

A Comparative Study of Reading Strategies between Good and Poor ESL Readers at the Graduate Level

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Abstract

This article presents the results of a study which was conducted to investigate the differences of reading strategies in English employed by good and poor readers at the graduate level of Thammasat University. The 260 samples, 130 for each group, responded to the questionnaire. Results of this study revealed that there are statistically significant differences between these two groups.

Background

The ultimate goal of reading instruction is to develop students' comprehension of what they read. Most teachers, therefore, try to teach their students reading skills with the hope of improving their comprehension. Yet, possessing reading skills alone does not guarantee that students can be proficient readers. Reading solely for the sake of reading is akin to listening only to listen, or speaking only to speak. Reading is a complex, communicative act which takes place in a rich context-based setting. It implies, among other things, that there is a *purpose* in reading. Research reveals that teaching **reading strategies**, applied at all stages of the reading process, assists the learners in accomplishing their reading tasks.

Paris, Wasik, and Turner (1991) have identified six characteristics of reading strategies that make them valuable for explicit teacher instruction:

1. Strategies allow readers to elaborate, organize, and evaluate information derived from the text.
2. The acquisition of reading strategies coincides and overlaps with the development of multiple cognitive strategies to enhance attention, memory, communication, and learning.
3. Strategies are personal cognitive tools that can be used selectively and flexibly.
4. Strategic reading reflects metacognition and motivation because readers need to have both the knowledge and disposition to use strategies.
5. Strategies that foster reading and thinking can be taught directly by teachers.
6. Strategic reading can enhance learning throughout the curriculum. (p. 609)

Over the past three decades, research has investigated whether the teaching of reading strategies contributes to the development of reading comprehension (Anderson 1991; Brantmeier, 2002; Block, 1986; Carell, 1998; Hayashi, 1999; He, 2001; Hosenfield, 1997; Rusciolelli, 1995; & Upton, 1997). Conclusions drawn from these studies vary slightly, but overwhelmingly they confirm that reading strategies play a vital role in reading comprehension in a variety of ways.

In Thailand, research studies on reading strategies have been increasingly conducted. Areerak Suebtin (อเรียรักษ์ สืบสันติ, 2535) made a study on the relationship between meta-cognitive awareness and reading comprehension in Thai and in English of high school students in Bangkok. One of the results showed that the meta-cognitive awareness was highly related to reading comprehension in English.

Songsri Soranastaporn (1999) made a comparative study on the reading comprehension strategies used by ESP students at Mahidol University. It was found that the good readers tended to use effective reading strategies wider and more often than the poor readers.

Pornpimon Harnseithanon (2002) studied the effectiveness of reading strategies on English reading comprehension among Thai students in Marketing at Rajabhat Institute Pranakorn. The results showed that most students agreed that reading strategies affect their learning English moderately. Moreover, they had positive attitudes towards reading strategies and realized the significance of reading strategies that help them learn reading.

According to Koda (2005), reading strategies, or strategic reading, are believed to assist readers in adjusting their reading behaviors to work on text difficulty, task demands and other contextual variables.

Different types of reading strategies are classified in a variety of ways by researchers. Paris, Wasik, and Turner (1991) grouped the strategies on the basis of whether they are used “before”, “during” or “after” reading. Anderson (1991) enumerated five different functions of reading strategies: “supervising”, “supporting”, “paraphrasing”, “establishing text coherence”, and “test taking”. Chamot and O’Malley (1994) identified reading strategies as “cognitive”, “meta-cognitive”, or “social and affective”. They suggest that cognitive-based strategies are those used mainly to attain a specific cognitive task during the reading phase, such as making inferences and analyzing word parts. Meta-cognitive strategies are those employed to regulate the cognitive process; and social-affective strategies are used for interacting cooperatively with other strategies during reading.

