly lines or construction sites when we think of noise pollution in the workplace, and while these examples definitely apply, regular offices are not immune. With more people packed into busy office spaces, office noise is a common complaint. Co-workers who talk, drum their fingers on the desk, or offer other distracting noises can decrease the productivity of those around them without realizing it.
- **Home Sound**--Many people don't think of their homes as 'noisy', but if there's a lot of activity in the home, including a constantly running t.v., this overall noise level can actually be a threat to concentration and a cause of stress. In fact, children from more noisy homes do suffer ill effects from this type of sound

pollution that include less cognitive growth, delayed language skills, increased anxiety, and impaired resilience, according to a Purdue University professor in a related press release.

Negative Effects of Noise Pollution

Many studies have been conducted to study the effects of noise pollution on health and wellness, and the results have shown that noise pollution can negatively impact you in the following ways:

- **Productivity:** We all know that noise can be distracting, and research proves this. One study examined children exposed to airport noise and found that their reading ability and long-term memory was impaired. Those working in noisy office environments have also been found to be less cognitively motivated, and to have higher stress levels, according to a Cornell University study.
- **Health:** Perhaps the most serious problem created by sound pollution is the impact it has on our health. Because sound pollution can trigger the body's stress response, one of its major health effects is **chronic stress** and the high levels of stress hormones that go with it. As a result, noise pollution has also been linked with health problems such as **heart disease, high blood pressure, and stroke**. It's also been linked with **musculoskeletal problems**, as a Cornell University study on office noise found that those working in noisy office environments can also be less likely to ergonomically adjust their workstations for comfort, which can contribute to physical problems. Noise pollution can also impact sleep quality by preventing sleep and disrupting sleep cycles. And, perhaps most significantly, because chronic stress can lower your **immunity** to all disease, noise pollution is a general threat to health and wellness.

What can you do to protect yourself from chronic stress? This article on reducing the effects of noise pollution has some important ideas for you.

Sources:

Journal of Applied Psychology (Vol. 85, No. 5, pp. 779-783, 2000).
Psychological Science (Vol. 13, No.5, Sept. 2002).

Explore Stress Management

See More About:

- productivity
- noise pollution
- school success
- environment stress
- healthy living

By Category

- Understanding Stress
- Stress Tests
- Student Stress
- Job Stress
- Situational Stress
- Parents Under Stress
- Financial Stress
- Stress and Health
- Relationships
- Tension Tamers
- Low-Stress Lifestyle
- Unhealthy Behaviors
- Professional Help
- Stress Relief Products

Must Reads

- Join The Community--Free Resources!
- Is Your Stress Level Unhealthy?
- Individualized Stress Reliever Plan
- Frequently Asked Questions About Stress
- Personality Tests for Stress Relief

Most Popular

The Type A Personality Quiz
Optimism Quiz
Stress Symptom Quiz
Cortisol, Stress and Your Body
25 Stress Relievers

Printed Academic Text

READING 5

LAUGHTER AS THERAPY

From *Pulmonary Rehabilitation: Guidelines to Success,* Patty Wooten, RN BSN CCRN

"A merry heart does good like a medicine, but a broken spirit dries the bones"
—Proverbs 17:22

1 Laughter can be a powerful therapy for both the patient and the caregiver. This chapter will examine the beneficial effect of humor and laughter on the body, mind, and spirit; for the patient during recovery from illness; and for the health professional during delivery of care.

2 Most experienced caregivers have discovered that attention to only the physical body during treatment will produce a partial or temporary recovery. The patient's emotional responses, belief system, support network, etc. can all affect agreement to treatment and the ability to cope with fear, pain, and loss.

1 Is *or* used to give a definition here?

3 The ability to laugh at a situation or problem gives us a feeling of superiority and power. Humor and laughter can cultivate a positive and hopeful attitude. We are less likely to succumb to feelings of depression and helplessness if we are able to laugh at what is troubling us. Humor gives us a sense of perspective on our problems.

2 What may help you to understand the phrase *succumb to feelings of depression*?

4 Laughter provides an opportunity for the release of those uncomfortable emotions which, if held inside, may create biochemical changes that are harmful to the body. For thousands of years, the human race has praised the health benefits of laughter. Current research by Lefcourt, Guillemin, and Fry in the areas of psychology, physiology, and psychoneuroimmunology has defined the specific changes effected by laughter.

5 Therapy is defined as "an activity or treatment intended to alleviate an undesirable condition." With that in mind, let's explore the therapeutic benefit of laughter for the body, mind, and spirit.

LAUGHTER SUPPORTS RECOVERY FROM ILLNESS

3 What is the purpose of this section?

6 Norman Cousins, former editor of the magazine *Saturday Review*, first brought the attention of the medical community to the possibility that laughter might aid healing. In 1964, Cousins was diagnosed with ankylosing spondylitis, a progressive degenerative disease of the collagen tissue. His physicians gave him little hope for recovery, indicating that a possible cause of his illness was due to heavy-metal poisoning.

7 When he thought about his activities in the month before his symptoms began, he remembered frequent exposure to diesel exhaust fumes during his travel in Russia. From his reading of Hans Selye's 1956 book about the body's response to stress, Cousins recalled that research had shown that negative emotions could create chemical changes which would eventually lead to adrenal exhaustion. He suspected that this condition weakened his ability to tolerate the toxic exposure. He wondered if positive emotions (such as faith, hope, confidence, and joy) might create changes within the body which would help him recover. He decided to find out.

4 Do you understand *adrenal exhaustion?*

5 What is the important idea in this paragraph?

8 Since laughing tends to make people feel positive emotions, Cousins began viewing movies that made him laugh. After each laughing episode he noted that he could sleep comfortably without the need for medication. He also discovered that laughter stimulated a decrease in his sedimentation rate, indicating a reversal of the inflammatory response. Contrary to the predictions of the entire medical establishment, Cousins made a complete recovery.

9 After his recovery, he spent the last ten years of his life as an adjunct professor at U.C.L.A. Medical School where he established a Humor Task Force to coordinate and support clinical research. Today, more than 25 years after Cousins' experience, we have the scientific research to explain the specific physiological changes which his experience suggested. Laughter does affect the body, mind, and spirit.

PHYSIOLOGICAL RESPONSE

6 Are any of your key words in this paragraph? What should you do?

10 Humor is a perceptual process while laughter is a behavioral response. This behavior creates predictable physiological changes within the body. As with other exercise, we see two stages of the body's response, the arousal phase when the physiological parameters such as heart rate increase, and the resolution phase when they return to resting rate or lower. With vigorous sustained laughter, the heart rate is stimulated, sometimes reaching rates of above 120 bpm (beats per minute); the normal respiratory pattern becomes chaotic; respiratory rate and depth are increased while residual volume is decreased. Coughing and hiccups are often triggered due to phrenic nerve irritation or the dislodging of mucus plugs. Oxygen saturation of peripheral

blood does not significantly change during the increased ventilation occurring with laughter. Conditions such as asthma or bronchitis may be irritated by vigorous laughter. Peripheral vascular flow is increased due to vasodilitation. A variety of muscle groups become active during laughter—diaphragm, abdominal, intercostal, respiratory accessory, facial, and occasionally muscles in the arms, legs, and back.

7 Are any of your key words in this paragraph? What should you do?

11 Some of the most exciting research exploring the potential healing value of laughter is in the area of psychoneuroimmunology, the area of research which explores the connections among the nervous system, the endocrine system, and the immune system. Loma Linda University Medical Center has recently completed research showing that the neuroendocrine system is affected during the experience of mirthful laughter. This work by Lee Berk and Stanley Tan has shown that serum cortisol levels decreased with laughter. Also, the experimental group demonstrated a lower baseline epinephrine level than the control group (possibly due to their relaxed status in anticipation of the laughter experience). Levels of cortisol and epinephrine (known to be immunosuppressive) are elevated during the stress response. Therefore, Berk and Tan conclude that by decreasing these levels we can diminish the suppression of the respective immune components. Other research has demonstrated that mirthful laughter increases the spontaneous lymphoycyte blastogenesis and the natural killer cell activity. Natural killer cells are a type of lymphocyte that have a spontaneous cytolytic activity against tumor cells.

8 Underline the technical words. Is it time to stop reading?

A. Checking Your Comprehension

Read each exercise below. Then reread the article for the answers.

1. Explain how Norman Cousins investigated the relationship between laughter and health.
2. Sir William Osler said, "It is more important to know what sort of patient has the disease, than what sort of disease the patient has." Would the writer of Reading 5 agree with this quotation? Why or why not?

B. Making Inferences

1. **What kind of person was Norman Cousins?**
2. **What might make you believe that Cousins' theories were accepted by the medical community?**
3. **Why might the information in this reading be more persuasive than information in some of the other readings?**

APPENDIX D

Interview Questions

Interview Questions for Online Academic Texts

1. What do you do first when you read?
2. Do you set your purpose before you read?
3. Do you skim and scan the passage before you reading?
4. Do you try to guess or predict what the text is going to say?
5. Do you find main and supporting idea before you read? How?
6. Do you take any notes to help you understand the reading?
7. Do you use tables, figures and pictures in the online text to increase you understanding?
8. What do you do when text become difficult? Do you re-read, read aloud, read slower or stop reading a while?
9. What do you do when you saw unfamiliar words?
10. Do you use context clue to help you understand the text?
11. Do you use your personal background experience to help you understand the text? If so, please explain why?
12. While reading, do you translate text into Thai? If so why?
13. Do you go back and forth when you lose concentration? How often?
14. After reading, do you evaluate what is read?
15. What are the problems when you read each online passage?

Interview Questions for Printed Academic Texts

1. What do you do first when you read?
2. Do you set your purpose before you read?
3. Do you think finding main idea and supporting idea is important?
4. Do you skim or scan before reading the whole text?
5. Do you read introduction and conclusion to see what the text is about?
6. Do you adjust reading rate to increase understanding?
7. Do you go back and forth while reading? How often?
8. Do you use your background knowledge to understand the text?
9. Do you use grammatical rule such as transitional words, conjunction, and punctuation?
10. Do you think the use of the grammatical structure is important when you read?
11. What do you do when you saw unfamiliar words, recheck or find another clue?
12. Do you take any notes, underline or highlight words while you read ?
13. Do you analyze or evaluate the information appeared in the text?
14. What do you do if you have a problem in understanding what you are reading?
15. What are the problems when you read printed academic texts?

APPENDIX E

Sample of Think-Aloud and Interview Data

Transcription

Reading in Printed Academic Text

นิสิต A: ก็เริ่มตรง why do environmentalists want to make the Act stronger? เราคิดว่ามันต้องการที่จะ protect endangered species และก็ protected animals

นิสิต B: ก็คิดว่าอย่างนั้น

นิสิต C: อืมใช่

นิสิต A: ก็แค่เพราะว่าสัตว์มันกำลังตายก็แค่นั้นเอง ต่อไปดูที่ Why do loggers and farmers want to make the Act weaker?

นิสิต C: เราว่ามันต้องเป็นเรื่องที่ขัดผลประโยชน์กัน

นิสิต B: มันทำให้ไม่เงิน

นิสิต A: มันทำให้เสียงาน มันทำให้ไม่มีอาชีพ ไร้ซึ่งอาชีพ

นิสิต C: งั้นมันจะส่งผลอะไร

นิสิต A: มันก็คือทำให้ไม่มีงานนั่นไง ต่อไป Why don't some people want to protect spotted owls or wolves? อย่างไอ spotted owls มันก็คือว่าไปรบกวนการตัดไม้หมาป่าก็ด้วย

นิสิต B: หมาป่าก็ด้วย

นิสิต A: คนก็กลัวหมาป่าด้วย แล้วไอสองตัวนี้มันก็ยังไปทำร้ายสัตว์อื่นด้วย

นิสิต C: ก็เหมือนคล้าย ๆ ข้อ สี่นะ อะไรนะขัดผลประโยชน์กัน

นิสิต B: อืม...ใช่ ต่อไปมาดูข้อ how do environmentalists try to appeal to business? นี่มันอยู่ใน paragraph เลยเนี่ย

นิสิต A: ที่ว่า they say that studying unknown plants maybe a good business idea. Plants give us important materials: drugs, rubber, food…คือตรงนี่ก็สรุปแล้วหล่ะหาผลประโยชน์เหมือนเดิม อ้าวต่อไปมาดูข้อ 8 which is more important: jobs or the environments? Why?

นิสิต B: ดูใน text ก็ environment แน่นอน เพราะเริ่มเรื่องมาก็คือ environment ก่อนเลย

นิสิต A: และเรื่องก็พูดถึง environment เกือบหมด

นิสิต B: Environment แน่นอน แล้วพอถามถึงว่าทำไม...ทำไม..ก็อย่างที่ว่าเนื้อเรื่องบอกครบแล้วว่า ถ้ามันไม่มีป่ามันก็จะไม่มีงานไม่มีคน ก็ดูใน text สิ เขาบอกว่าถ้าไม่มีป่าก็ไม่มีความหลากหลายทางพันธุกรรม เนี่ยะ อย่างเช่นตรงเนี่ยะ paragraph ที่ 4 หรือ 3

นิสิต C: Paragraph สุดท้ายมันก็บอกว่ามันจะไม่มียารักษา เอดส์ หรือมะเร็ง

นิสิต B: และดูตรงบรรทัดสุดท้ายเลยที่ว่า save the environment to save ourselves ก็คือสิ่งที่สำคัญก็ต้องเกี่ยวกับเรื่อง environment ชัวร์ ตอนนี้ก็ไม่มีอะไร ไม่มีอะไรแล้ว

นิสิต A: ย้อนกลับไปดูคำถามข้อ 1 ก็คือ ถามเกี่ยวกับเรื่อง stat ซึ่งอยู่ใน paragraph ที่ 2 เลย และมันก็บอกแล้วใน สี่ประโยคแรกที่บอกว่า
ถ้าไปดู ข้อ 7 หล่ะ ข้อ 7 ก็เหมือนกับข้อ 8 เมื่อกี้ว่าว่ามันช่วยเรื่อง cancer, aids cure หรือการรักษาโรคพวกนี้ได้ ซึ่งทรัพยากรเล่านั้นก็มาจากป่า ป่าดิบชื้น โอเคนะ อ่ะจบ

……..

ผู้สัมภาษณ์: น้องหา main idea นี้ได้จากที่ไหน อย่างไร

นิสิต A: ก็ใช้ความรู้เดิมที่มีด้วยแล้วก็ดูภาพประกอบที่อยู่ใน text แล้วเอามาดูว่าพูดถึงเรื่องอะไร สังเกตจากตัว title มันก็รู้แล้ว เรื่องนี้เกี่ยวกับ สัตว์ที่กำลังจะสูญพันธุ์ แล้วประโยคแรกของเรื่องก็บอกได้เลยว่า main idea มันคืออะไร

ผู้สัมภาษณ์: น้องคิดว่าการหา main idea หรือ พวก supporting details ต่าง ๆ เนี่ยะ ช่วยให้น้องเข้าใจ text ได้มากขึ้นมั้ย

นิสิต C: ก็ช่วยนะเพราะว่าถ้าเราหา main idea เจอเนี่ยะก็จะรู้ว่าหลัก ๆ ของเรื่องเนี่ยะมันพูดถึงเรื่องอะไร

นิสิต A: ถ้าเรารู้ main idea แต่ละ paragraph เราก็จะรู้ว่า paragraph นั้นกำลังจะบอกอะไรเรา กำลังจะพูดถึงอะไร

นิสิต B: ทีนี้เราก็จะได้ปรับความคิดของเราได้ว่า โอเค ต่อไปเราจะหาเรื่องนี้ หาข้อมูลเกี่ยวกับอันนี้

นิสิต A: บางทีเราไม่ต้องมาอ่านพวก example หรือรายละเอียดเล็ก ๆ น้อย แค่หา main idea ให้เจอก็รู้แล้วว่าพูดถึงเรื่องอะไร

นิสิต B: เหมือนเป็นวิธี skim and scan

นิสิต C: scan text ก่อน แล้วค่อยอ่านรายละเอียดเพิ่มจะได้ไม่ต้องไปเสียเวลาอ่านเยอะ

ผู้สัมภาษณ์: น้องได้ใช้วิธีการแปลคำศัพท์ให้เป็นไทยบ้างหรือไม่เวลาอ่าน

นิสิต C: ไม่เลย คือว่าอ่านแล้ว flow เพราะว่าเป็นคำศัพท์ที่รู้อยู่แล้ว

นิสิต A:. ใช่ ไม่ได้แปละนะอ่านไปเรื่อย ๆ เพราะศัพท์ก็รู้อยู่แล้ว

นิสิต B: แต่ถ้าไม่รู้จริง ๆ ก็จะใช่ พวก context มาช่วย

ผู้สัมภาษณ์: แล้วเวลาอ่านได้ take note อะไรบ้างไหม อย่างเช่นถ้าไม่เข้าใจแล้วขีดเส้นใต้หรือทำไฮไลท์ข้อความบ้างไหม

นิสิต B: ก็ดูที่ text ว่าถ้าอันไหนอ่าน flow ก็ไม่ จดหรือว่าขีดข้อความใด ๆ เลย

นิสิต A: แต่ส่วนมากก็จะขีดนะ ขีดประเด็นสำคัญ

นิสิต C: ก็คือถ้าไม่รู้ก็จะขีดเลย

นิสิต B: บางครั้งก็ขีดไว้ แล้วก็เอาไปเช็คกับคำถาม ดูสิว่าส่วนไหนตรงคือคำตอบ และก็จะดูว่ามีตรงไหนติดขัดมั้ย ถ้าไม่มีก็อ่านไปเลย

นิสิต A: ส่วนมากจะเป็นอ่านผ่านรอบแรกก่อน แล้วพอรอบสองก็ดูคำถาม แล้วค่อยมาขีดตรงที่เป็นประเด็นสำคัญ เน้นหาคำตอบจากคำถาม จะทำให้ไม่เสียเวลาในการอ่านมาก และหาคำตอบได้ง่ายขึ้น ส่วนที่เป็นเนื้อของมันก็จะขีดแต่ตรงที่เป็นเนื้อ พวกรายละเอียด example ก็ไม่ต้องไปขีดมัน

ผู้สัมภาษณ์: แล้วถ้าในกรณีที่ไม่รู้คำตอบเลยเนี่ยะจะใช้วิธีอะไรในการทำ

นิสิต B: ก็คือจะอ่านผ่านไปก่อน

นิสิต C: ใช่ อ่านผ่านไปก่อน

นิสิต A: อ่านแบบแสกน

นิสิต B: หรือไม่ก็ไป โฟกัสที่คำศัพท์ ดูpart of speech อย่างเช่น คำนี้เป็นคำนามหรือเปล่า อย่างเช่นพวกคำว่า environment คำที่มันอยู่ในพวกเดียวกันเนี่ยะ มันก็จะเป็นพวกคำนามก็แสดงว่าพูดถึงเรื่องเดียวกันอยู่ แต่

นิสิต A: ดูที่ part of speech ของ คำศัพท์นั้น ๆ

นิสิต B: อย่างเช่นเรื่องของ verb เนี่ยะ มันจะซับซ้อนถ้าเราแปล positive เป็น negative เนี่ยะความหมายก็จะเปลี่ยนไปเลย ก็คือตรง verb เนี่ยะจะมีปัญหานิดนึง

นิสิต A: แต่ส่วนมากก็จะดูตรงที่ในประโยคนั้นก่อนว่า part of speech ของมันคืออะไร แล้วค่อยมาดู context ข้าง ๆ บางทีเราก็จะเดาได้จาก context ข้าง ๆ

ผู้สัมภาษณ์: ตอนเริ่มแรกที่อ่านได้มีการ ตั้งเป้า set purpose ไว้ว่าเรื่องเราที่เราจะอ่านเนี่ยะเกี่ยวกับเรื่องอะไร