Aebersold and Field (1997) described reading strategies as:

- recognizing words quickly
- using text features
- using titles to infer what information might follow
- using world knowledge
- analyzing unfamiliar words
- identifying the grammatical functions of words
- reading for meaning by focusing on constructing meaning
- guessing the meaning of the text
- evaluating guesses and trying new guesses
- monitoring comprehension
- keeping the purpose of reading the text in mind

- adjusting strategies to the purpose of reading
- identifying or inferring main ideas
- tolerating ambiguity in a text
- paraphrasing
- using context to build meaning to aid comprehension
- continuing reading even when unsuccessful, at least for a while

Finally, Anderson (1999) divides the reading process, or reading strategies, into three categories: a “bottom-up” process, a “top-down” process, and an “interactive” process. The bottom-up process emphasizes the “lower-level” reading process such as word recognition, letter identification, and grapheme-phoneme recognition. The top-down process, on the other hand, operates mainly at a higher level, starting with hypothesizing and predicting, and then trying to check for confirmation from the printed words. The interactive process is the interaction between the bottom-up and top-down processes and the interaction between the reader and the text. By far, most research studies have been carried out on school children or undergraduate students. Graduate-level students have been under-investigated.

This study, therefore, attempts to find out whether there are any disparities in the use of reading strategies between good ESL readers and poor ESL readers at the graduate level at Thammasat University.

Research Questions

This study attempts to answer the following research questions:

1. To what extent do poor ESL readers use individual reading strategies when reading English?
2. To what extent do good ESL readers use individual reading strategies when reading English?
3. What are the differences in reading strategies used by good and poor ESL readers?

Methodology

A total of 260 first-year graduate students in academic year 2005 from various faculties at Thammasat University were involved in this study. The 260 samples were selected as described below.

In this study, 1,998 first-year graduate students were classified into 3 groups based on their Thammasat University-Graduate Entrance Test (TU-GET) English scores, namely, “good”, “moderate” and “poor” readers. The moderate group was based on the mean $(427.50) \pm 1 \text{ SD}$ (126.90) with the scores above and below the moderate group belonging to the good and the poor groups as follows:

| <u>TU-GET Score</u> | | |
|---------------------|---------------------|--------------|
| “Good” | (n = 419) | 555-1000 |
| “Moderate” | (n = 357) | 301-554 |
| “Poor” | (n = <u>1,222</u>) | 120-300 |
| Total | | <u>1,998</u> |

One hundred and thirty students were randomly selected from the “good” and “poor” groups each for a total of 260 students, representing approximately 15.84 % of the total population. Students were asked to complete a questionnaire on the reading strategies they normally employed. The questionnaire consisted of three parts: Part One recorded general information about the student (e.g. gender and age); Part Two consisted of reading strategies for which students were asked to rate the frequency of their use when reading English materials on the following scale:

- 5 = very often
- 4 = often
- 3 = sometimes
- 2 = rarely
- 1 = never

Part Three elicited additional reading strategies employed by students to assist them in reading comprehension.

The reading strategies descriptions were drawn and adapted from Paris, Wasik, and Turner (1991), and Aebersold and Field (1997). The first draft of the questionnaire was piloted on 30 first-year "moderate" students assumed to averagely represent the whole population, resulting in a correlation coefficient with a high reliability ($r = .845$).

Results and Discussions

The data obtained from the questionnaires were analyzed by SPSS. Descriptive statistics employed in this calculation process were arithmetic mean and standard deviation, frequency and percentage, and t-test.

As shown in Tables 1, 2 and 3, the total 260 samples consist of 130 poor readers and 130 good readers, 83 of whom are males and 177 females. The majority is between 24-30 years of age.

Table 1 Backgrounds of Graduate Students

| | Background | Number | % |
|-------|--------------|------------|---------------|
| Group | Good readers | 130 | 50.00 |
| | Poor readers | 130 | 50.00 |
| | Total | 260 | 100.00 |

Table 2 Sexes of Graduate Students

| Sex | Number | % |
|--------------|------------|---------------|
| Male | 83 | 31.92 |
| Female | 177 | 68.08 |
| Total | 260 | 100.00 |

Table 3 Ages of Graduate Students

| Age | Number | % |
|--------------|------------|---------------|
| 24-30 | 207 | 79.62 |
| 31-40 | 40 | 15.38 |
| 41-50 | 9 | 3.46 |
| 51-60 | 4 | 1.54 |
| Total | 260 | 100.00 |