นิสิต C: ดูจากหัวข้อเรื่องก่อนเลย เลยก็รูปภาพ แล้วค่อยตั้งประเด็นต่อไป

นิสิต A: ก็คือดูจากประเด็นก่อนแล้วก็ค่อยมาตั้งเป้าว่าเรากำลังจะอ่านเกี่ยวกับเรื่องะไร

นิสิต B: ส่วนมากดูจาก หัวเรื่องก่อน title ก่อน

ผู้สัมภาษณ์: น้องใช้วิธีการอ่านแบบย้อนไปย้อนมาเมื่อเวลาเริ่มไม่เข้าใจ text บ้างรึเปล่า

นิสิต C: ต้องทำอยู่แล้วส่วนมากก็ทำอย่างนั้น

นิสิต A: โดยมากก็ทำอย่างนั้น

นิสิต B: เวลาที่ไม่เข้าใจก็จะอ่านกลับไปกลับมากหลาย ๆ รอบ

นิสิต A: เพราะว่าการอ่านหลาย ๆ รอบจะช่วยให้เราจับประเด็นเนื้อเรื่องได้ดีขึ้น

นิสิต B: บางทีเราอาจจะอ่านข้ามไป อ่านไปอ่านมาตรงนี้มันไม่ใช่ อยู่ตรงนี้ต่างหาก อ่านเร็วไปบางทีไม่เข้าใจก็ต้องกลับมาอ่านใหม่ หรือดูพวกเครื่องหมาย

นิสิต A: บางทีก็ลืมดูพวก punctuation มันก็ทำให้ตีความหมายผิดไป semi colon หรือแค่ comma ก็ทำให้ความหมายของ paragraph ของประโยคนั้นเปลี่ยนได้ หรือรอบแรกเราไม่ได้สังเกต

ผู้สัมภาษณ์: งั้นอย่างนี้ก็แสดงว่าน้องอ่านไปเรื่อย หมายถึงว่าเวลาไม่เข้าใจก็อ่านช้าหรือค่อย ๆ อ่านรึเปล่า

นิสิต A: ก็อ่านช้าลงแล้วค่อยพิจารณาว่าเค้าหมายถึงอะไรกันแน่ คือหลังจากอ่านแบบ skim and scan คืออ่านแบบเร็ว ๆ แล้วพอไม่เข้าใจก็อ่านให้ช้าลง เหมือนกับจะได้ประมวลผลตัวเองไปด้วยว่าเค้าหมายถึงอะไรกันแน่

นิสิต B: อย่างเช่นถ้าอ่านไปสักพักนึงแล้วมันติดก็จะเริ่มอ่านช่วงนั้นให้ช้าลง แล้วพอเข้าใจดีแล้วก็ค่อยอ่านต่อไป

นิสิต C: แบบว่าจะดูผ่าน ๆ ก่อน อย่างมีกี่หน้ากี่แผ่น และที่ทำก่อนเลยก็คือจะเปิดไปดูคำถามว่าถามว่าอย่างไร และยิ่งถ้าไปเจอ text แบบยาว ๆ เนี่ยะ ก็จะไปดูคำถามก่อนเลย เพราะจะได้เอาไปเทียบกับเนื้อหาว่าคำตอบอยู่ตรงไหน

นิสิต A: ดีกว่าไปนั่งอ่าน ๆ ๆ ไปจนจบ พอเสร็จก็ลืมไปเลยว่าอ่านอะไร

ผู้สัมภาษณ์: แล้วพอหลังจากอ่านเสร็จน้องได้ประเมินตัวเองบ้างมั้ยว่า อุ๊ยนี่เราอ่านเรื่องอะไร เราเข้าใจเรื่องที่อ่านมากน้อยแค่ไหน

นิสิต B: มันจะเป็นแบบนี้มากกว่าอย่างเช่นเราอ่าน text นี้ไปที่เป็นพวกวิทยาศาสตร์แล้วเราไม่เข้าใจเนี่ยะแสดงว่าเราคำศัพท์เราไม่ค่อยดี แต่ถ้าเป็นศัพท์ทั่วไป ในชีวิตประจำวัน อย่าง text นี้เป็นเกี่ยวกับเรื่อง environment ก็พอรู้นะ ก็ไปได้หนิ

ผู้สัมภาษณ์: งั้นก็แสดงว่าน้องก็ประเมินจากความรู้เดิมที่มีเกี่ยวกับ text นั้น และพื้นฐานคำศัพท์ที่มีก็ช่วยให้อ่าน text ได้ง่ายขึ้นใช่มั้ย

นิสิต A: ใช่ก็คือ คำศัพท์ใน text ที่อ่านไปนี้มันไม่ยากมาก และศัพท์บางคำก็เคยผ่านตามาแล้ว ส่วนอันไหนถ้าเจอแล้วเป็น technical term ก็ต้องมาดูรายละเอียดอีกที

นิสิต B: เช่นถ้าเราไม่รู้เรื่องเลยเนี่ยะ ก็เหมือนกับเราขาด word choice เพราะไม่รู้ว่าจะเลือกคำไหนมาแทน ถ้าเราอ่านไม่รู้เรื่องก็ประเมินได้และว่าเราแย่และ

นิสิต C: คือบางทีมันก็ประเมินตัวเองได้บ้างตั้งแต่เริ่มอ่าน text แล้วว่ามันจะรู้เรื่องหรือไม่รู้เรื่อง อย่างเช่นถ้าเราอ่านไม่รู้เรื่องแล้วเนี่ยะก็แสดงว่าเรื่องนี่เราไม่ถนัดแล้ว

นิสิต A: บางครั้งเมื่อเราอ่านไปแล้วถ้าเรามีอารมณ์ร่วมกับเรื่องนี้ด้วยมั้ย เราชอบเรื่องนี้มั้ย บางครั้งปัญหาอาจจะเกิดจาก ความคิดเห็นส่วนตัวของเราอาจจะทำให้ความเข้าในเนื้อเรื่องเพี้ยนไป อย่างเช่น พวก text ที่เป็น argumentative passage เราอาจจะมองข้าม หรือเข้าใจวัตถุประสงค์ของ text ผิดไป คืออาจจะตอบคำถามผิดประเด็นได้

ผู้สัมภาษณ์: แล้วน้องใช้ความรู้ทางด้านไวยกรณ์ grammar structure เข้ามาช่วยในการอ่านบ้างรึเปล่า มากน้อยแค่ไหน

นิสิต C: ช่วยได้มาก

นิสิต A: ใช่ อย่างเช่นพวก punctuation หรือ conjunction ทั้งหลายเนี่ยะเป็นตัว keywords ช่วยได้เยอะเลย

นิสิต B: อย่างเช่น transitional words

นิสิต A: ถ้าเราไม่รู้ เราก็จะไม่เก็ทว่า ว่าเรื่องที่เขียนเนี่ยะมันเป็นเหตุ เป็นผลกันตรงไหน หรือ ตรงไหนเป็นคำพูดที่ขัดแย้งกัน จบเลยเลยจะทำให้อ่านไม่เข้าใจ

นิสิต B: ใช่แบบเราจะเข้าใจเนื้อหาผิดไปเลย

ผู้สัมภาษณ์: แล้วพวกคำ signal words น้องได้หามาช่วยเวลาไม่เข้าใจคำศัพท์บ้างมั้ย

นิสิต B: ก็ดูว่าคำศัพท์คำนั้นเป็นคำสำคัญกับเนื้อเรื่องรึเปล่า ถ้ามันสำคัญก็จะอ่าน text ไปเรื่อย ๆ อย่างเช่นเนี่ยะคำว่า grizzly bear ก็จริง ๆ คือไม่รู้ว่าจะแปลว่าอะไร แต่ดูจากรูปแล้วมันก็คือหมีประเภทหนึ่ง

นิสิต A: แต่ในที่นี้เนื้อหาไม่ได้เน้นถึงตัวหมี เน้นเรื่อง environment จึงไม่จำเป็นต้องไปโฟกัส อะไรมาก แต่ถ้าเนื้อเรื่องพูดถึงโครงสร้างของหมี grizzly ก็ต้องหา signal words จากใน text ให้ได้ว่า grizzly หมายถึงหมีประเภทอะไร แล้วมันต่างกับหมีประเภทอื่นอย่างไร

นิสิต B: ก็เลยแค่ assume ไปว่ามันคือหมีประเภทหนึ่งแค่นั้น

ผู้สัมภาษณ์: แล้วเวลาอ่านเนี่ยะมีการเพิ่มอัตราความเร็วในการอ่านบ้างมั้ย

นิสิต B: ก็ดูที่ความยากง่ายของ text

นิสิต C: แล้วแต่ text ด้วย

นิสิต A: ถ้าเจอ text ที่มันยากก็อ่านช้าลง แต่ถ้าอย่าง text นี้ไม่ยากมากและมีความรู้เดิมแล้วด้วย หรือว่าเป็นเรื่องใกล้ตัว ก็เลยอ่านได้เร็วระดับเท่า ๆ กันตลอด

ผู้สัมภาษณ์: ย้อนกลับไปช่วงแรกอีกทีว่าก่อนเริ่มอ่านนี่ยะ ได้ plan ดูรูปที่ให้มั้ย อ่านทุก paragraph หรือ the whole passage ก่อน

นิสิต A: ก็คือ scan เนื้อเรื่องก่อนเลยคือหาmain idea จับไปทีละparagraph เรื่อย ๆ แล้วก็ดูภาพที่ประกอบ

นิสิต C: คือเรื่องที่อ่านนี้ก็ไม่ได้ยากมาก อ่านแบบทีเดียวก็รู้ไอเดียเลย

นิสิต B: แล้วมาคิดทีหลังว่าเนื้อหาเน้นอะไรเป็นหลัก

ผู้สัมภาษณ์: น้องได้ดู main ไอเดียของแต่ละparagraph มั้ย หรือว่ารู้เองเลยจากที่อ่าน

นิสิต B: ก็ใช้ความรู้จากที่ได้เรียนมาที่บอกว่า main idea ส่วนใหญ่จะอยู่ที่ paragraph แรก แล้วส่วนที่ตามมาก็จะเป็นส่วนขยาย หรือ supporting details

ผู้สัมภาษณ์: ขอถามช่วงท้ายนิดนึงว่าสรุปมีปัญหาอะไรในการของ text นี้บ้างมั้ย

นิสิต A: คือจะบอกว่า text นี้ไม่มีเลยด้วยเพราะว่าแบบไม่มีศัพท์ที่ไม่รู้เลย คือคำศัพท์ รึว่า text เนี่ยะไม่ยากเลย

นิสิต C: คือรู้คำศัพท์ ไม่มีศัพท์ที่เป็น unfamiliar word เลย แล้วก็เนื้อหาก็พอจะเดาได้ว่าเรื่องทั้งหมดเกี่ยวกับอะไร

นิสิต A: ก็มีแค่ชื่อของสิ่งที่เราไม่รู้ แต่พออ่าน text ต่อไปแล้วก็ รู้เอง ใช้ context clue ช่วยใน text นี้ไม่ถึงกับว่าถ้าเราไม่รู้แล้วต้องถึงกับไม่เข้าใจ มันไม่ใช่

นิสิต B: ปัญหาเรื่องใหญ่ ในการอ่าน เรื่องอื่น ๆ เนี่ยะ จะเป็นเกี่ยวกับเรื่องคำศัพท์ คือคำศัพท์มันอาจจะอยาก

นิสิต A: แต่เรื่องนี้พอเราใช้หลักแกรมม่า หลักการอ่านที่พอจะรู้ว่าผูกโยงเรื่องยังไงแล้ว เช่นเรารู้พวก transition หรือ conjunction คือเรารู้ว่ามันหมายถึงอะไร แต่ถ้าในกรณีที่ไม่รู้เลยเนี่ยะ ก็จะไม่สามารถบอกหรือเดาได้เลยว่ามันคำศัพท์ตัวนั้นหมายถึงอะไร

นิสิต C: บางครั้งการที่เราไม่รู้คำศัพท์ใน text แล้วเนี่ยะหมายถึงมันเยอะเกินไปเนี่ยะ context clue ก็ช่วยไม่ได้ อย่างเช่นตอนแรกอ่านไม่รู้เรื่องแล้วพอมาเจอคำศัพท์ที่ไม่รู้อีก มันก็จะงงคิดไม่ออก

ผู้สัมภาษณ์: แสดงว่าน้องคิดว่าประเด็นเรื่องคำศัพท์นั้นมีส่วนสำคัญในการอ่านใช่มั้ย

นิสิต A: ใช่ เพราะเราไม่สามารถจะจดคำศัพท์ทุกคำได้ ต้องอาศัยคำที่คุ้นเคย หรือคำที่เคยผ่านตามาช่วยมากกว่า

ผู้สัมภาษณ์: แล้วน้องมีสะดุดบ้างรึป่าว เมื่อเวลาเจอศัพท์ที่ยากใน paragraph เนี่ยะ

นิสิต C: อ่านต่อไปก่อน

นิสิต A: อ่านต่อไปก่อน ไม่ค่อยได้หยุด

นิสิต B: อ่านข้ามไปก่อน เพื่อว่าอาจจะเจอคำตอบในประโยคต่อไป

ผู้สัมภาษณ์: ก็คือใช้ context ช่วยใช่มั้ย

นิสิต A: ใช่

นิสิต B: บางครั้งก็ไปดูที่คำถามเลยว่ามีถามเกี่ยวกับคำที่ไม่รู้นี้รึป่าว

นิสิต A: บางทีก็ดูจาก reference เอาว่ามัน refer ถึงอะไร

Translated Version

Reading in Printed Academic Text

Student A: All right, let's begin…"why do environmentalists want to make the Act stronger?" I think it's about to protect endangered species and protect animals.

Student B: I think so.

Student C: Right.

Student A: It's just the animals is going to die. Next, "Why do loggers and farmers want to make the Act weaker?"

Student C: I think it's about the conflict of interest.

Student B: There is no income.

Student A: It's a cause of losing job, money, and benefit.

Student C: Then, what's the effect of this thing?

Student A: That's about losing the job. Ok? Next, why don't some people want to protect spotted owls or wolves? Like, spotted owls…It's interfering their logging job.

Student B: Wolves too.

Student A: People are afraid of wolves and these animals can hurt other animals.

Student C: I think it's similar to answer 4, the advantages

Student B: Right. Then, how do environmentalists try to appeal to business? Here, I can find it in this paragraph…where?

Student A: Here, they say that studying unknown plants maybe a good business idea. Plants give us important materials: drugs, rubber, food…It can be summarized that it's about the advantages. Ok. Let's see "which is more important: jobs or the environments? Why?"

Student C: Look at the text; it's about environments definitely because at the beginning of the text focused on environments

Student A: The whole text is about environments.

Student B: I think environments definitely. "why?"…It can be seen in the text that if there's no forests, there's no job, no people and no money.

Student C: At the last paragraph, the text said without forest there's no medicine for cure AIDS or cancer.

Student B: Look at the last line that “save the environment to save ourselves” is important thing about the environments. So that’s it.

Student A: Look back at the question 1 asking about “star”. It appears in paragraph 2. And the question 7 is similar to the question 8 that talks about cancer or aids cure. These resources are from forest. Ok.

…...…….

I: What is the main idea of this text? How can you find it?

Student A: I use my background knowledge and the picture of the text. Then, I see what the text is about. It can be noticed from the title which is clearly that the animals are going to extinct and the first sentence is the main idea of this text.

I: Do you think finding main idea or supporting details can help you more understand?

Student C: I think so because these will help me know what the text is.

Student A: If I know main idea of each paragraph I can get the idea of the text.

Student B: So I can plan what I will have to do to understand more.

Student A: Sometime, I don’t have to look at the example or more details only main idea. I can understand the main point of the text.

Student B: It likes skim and scan the whole text.

Student C: I scan text first then look in depth later because I will not waste time.

I: Do you translate text or words into Thai while reading?

Student C: Not at all. I can read flow in this text because I know the meaning of it well.

Student A: Right. I keep reading because I know the words well.

Student B: But If I don't know I will find context to help me understand more than translate it.

I: When you read, do you take any notes, underline or highlight text?

Student B: It depends on text which is difficult or not. Sometime I don't take any note.

Student A: But I do only the main point of each paragraph.

Student C: If I don't know I will underline word immediately.

Student B: Sometimes I underline it then I will check with the question. If I understand I will read ahead.

Student A: I usually scan the text and then I will read again and find the answer and underline the main point. I think this way save my time and I can find the answer easily. I will underline only main point.

I: If you do not know the answer at all what will you do?

Student B: Read quickly

Student C: Right.

Student A: Scan the whole text.

Student B: Or focusing on the words, look at its part of speech such as "environment is noun, isn't it"

Student A: Look at part of speech of unfamiliar word.

Student B: For example "verb" it's complicated. If I translate from positive meaning into negative meaning, the meaning will be change. So, I think "verb" is one of my problems.

Student A: Mostly, I will check the part of speech of that word and then find the context around. Sometime, I can find the answer by using context.

I: Before reading text, do you set purpose of the text?

Student C: Yes, but I look at the title, the picture and then set my purpose what the text is about.

Student A: I look at the main point and then set my purpose of the reading

Student B: I look at the title first.

I: Do you read back and forth when you don't understand text?

Student C: Yes, quite often.

Student A: I often do that.

Student B: When I do not understand I will read back and forth many times.

Student A: I think read back and forth will help me get the main point easily

Student B: Sometime, when I skim and scan text I will miss the important details. So, If I don't understand I will reread and look at the marker in the text.

Student A: Sometime, missing the punctuation such as semi colon or comma can make the wrong meaning. These can make me misunderstand the whole paragraph.

I: When you don't understand, do you read slowly?

Student A: Right. I will read slowly to consider what text is about. First I will read skim and scan quickly but when I don't understand I will read slower and ask myself what I am reading or what the text is about.

Student B: If I read for a while and I got struck, I will read slower until I understand well. Then I will continue.

Student C: I will read roughly, check how many page and look at the question. Especially, if the text is long, I will focus on question first to find the answer.

Student A: It's better than reading the whole text and then you forget what the text is about.

I: Do you analyze or evaluate yourself or text after reading?

Student B: If I read difficult text such as science text and I do not understand that mean my knowledge about vocabulary is not good. However, if the text is general or familiar with my background knowledge like this text "environment" I can understand easily.

I: That means background knowledge about vocabularies can help you understand text well.

Student A: Yes. I think the vocabularies in this text are not difficult for me. I have seen some words before. Well, if there are any technical terms, I will check it again.

Student B: For example, if I don't know the whole text that means I have no word choice. So, I can evaluate myself that I really don't understand the text.

Student C: Sometime, I can evaluate myself since I have read the text. If I don't understand at all that means I am not familiar in the text.

Student A: I think self-opinion can cause misunderstanding about the text.

I: Do you use the grammatical structure rules in reading? How often?

Student C: Of course.

Student A: Like punctuation or conjunction are my keywords to understand text.

Student B: Such as transitional words are very helpful.

Student A: If I don't use it I won't know what the cause or reason is, or where the conflict is.

Student B: Right. If I don't use it, I will misunderstand the text.

I: Do you use signal word to help you understand the unfamiliar word?

Student B: It depends on the important of the word. Like the word "grizzly bear" actually I don't know how to translate it but I guess from the picture that it's a kind of bear.

Student A: In the text did not focus about the bear. It's about environment so I don't have to translate the meaning. But if the text talks about the structure of grizzly bear then I have to find the signal words to find what types of bear and how it is different from another type.

Student B: So, I just assume that it's a kind of bear.

I: When you read do you increase your speed reading?

Student A: Not in this text. I think it depends on type of text. If the text are difficult, I will the same rate throughout the text.

I: Look back when you start reading, do you plan, see the picture, read every detail or read the whole passage.

Student A: I scan the whole text then find the main idea in each paragraph and see the picture.

Student C: This text is not difficult. When I start reading, I can get the main point.

Student B: I think about what the text is focused on.

I: Do you find the main idea of each paragraph or suddenly know the main point after scan the text.

Student B: I use my reading skill that mostly main idea will appear in the first paragraph and the next part will be supporting details.

I: Do you have any problems when you read this text?

Student A: Not at all. The vocabularies in this text are not difficult.

Student C: There are no unfamiliar words in this text. I can guess what the text is about.

Student A: There are some unknown words but after I read in detail, I can use context clue to help me understand text.

Student B: I think the main problem for reading another text is vocabularies.

Student A: But in this text, I can use grammatical rules such as transition or conjunction to understand the connection of the text. In contrast, if I don't know the grammatical rules at all, I can't guess what the meaning of that word is.

Student C: If I don't know the words or there are too many unknown words in one text, I think sometimes it will make me confuse what that word means

Student A: Right. I can't remember all vocabularies so I have to recall my prior knowledge to help me understand some unknown words.

I: Do you stop when you find difficult words?

Student C: No. I read ahead.

Student A: I read ahead. I don't stop when I read.

Student B: I will read for another clue. I can find the answer in the next sentences.

I: That means you use context to help you understand the text

Student A: Yes.

Student B: Sometimes, I look at the question first to get the main point.

Student A: I look at the references to refer what the text is about.

Transcription

Reading in Printed Academic Text

นิสิต D: Laughter as therapy… "From Pulmonary Rehabilitation…." ตรง subtopic เนี่ยะเป็น proverb "An merry heart does good like a medicine…" สิบเจ็ดยี่สิบสองเนี่ยะ มันต้องมาจากไบเบิ้ลแน่เลย

นิสิต E: Maybe.

นิสิต D: มันเป็น proverb ป่ะ…. “Laughter can be a powerful therapy for both the patient and the caregiver” Ok. เป็น topic sentence แล้วก็เป็น thesis statement ด้วย ด้วยความที่ text ยาว เรามาดูรวมดีกว่าว่ามันมีกี่หน้า กี่เรื่อง มาดูเนี่ยะมี sub topic ด้วย แล้วก็มีหน้าต่อไปอีก “Laughter supports recovery from illness”

นิสิต E: อืม...ใช่

นิสิต D: นี่เป็น sub topic ป่ะ

นิสิต E: ไหนขอดูก่อนสิ….ใช่ ๆ ๆ

นิสิต D: แล้ว topic sentence กับ main idea ก็คือ “laughter might aid healing” เรื่องต่อไป Physiological Response มันแปลว่าอะไรเนี่ยะ

นิสิต E: เหมือน physical บวก logic หรือเปล่า

นิสิต D: เออ ใช่

นิสิต E: ไหนดูประโยคแรก “Humor is a perceptual process while laughter is a behavioral response”

นิสิต D: Physiological คือ...เปิดดิคแป๊บ อ๋อมาจากคำว่า physical กับ logic จริง ๆ ด้วย

นิสิต E: อืม

นิสิต D: โอ้ย background knowledge มีมั้ยเนี่ยะ...มันจะเกี่ยวกับเรื่องอะไรเนี่ยะ

นิสิต E: มันจะเกี่ยวกับอะไรที่มันตอบสนองรึป่าว กับพฤติกรรม

นิสิต D: คำว่า arousal แปลว่าอะไรเนี่ยะ ต้องเปิดดิคอีกแล้ว....ยากจัง text นี้ อ๋อแปลว่า “excitement”

นิสิต E: เปิดคำว่าVigorous ด้วย อ๋อนี่ไงคำว่า arousal เนี่ยะ ยกตัวอย่างเช่น heart rate increase เหมือนแบบเลือดสูบฉีด

นิสิต D: เออ อะไรประมาณนั้น แล้วก็ตามด้วย “and the resolution phase when they return to resting rate or lower”

นิสิต E: เหมือนกับการออกกำลังกายที่มีขึ้นแล้วก็ลง

นิสิต D: Vigorous คุ้น ๆ มันแปลว่า เอ่อ....เปิดดิคดีกว่า ไม่มี background knowledge เลย

นิสิต E: ใช่

นิสิต D: มันแปลว่า “forceful or energetic” คงเต็มไปด้วยพลังงั้นมั้ง อ๋อมันแปลว่า healthy and strong ต่อไป “the normal respiratory pattern becomes chaotic..” คำว่า respiratory แปลว่าอัตราการเต้นของหัวใจ

นิสิต E: มาดูนี่คำถามดีกว่า “succumb to feeling of depression” วลีนี้แปลว่าอะไร ตรง paragraph ที่ 3

นิสิต D: “succumb to feelings of depression and helplessness if we are able to laugh at what is troubling us” อ๋อ ก็คือว่าขจัดเอาความหดหู่ ความเศร้าออกไป

นิสิต E: ใช่นี่ไงดูจากตรงนี้ ตรงประโยคข้างหลัง ที่บอกถึงปัญหาที่เกี่ยวกับเรา ดูจากคำถามดีกว่าจะได้อ่านอย่างมีจุดหมาย

นิสิต D: โอเค ตรงนี้ถามว่า paragraph ที่สองมีตัวบอกคำจำกัดความมั้ย ไม่มีนะไม่ใช่ definition

นิสิต E: มันไม่ใช่ definition

นิสิต D: ต่อไป “what is the purpose of this section?” ตรง paragraph ที่ 6 กับ7 Purpose ก็คือ the possibility that laughter might aid healing คำว่า ankylosing spondylitis เป็นคำที่เป็น medical term แน่นอนเลย

นิสิต E: แต่มันบอกขยายความในประโยคต่อมา ที่ว่า a progressive degenerative disease of the collagen tissue มันเป็นโรคชนิดหนึ่ง ก็คือต้องการ convince ว่าการหัวเราะเนี่ยะมันดี ช่วยรักษาโรคได้ก็เลยยกตัวอย่างบางโรค

นิสิต D: มันเกี่ยวกับมะเร็งไขกระดูก โดยมาเกิดในผู้ชาย ต่อไป “do you understand adrenal exhaustion?” เออรู้จักแต่ adrenaline น่าจะเหมือนกันนะ

นิสิต E: เหมือนกับว่าเป็นสภาพ ร่างกายไม่สามารถผลิตฮอโมนส์ได้ ประมาณนั้น

นิสิต D: อาศัยการอ่านประโยคถัดไปจะช่วยได้ ต่อไป “what is the important idea of this paragraph?”

นิสิต E: คิดว่า positive emotion might create changes within the body

นิสิต D: ใช่ งั้นต่อไป “are any of your key words in this paragraph?” อ๋อมี key word มั้ย อืม หัวข้อมันก็บอกนะว่าเกี่ยวกับอะไร แล้วพอมาอ่านประโยคแรกก็มี คำว่า behavioral response ทำให้เข้าใจภาพรวมของ text

นิสิต E: แล้วก็ เครื่องหมาย hyphen เป็นตัวที่บอกว่ามีส่วนไหนของร่างกายบ้างที่เคลื่อนไหวระหว่างที่เราหัวเราะโดยที่เราไม่ต้องรู้ความหมายที่แท้จริงของแต่ละคำก็ได้

นิสิต E: ต่อไปเออเจอคำที่ยาวอีกแล้ว psychoneuroimmunology แปลว่าอะไรเนี่ยะ neuro ก็ระบบประสาท immune ก็ภูมิคุมกัน แต่มันมี definition ข้างหลังเห็นคอมมามั้ย ก็คือระบบประสาท ระบบผลิตฮอโมนส์ และก็ระบบภูมิคุมกัน

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ผู้สัมภาษณ์: สิ่งแรกเลยที่น้องทำตอนอ่าน text นี้คือ

นิสิต D: อ่าน topic ก่อน อ่าน ชื่อเรื่อง แล้วก็ดูความยาวของ text

นิสิต E: อ่าน Title เปิดดูเนื้อหาคร่าว ๆ ก่อน เช็คดูแต่ละ paragraph ว่ามันมี main idea อะไรบ้าง เพราะว่า text นี้ค่อนข้างยาว

นิสิต D: อ่านคร่าว ๆ ก็ยังไม่ค่อยเข้าใจก็เลยต้องหาดู main point ว่ามันเกี่ยวกับเรื่องอะไร เพราะจะช่วยให้เดาเรื่องได้ว่าจะเกี่ยวกับอะไร

ผู้สัมภาษณ์: น้องมีการ set purpose ในการอ่านบ้างไหม

นิสิต D: ก็มีเพราะว่าอ่านจาก ชื่อเรื่องก็พอเข้าใจว่าเกี่ยวกับเรื่องการหัวเราะนั้นมีประโยชน์หรือช่วยบำบัดโรคได้

นิสิต E: ก็ตั้งไว้ว่าเรื่องจะเกี่ยวกับการบำบัดโรคด้วยการหัวเราะ แต่พออ่านละเอียดก็รู้ว่ามันมีทั้งเรื่องของงานวิจัย ที่เอามาให้เห็นว่าการหัวเราะมันดีอย่างไร ซึ่งเจอศัพท์ที่เป็น technical term เยอะมาก

ผู้สัมภาษณ์: เมื่อน้องเจอคำศัพท์ที่ยาก หรือ unfamiliar word เนี่ยะน้องทำอย่างไร

นิสิต E: ก็นอกจากใช้ dictionary แล้วก็ อาศัยพวกคำขยายความในประโยคต่อไป

นิสิต D: ในเรื่องนี้ศัพท์ technical term เยอะ ก็เลยเปิด dictionary ช่วย แต่ก็ดูคำในวงเล็บบ้าง หลัง comma บ้าง ทำให้เรา assume ได้ว่ามันเกี่ยวกับอะไรเพราะคิดว่ามันไม่จำเป็นต้องรู้ความหมายที่ตรงตัว เพราะคำถามไม่ได้ focus มาก

นิสิต E: แต่เป็นความสนใจมากกว่าเพราะอยากรู้ว่าคำนั้นแปลว่าอะไรกันแน่ อย่างเช่นคำว่า asthma เนี่ยะแปลว่าอาการหอบหืด คำข้างหลัง bronchitis ก็น่าจะเกี่ยวกับเรื่องหลอดลม หรือการหายใจ

นิสิต D: ดูพวกเครื่องหมายต่าง ๆ พวกคำเชื่อม เช่น or, and เป็นต้น

ผู้สัมภาษณ์: แล้วเวลาอ่าน text ยาว ๆ น้องมีสมาธิหลุดบ้างไหม

นิสิต E: มันขึ้นอยู่กับสถานการณ์มากกว่าถ้าเราเครียดเนี่ยะก็อาจจะหลุดบ้าง

นิสิต D: ยกตัวอย่างเช่นถ้าเอาเรื่องนี้ไปเป็นข้อสอบซึ่งมีคำศัพท์ยากเนี่ยะ ก็อาจทำให้เราไม่อยากอ่าน แล้วก็อาจจะคิดไปเรื่องอื่นก่อนแล้วค่อยกลับมาอ่าน แต่ถ้าเราใช้วิธีเจาะประเด็นในการอ่านคำถามก่อนว่าคำถามต้องการอะไรก็ทำให้เราไม่หลุด

ผู้สัมภาษณ์: ถ้าอย่างนั้นน้องก็อ่านกลับไปกลับมา คืออ่านซ้ำใช่ไหม

นิสิต D: ไม่ได้อ่านซ้ำทุกส่วน อ่านตรงที่ refer ถึงเท่านั้น หรือตรงส่วนที่เราอ่านแล้วไม่เข้าใจจริง ๆ

นิสิต E: อย่างเช่นถ้าคำถามถามว่า asthma กับ bronchitis ก็ต้อง ไปหาเลยว่ามันแปลว่าอะไร แต่จริง ๆ ก็ดูจากข้อความถัดไปก็จะมีคำอธิบายอยู่

ผู้สัมภาษณ์: น้องมีการ take note หรือ ขีดเส้นใต้ข้อความบ้างไหม

นิสิต D: มีเยอะเลยแต่ส่วนมากจะขีดเส้นใต้มากกว่าเน้นตรงที่สำคัญ

นิสิต E: ขีดเส้นใต้คำอย่างเช่น technical term ยกตัวอย่างเช่น คำว่า psychoneuroimmunology ก็เขียนแยกคำออกมาให้รู้ว่าประกอบด้วยคำอะไรบ้าง

ผู้สัมภาษณ์: มีการใช้ context clue มาช่วยบ้างไหม

นิสิต D: ใช้เยอะเหมือนกันบางทีใช้ทั้งประโยคมาช่วยอธิบายคำบางคำที่ไม่เข้าใจ

นิสิต E: เพราะเรื่องมันยาวทำให้บางทีก็ต้องเน้นเกือบทุกคำเลย

ผู้สัมภาษณ์: น้องมีการประเมินเนื้อหาที่จะอ่านไหม

นิสิต D: ก็ทำ แต่อ่านไปอ่านมาก็รู้ว่ามันไม่ใช้เรื่องทั่ว ๆ อย่างที่คิดไว้

นิสิต E: ก็อ่านแล้วดูว่าเรามีความรู้เกี่ยวกับ text มากแค่ไหนก็ลองคิดไว้ในใจ ตรง introduction ของเรื่องบอกน้อยมาก เพราะอ่านจริงแล้วรายละเอียดเยอะกว่านั้น

ผู้สัมภาษณ์: มีการแปล text เป็นภาษาไทยบ้างไหม

นิสิต D: ก็มีแปลไปด้วยแต่โดยมากจะแปลคำศัพท์มากกว่า

นิสิต E: พออ่านไปแล้วก็นึกเป็นคำภาษาไทยเพื่อช่วยให้เข้าใจมากขึ้น หรือภาษาบ้านเราเรียกว่าอะไรนะ แต่ก็จะเปิด dictionary ช่วยแปลคำศัพท์ยาก ๆ มากว่า

ผู้สัมภาษณ์: งั้นถ้าเป็นเรื่องที่เป็นยากมาก ๆ น้องก็จะแปล text เป็นไทยเพื่อให้เข้าใจมากขึ้นใช่มั้ย

นิสิต D: ใช่ ก็อย่างที่บอกแต่ก็ไม่ใช่ทุกคำนะ

ผู้สัมภาษณ์: น้องมีปัญหาในการอ่าน เรื่องนี้หรือไม่

นิสิต D: มีแน่นอน คือเนื้อเรื่องยาว และคำศัพท์ก็เป็น medical term มาก

นิสิต E: ตรงนี้มีใช้ background knowledge น้อยมากเพราะเรื่องจะเกี่ยวกับงานวิจัยที่เอามายกตัวอย่าง

Translated Version

Reading in Printed Academic Text

Student D: Laughter as therapy… “From Pulmonary Rehabilitation….” This subtopic is proverb “An merry heart does good like a medicine…” 17 and 22 are from bible surely.

Student E: Maybe.

Student D: Is it a proverb? “Laughter can be a powerful therapy for both the patient and the caregiver” Ok. This is a topic sentence and a thesis statement. According to long text, I will look overall, how many pages, and how many topic in this text. Here is a sub topic at the next page “Laughter supports recovery from illness”

Student E: Um…right.

Student D: Is it subtopic?

Student E: Let's me see. That's right.

Student D: And topic sentence and main idea is "laughter might aid healing"
Next title is "Physiological Response" What is that?

Student E: That's physical plus logic, isn't it?

Student D: Right.

Student E: Let's look at the first sentence "Humor is a perceptual process while laughter is a behavioral response"

Student D: Physiological is…open my dictionary… Here it's from physical plus logic, exactly.

Student E: Um…

Student D: I don't have any background knowledge in this text. What is it about?

Student E: It maybe about the respondence of our behavior.

Student D: What "arousal is? I have to use dictionary again. How difficult it is. Oh, I got it. It means "excitement"

Student E: Find the word "Vigorous" please. Here, this example is support the word "arousal". It is about heart rate increase. It's a blood pumping.

Student D: I think so. Follow with "and the resolution phase when they return to resting rate or lower"

Student E: It's similar to exercising.

Student D: Vigorous. I think I have to open dictionary again. I really don't know

Student E: Right. Me too.

Student D: It mean forceful or energetic. I think it's full of power. I see, it mean healthy and strong. Next, ""the normal respiratory pattern becomes chaotic.." The word "respiratory" means heartbeat rate.

Student E: Let's see the phrase "succumb to feeling of depression" what is it? Here at 3 the 3rd paragraph.

Student D: "succumb to feelings of depression and helplessness if we are able to laugh at what is troubling us" It means get rid of trouble or depress.

Student E: Yes. Look at the next sentence, it talks about our problem. I think we should look at the question to set the goal of reading.

Student D: Ok. Is this paragraph giving a definition? No. it's not definition

Student E: It's not definition.

Student D: Next, "what is the purpose of this section?" It's in the 6th"and 7th paragraph. The purpose is the possibility that laughter might aid healing Here, what ankylosing spondylitis means? I think this word is a medical term definitely.

Student E: It can see from the next sentence that is "a progressive degenerative disease of the collagen tissue. It's a kind of disease. This paragraph try to convince that laughter can heal the illness.

Student D: "ankylosing spondylitis means a type of cancer mainly affects joints in the spine, mostly happened to male. Next "do you understand adrenal exhaustion?" Is it similar to adrenaline? I think so.

Student E: It's a condition that the body can't produce hormone.

Student D: You have to read next sentence. Ok,"what is the important idea of this paragraph?"

Student E: I think the positive emotion might create changes within the body

Student D: Yes. I agree. Ok, next "are any of your key words in this paragraph?" Um…about key words. I think the title is a keyword. Moreover, when I read the next sentence I see the word "behavioral response". It help me understand overall.

Student E: It's no need to know every meaning of those words because hyphen is a keyword that explains which part of the body will active when laughing.

Student D: The long word again, what psychoneuroimmunology is? Um…neuro is nervous, immune is protection. I see, there is the definition here, look at the comma. That's the nervous system, the endocrine system, and the immune system.

……

I: What do you do first when you read this text?

Student D: I read the topic and the title first. Then, look at the length of the text.

Student E: I read title, scan the whole text and check main idea of each paragraph because this text is quite long.

Student D: I read roughly but I didn't understand much. So I read for main idea to guess what the text is.

I: Do set your purpose before you read?

Student D: Yes. I read the title and understand that it is about the advantage of laughter and its can heal illness.

Student E: I set the purpose about treatment with laughter first but after I read in detail, I realized there are more details. There are many technical terms in this text.

I: What do you do when you see the unfamiliar words?

Student E: Not only use dictionary, I also look for another supporting detail in the next sentence.

Student D: According to technical term, I use dictionary to help me understand but sometime I look the word or the sentence in parentheses or comma. I can assume what the text is without translating the meaning.

Student B: It's my interesting that I want to know what that word is. Such as the word "asthma" is symptom but I don't know the word "bronchitis" mean. Well, I can guess its meaning that is an infection at bronchial tubes.

Student D: I look at the conjunction such as or, and etc.

I: When you read long text, do you lose concentration?

Student E: It depends on the situation. If I stress, I will lose concentration.

Student D: For example, if this text appears in the exam, it make me feel uncomfortable to read. I may think about the other things and then read it later. I think focusing on the main question before reading can help me not to lose concentration.

I: So, do you read back and forth or reread it?

Student D: I didn't read every part of it. I read only the main point or the passage that I didn't understand.

Student E: If the question asks the meaning of these words "asthma and bronchitis" I have to find what those words mean. However, I can find the answer from the next sentence.

I: Do you take any notes or underline the text?

Student D: It's a lot but I underlined only the important idea.

Student E: I underlined technical term such as "psychoneuroimmunology"
I divided it to see the combination.

I: Do you use context clue to understand this text?

Student D: I use several clues. I often use the entire sentence to explain some the unknown words.

Student E: Because of the length of it, I have to read almost every word.

I: After reading, do you evaluate what is read?

Student D: A little. After I read I found that it's not general text as I thought.

Student E: I read and think about how much I will understand this text and set the point in mind. I think the introduction can't tell because there are more details.

I: While reading, do you translate text into Thai?

Student D: Yes, but mostly are vocabularies.

Student E: When I read I think about meaning in Thai but I prefer open dictionary to translate difficult words.

I: If the text is very difficult, you will translate text into Thai, won't you?

Student D: Right. But it's not every word.

I: Can you tell me what the problem in reading this text is

Student D: Absolutely, this text is very long and several vocabularies are medical term.

Student E: I rarely use my background knowledge because this text gives many examples about research articles.

Transcription

Reading in Online Academic Text

นิสิต B: What is the main idea of this passage? How can you find it? เอ....ตรงนี้ไง ที่ว่า “Noise pollution can have negative effects on productivity and health.” ผมหา main idea จากการอ่านแบบ skim เนื้อหาทั้งหมดก่อน แล้วจึงพบว่ารายละเอียดนั้นอ้างเรื่องผลกระทบในแง่ลบที่ส่งผลต่อสุขภาพ ไหนมาดูคำถามต่อไปสิ “what is the noise pollution?” มันก็คือตรงนี้ไงตามเนื้อหาเลย “It’s intrusive noise that disrupts, distracts, or detracts from regular functioning” ตรงนี้ใช้วิธี paraphrase จากเนื้อเรื่อง ต่อไป เอ... “what are the causes of noise pollution?” ตรงนี้มันอยู่ใน paragraph ที่ว่านี่ “the competing sounds of more people in a smaller space” ตรงเนี่ยะเป็นสาเหตุของมลพิษทางเสียง อืม...ดูสิ คำถามต่อไป “do you agree that noisy at home can effect to children’ growth? Why?” โอ้ตรงนี้เห็นด้วยอย่างยิ่งเพราะว่าความจริงแล้วก็เป็นประเด็นที่ผู้วิจัยนั้นเน้นไว้แล้วในเรื่อง

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ผู้สัมภาษณ์: สิ่งแรกเนี่ยะน้องทำอะไรบ้างเมื่อเริ่มอ่านเรื่องนี้คะ

นิสิต B: ก็อ่านชื่อเรื่องก่อนนะ แล้วก็เช็คดูความยาวของเนื้อเรื่อง

ผู้สัมภาษณ์: ได้มีการ set purpose บ้างไหมในการอ่านเรื่องนี้

นิสิต B: พอดู ๆ เรื่องแล้วก็ตั้งเป้าหมายเพื่อที่จะหาคำตอบจาก คำถามที่ถาม มากกว่า

ผู้สัมภาษณ์: น้องใช้วิธี skim กับ scan เนื้อเรื่องก่อนไหมคะ แบบว่าดูเนื้อเรื่องโดยรวม

นิสิต B: ใช้ก็ใช้วิธี skim แล้วก็ scan เรื่องทั้งหมดก่อนเพื่อทีจะหาคำตอบก่อน จากนั้นก็ถึงหา main idea แล้วค่อยอ่านอย่างละเอียดอีกที

ผู้สัมภาษณ์: น้องลองเดาเนื้อหาของเรื่องว่ามนจะเกี่ยวกับอะไรบ้างไหม

นิสิต B: ไม่ได้เดานะ ก็คือมีเป้าหมายไว้ในใจอยู่แล้วหนิ

ผู้สัมภาษณ์: อย่างนั้นน้องก็มีการหา main idea ก่อน หา supporting details ก่อนใช่ไหมคะ

นิสิต B: ใช่ครับ ใช่ ผมหา main idea หลังจากที่อ่านเพราะว่าผมต้องอ่านเรื่องทั้งเรื่องคร่าว ๆ ก่อน เพื่อที่จะเจอ main idea

ผู้สัมภาษณ์: ที่นี้เวลาน้องอ่านไปเนี่ยะน้องเขียนโน้ตอะไรบ้างไหม เพื่อที่จะได้เข้าใจมากขึ้น

นิสิต B: ฮึ....ไม่มีเลยนะ ไม่ได้จดอะไรเลย

ผู้สัมภาษณ์: น้องคิดว่าพวกตาราง หรือรูปภาพประกอบเนี่ยะช่วยให้น้องอ่านรู้เรื่องมากขึ้นไหม

นิสิต B: นิดหน่อยเองเพราะว่ารูปภาพในเรื่องไม่ได้มีส่วนที่ช่วยให้ผมเข้าใจมากขึ้น

ผู้สัมภาษณ์: แล้วเมื่อเวลาอ่านเจอ text ที่ยาก ๆ เนี่ยะทำยังไง ใช้วิธีอ่านซ้ำ อ่านออกเสียง อ่านช้า ๆ หรือว่าหยุดพักชั่วคราวบ้างไหม

นิสิต B: ก็พอเจอเนื้อหาที่มันยาก ก็จะหยุดอ่านเพื่อเปิดดิกฯ แล้วก็จะอ่านซ้ำบ้าง แล้วก็ค่อยอ่านต่อ

ผู้สัมภาษณ์: แล้วเวลาน้องเจอคำศัพท์ที่ไม่รู้จักเนี่ยะ น้องทำยังไง ใช้ดิกฯ ออนไลน์ช่วยบ้างไหม

นิสิต B: ก็พยายามนึก ๆ ก่อนแล้วก็ดูประโยค เครื่องหมายข้างหลังว่ามีอะไรที่ขยายความรึเปล่า แล้วก็ใช้ English to English dictionary ช่วยเหมือนกันเมื่อเจอคำที่ไม่รู้จัก

ผู้สัมภาษณ์: แสดงว่าน้องก็มีการใช้ context clue เพื่อช่วยให้น้องเข้าใจมากขึ้นใช่หรือไม่

นิสิต B: ใช่ครับ ผมใช้ context clue มาดูตั้งแต่ประโยคแรกแล้วก็ ดูคำหลังจากเครื่องหมายคอมม่า

ผู้สัมภาษณ์: น้องว่าพื้นความรู้เดิมเนี่ยะช่วยน้องในการอ่าน text ได้เข้าใจมากขึ้นหรือเปล่า

นิสิต B: ใช้ครับเพราะพื้นความรู้เนี่ยะช่วยผมในการอ่านเรื่องนี้เข้าใจมาก แล้วผมก็ใช้คลังคำศัพท์ส่วนตัวมาช่วยในการเดาความหมายคำที่ไม่รู้อีกด้วย

ผู้สัมภาษณ์: เวลาที่อ่านได้มีการแปลข้อความเป็นภาษาไทยบ้างไหม แล้วทำไมต้องทำอย่างนั้น

นิสิต B: จริง ๆ แล้วเนี่ยะไม่ได้แปลข้อความนะเวลาอ่าน แต่ก็จะลองแปลสองสามคำหลังการอ่านมากกว่า

ผู้สัมภาษณ์: ได้ย้อนกลับไปกลับมาบ้างไหมเวลาอ่าน แล้วเวลาสมาธิหลุดบ่อยไหม

นิสิต B: ก็ย้อนไปอ่านบ้าง แบบว่าค่อย ๆ อ่าน ก็เลยไม่ค่อยเสียสมาธิเท่าไหร่

ผู้สัมภาษณ์: หลังจากที่อ่านแล้วได้มีการประเมินเรื่องที่อ่านบ้างไหมว่าเราอ่านอะไร

นิสิต B: ผมประเมินว่าการหา main idea ของเรื่องนี้ยากกว่าเรื่องอื่น แล้วก็ประเมินตัวเองว่า เอ.... เราก็พอเข้าใจคำศัพท์ของเรื่องอยู่บ้าง

ผู้สัมภาษณ์: สิ่งที่เป็นปัญหาในการอ่าน text ออนไลน์ นี้คืออะไร แล้วมีอะไรบ้าง

นิสิต B: ปัญหาในเรื่องนี้ แทบจะไม่มี นอกจากศัพท์ แต่ก็ใช้ ดิกฯ ในคอมพิวเตอร์ช่วย

Translated Version

Reading in Online Academic Text

Student B: What is the main idea of this passage? How can you find it? Um…here "Noise pollution can have negative effects on productivity and health." I found the main idea after I had skimmed all passage and found that the detail in the passage mostly referred to how noise pollution can have negative effects on productivity and health.

And…next question "what is the noise pollution?" It's intrusive noise that disrupts, distracts, or detracts from regular functioning. I paraphrase from the text. Next, "what are the causes of noise pollution?" I think here in the paragraph, "the competing sounds of more people in a smaller space" is caused of noise pollution. Um… "do you agree that noisy at home can effect to children' growth? Why?" Quite agree because the fact has been issued by researchers.

I: What do you do first when you read?

Student B: I read the title and look how long the text is

I: Do you set your purpose before you read?

Student B: Yes. I set my purpose to find the answer and look at the questions.

I: Do you skim and scan the passage before you reading?

Student B: I scan the whole passage to find the answer first. Then I read for main idea and read it thoroughly.

I: Do you try to guess or predict what the text is going to say?

Student B: No, because I have purpose in my mind.

I: Do you find main and supporting idea before you read? How?

Student B: Right. I find main idea after I read because I have to read the whole text to find it.

I: Do you take any notes to help you understand the reading?

Student B: Not at all.

I: Do you use tables, figures and pictures in the online text to increase your understanding?

Student B: Very little because I think the picture in this text didn't increase my understanding .

I: What do you do when text become difficult? Do you re-read, read aloud, read slower or stop reading a while?

Student B: When I found the difficult text, I will stop to open dictionary and then I reread that sentences and continued.

I: What do you do when you found unfamiliar words? Do you use online dictionary?

Student B: I try to think what the meaning is by reading or looking for the marker to clarify its meaning. Yes. I used English-English dictionary when I found the unfamiliar words.

I: Do you use context clue to help you understand the text?

Student B: Exactly, I used at the first sentence and the vocabulary after comma.

I: Do you use your personal background experience to help you understand the text?

Student B: I used my word tanks and see context clue to help me understand the text

I: While reading, do you translate text into Thai? If so why?

Student B: Actually, I didn't but I try to translate few words after reading.

I: Do you go back and forth when you lose concentration? How often?

Student B: Yes. I go back to read it again but I read gradually to check whether I understand clearly. I think I didn't lose concentration.

I: After reading, do you evaluate what is read?

Student B: First I evaluated that finding this main idea is difficult to another text. Then I evaluated myself that…ur.. I understand the vocabularies in this text well.

I: What are the problems when you read online passage?

Student B: There are some difficult words but I use dictionary in the computer instead.

Transcription

Reading in Online Academic Text

นิสิต E: What is the main idea of this passage? ผมคิดว่าตรงนี้นะ “profound effect on your body and psyche caused by music” น่าจะเป็น main idea ก็อ่านเจอตรงประโยคของ paragraph แรก มันสามารถบอกรายละเอียดของ paragraph ต่อไปได้ มาดูคำถามต่อไปสิ “what is the benefit of music therapy?” เอ่อ...มันอยู่ตรงไหนเนี่ยะ....นี่ไงตรงนี้ “the benefit of music therapy can help cancer patients, children with ADD, and others” ตามด้วยตรงนี้อีกที่ขยายความ “even hospitals are beginning to use music therapy to help with pain management, to help ward off depression, to promote movement, to calm patients, to ease
muscle tension” นั่นแหละ เฮ้อ...ต่อไป “do you know what “wreaking havoc” means?” เออ..มันแปลว่าอะไรเนี่ยะ ขอหาใน dictionary หน่อยสิ.....อ๋อ นี่ไงมันแปลว่า อืม..หายนะเหรอ?? “สร้างปัญหาใหญ่หรือว่าปัญหา”

.....

ผู้สัมภาษณ์: น้องทำอะไรบ้างเมื่อเริ่มอ่านเรื่องนี้คะ

นิสิต E: ก็อ่านชื่อเรื่องก่อนเลยแล้วก็ดูว่าเรื่องมันยาวแค่ไหนก่อน

ผู้สัมภาษณ์: แล้วน้องมีการตั้งเป้าหมายการอ่านบ้างไหมคะ

นิสิต E: มีอยู่บ้าง ก็อ่านคำถามก่อนแล้วค่อยตั้งเป้าว่าเราจะอานตรงไหนเพื่อให้ได้คำตอบ

ผู้สัมภาษณ์: น้องใช้วิธี skim กับ scan เนื้อเรื่องก่อนไหม

นิสิต E: แน่นอนเลย เพราะว่าตัวเองต้องการที่จะกา keywords ที่ตรงกับคำถามที่ถาม

ผู้สัมภาษณ์: เวลาอ่านเรื่องนี้มีการคาดเดาเนื้อเรื่องก่อนอ่านบ้างไหม

นิสิต E: ก็มีนะ แบบว่าคาดเดาไว้ว่าจะเป็นการที่ดนตรีน่าจะช่วยช่วยบำบัดอารมณ์ต่าง ๆ ได้ประมาณนั้น

ผู้สัมภาษณ์: น้องได้หา main idea หรือว่าพวก supporting idea ของเนื้อหาที่จะอ่านบ้างไหม แล้วหายังไง

นิสิต E: อืม...คือถ้าคำถามที่ถามนั้นถามเกี่ยวกับ main idea ก็จะหา แต่ถ้าไม่ได้ก็จะอ่านเนื้อหาเพื่อหาข้อมูลอื่น ๆ

ผู้สัมภาษณ์: ในการน้องได้ใช้วิธีการจดบันทึกเพื่อช่วยให้เข้าใจเนื้อหามากขึ้นริเปล่า

นิสิต E: ไม่ได้จดบันทึกเลย เพราะว่าสามารถหาความหมายได้จากการใช้ดิกฯออนไลน์อย่างเช่นในคำถามที่

ผู้สัมภาษณ์: ได้มีการดูรูปภาพหรือตารางที่อยู่ใน text บ้างไหมเพื่อช่วยเพิ่มความเข้าใจเนื้อหา

นิสิต E: ไม่เลยเพราะว่ารูปที่อยู่ในเนื้อหาไม่สำคัญ และคิดว่า article นี้เป็นเนื้อหาทั่ว ๆ ไป แต่ถ้าเป็นเนื้อหาที่เน้นเรื่องรูปภาพก็จะมองอยู่เหมือนกันนะ

ผู้สัมภาษณ์: แล้วเมื่อเวลาอ่านเจอ text ที่ยาก ๆ เนี่ยะทำยังไง ได้มีการอ่านซ้ำ อ่านออกเสียง อ่านช้า ๆ หรือว่าหยุดพักบ้างไหม

นิสิต E: ก็ถ้าเนื้อหายากก็จะใช้การเปิดดิกฯแล้วก็อ่านซ้ำ ๆ ตรงประโยคนั้นแล้วค่อยอ่านต่อเรื่อย ๆ

ผู้สัมภาษณ์: น้องทำยังไงเมื่อเจอคำศัพท์ที่ไม่คุ้นหรือไม่รู้ ได้อาศัยการเปิดดิกฯหรือเปล่า

นิสิต E: ใช้ดิกฯเลย จะใช้การเปิดดิกฯเพื่อที่จะได้หาความหมายได้อย่างรวดเร็ว

ผู้สัมภาษณ์: น้องได้ใช้ context clue เพื่อช่วยให้อ่านเนื่อเรื่องเข้าใจมากขึ้นไหม

นิสิต E: ไม่ได้ใช้นะในเรื่องนี้เพราะว่าสามารถอ่านได้อย่างต่อเนื่องไม่สะดุ คืออ่านแล้วก็เข้าใจเนื้อหาเลย

ผู้สัมภาษณ์: คิดว่าการใช้ personal background experience เนี่ยะช่วยให้เราอ่านได้เข้าใจมากขึ้นไหม

นิสิต E: ใช่ เห็นด้วย โดยมากเนี่ยะผมใช้คลังศัพท์ของผมที่มีเพื่อช่วยให้อ่าน text รู้เรื่อง

ผู้สัมภาษณ์: เวลาที่อ่านได้มีการแปลข้อความเป็นภาษาไทยบ้างไหม แล้วทำไมต้องแปล

นิสิต E: อ๋อ เรื่องนี้เหรอ ผมอ่านแล้วสามารถเข้าใจเนื้อหาหลักเลยว่าต้องการสื่ออะไรโดยที่ไม่จำเป็นต้องแปลเป็นภาษาไทยเลย

ผู้สัมภาษณ์: แล้วเวลาเริ่มสมาธิหลุดเนี่ยะได้ย้อนกลับไปกลับมาบ้างไหมเวลาอ่าน บ่อยไหม

นิสิต E: ผมอ่านช้า ๆ ดังนั้นสมาธิจึงไม่ค่อยหลุดนะ แต่ก็จะหยุดเมื่อพบคำศัพท์ที่ไม่รู้ความหมายแล้วก็ใช้การเปิดดิกฯช่วย จากนั้นก็อ่านซ้ำแล้วก็อ่านต่อเนื่องไป

ผู้สัมภาษณ์: หลังจากที่อ่านแล้วได้มีการประเมินเรื่องที่อ่านบ้างไหมว่าเราอ่านอะไร

นิสิต E: ก็จะประเมินตัวเองมากกว่าว่าเราสามารถเข้าใจเรื่องนี้ได้มากน้อยแค่ไหนซึ่งก็พบว่าเราเข้าใจเรื่องนี้ได้ดีเลยทีเดียว

ผู้สัมภาษณ์: สิ่งที่เป็นปัญหาในการอ่าน text ออนไลน์ นี้คือ แล้วมีอะไรบ้าง

นิสิต E: ผมไม่มีปัญหาอะไรเกี่ยวกับการอ่านเรื่องนี้นะ แต่ก็คิดว่าปัญหาในเรื่องของการอ่านหลัก ๆ เนี่ยะน่าจะเป็นเรื่องของคำศัพท์โดยเฉพาะอย่างยิ่ง คำที่ไม่รู้ ไม่เคยเจอมาก่อน

Translated Version

Reading in Online Academic Text

Student E: What is the main idea of this passage? I think "profound effect on your body and psyche caused by music". I found it on the first sentence of the first paragraph and it can be detailed by following paragraph.
Let's see the next question "what is the benefit of music therapy?" uh….where is it?...oh here "the benefit of music therapy can help cancer patients, children with ADD, and others" And this following is a supporting idea "even hospitals are beginning to use music therapy to help with pain management, to help ward off depression, to promote movement, to calm patients, to ease muscle tension". That's it.
Next, "do you know what "wreaking havoc" means?" Urr….what is it? I will search in online dictionary. Here it is, um…disaster? "to cause a lot of damage or problems".

.....

I: What do you do first when you read?

Student E:: I read the title and look how long the text is.

I: Do you set your purpose before you read?

Student E: Yes. I look at the questions and set my purpose to find the answer.

I: Do you skim and scan the passage before you reading?

Student E: Yes, because I want to find keywords that match to the question.

I: Do you try to guess or predict what the text is going to say?

Student E: I guess that music can treat the emotion.

I: Do you find main and supporting idea before you read? How?

Student E: If the question asked about main idea I will find it. If not I will read for others information.

I: Do you take any notes to help you understand the reading?

Student E: I didn't because I can find the meaning from online dictionary as the question 3.

I: Do you use tables, figures and pictures in the online text to increase your understanding?

Student E: I didn't use it because the picture is not important. I think this article is general but if the text is focus on picture I will look at it.

I: What do you do when text become difficult? Do you re-read, read aloud, read slower or stop reading a while?

Student E: If text is difficult, I will open dictionary and then I reread that sentences and continued.

I: What do you do when you found unfamiliar words? Do you use online dictionary?

Student E: Yes. I use online dictionary to find the meaning quickly.

I: Do you use context clue to help you understand the text?

Student E: No, because I can read this text continuously.

I: Do you use your personal background experience to help you understand the text?

Student E: Right. Mostly, I use my own word tank to understand the text.

I: While reading, do you translate text into Thai? If so why?

Student E: I can understand the main point of this text without translation.

I: Do you go back and forth when you lose concentration? How often?

Student E: I read slowly so I didn't lose concentration. I stopped when I found the unknown words and open dictionary. Then, I reread it and continued.

I: After reading, do you evaluate what is read?

Student E: I evaluate myself that how can I understand this text. I found that I understand this text well.

I: What are the problems when you read online passage?

Student E: I don't have problem in this text but I think the main problem in reading is vocabularies, especially unknown words.

VITAE

VITAE

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