Table 4 Poor Readers' Before-reading Strategies

| Before-reading Strategies | Mean | SD |
|--|-------------|-------------|
| 1. I look at the picture(s) and/or illustration(s) given in order to better understand the passage. | 4.05 | 0.82 |
| 2. I read the first two or three sentences of the passage in order to figure out what the passage is about. | 3.92 | 0.80 |
| 3. I read the title of the passage first and try to imagine what the passage might be about by using my prior knowledge. | 3.81 | 0.81 |
| 4. I set a purpose for reading. | 3.54 | 0.84 |
| 5. I ask myself questions to predict the content e.g. what might come next? or how might the passage end? | 3.16 | 0.91 |
| Mean | 3.70 | 0.48 |

Table 4 presents the poor students' reading strategies used before reading. The most common reading strategies they use are as follows: they look at the picture(s) and/or illustration(s) given in order to better understand the passage; they read the first two or three sentences of the passage in order to figure out what the passage is about; they read the title of the passage first and try to imagine what the passage might be about by using their prior knowledge. On the other hand, the least common ones are: they set a purpose for reading; and they ask themselves questions to predict the content. The average mean for their "before-reading" strategies is 3.70.

Table 5 Poor Readers' While-reading Strategies

| While-reading Strategies | Mean | SD |
|--|------|------|
| 1. I look up the meanings of unknown words and/or usage from an English-Thai dictionary. | 4.04 | 0.66 |
| 2. I pay attention to the general idea of the passage. | 3.93 | 0.75 |
| 3. I guess the meanings of unknown words by using the context. | 3.85 | 0.79 |
| 4. I vary reading rates according to the type of the passage. | 3.82 | 0.77 |
| 5. I skip words I do not know. | 3.75 | 0.89 |
| 6. I underline or mark important points of what I have read. | 3.72 | 0.96 |
| 7. I try to relate my prior knowledge and experiences to the passage. | 3.72 | 0.75 |
| 8. I re-read texts in order to make sure that I do not miss any important information. | 3.71 | 0.85 |
| 9. I read over each sentence quickly for main ideas. Then, go back and carefully read for details. | 3.70 | 0.89 |
| 10. I pay attention to key words in sentences. | 3.67 | 0.86 |
| 11. I try to understand what I have read by using imagination. | 3.62 | 0.74 |
| 12. I guess the meanings of unknown words through word roots and/or affixes. | 3.56 | 0.93 |
| 13. I use different reading strategies according to the type of the passage. | 3.50 | 0.87 |
| 14. I notice punctuation and use it as an aid to reading. | 3.45 | 0.89 |
| 15. I guess the meanings of unknown words by considering the syntax of the sentences. | 3.42 | 0.89 |
| 16. I do not translate word for word into Thai. | 3.42 | 0.98 |
| 17. I separate important from unimportant information. | 3.27 | 0.80 |
| 18. I find out the writer's intention. | 3.21 | 6.85 |
| 19. I look up the meanings of unknown words and/or usage from an English-English dictionary. | 3.08 | 1.05 |
| 20. I ask my teacher or my classmates about unknown words. | 3.08 | 0.76 |
| 21. I keep the purpose of reading in my mind. | 3.06 | 0.90 |
| 22. I try not to look up the meanings of unknown words from a dictionary. | 2.98 | 0.92 |
| 23. I use my finger to point at each line of the passage. | 2.79 | 1.05 |
| 24. I read the text aloud. | 2.38 | 0.93 |
| Mean | 3.45 | 0.41 |

Table 5 concludes the most common reading strategies poor readers use while reading as follows: they look up the meanings of unknown words and/or usage from an English-Thai dictionary; they pay attention to the general idea of the passage; they guess the meanings

of words by using the context; they vary reading rates according to the type of the passage; they skip words they do not know; they underline or mark important points of what they have read; they try to relate prior knowledge and experiences to the passage; they re-read texts in order to make sure that they do not miss any important information; they read over each sentence quickly for main ideas. Then, go back and carefully read for details; they pay attention to key words in sentences; they try to understand what they have read by using imagination; they guess the meanings of unknown words through word roots and/or affixes; they use different reading strategies according to the type of the passage; and they notice punctuation and use it as an aid to reading.

On the other hand, the least common reading strategies they use are: reading the text aloud; using their fingers to point at each line of the passage; trying not to look up the meanings of unknown words from a dictionary; keeping the purpose of reading in their mind; and looking up the meanings of unknown words and/or usage from an English-English dictionary. The average mean for their “while-reading” strategies is 3.45.

Table 6 Poor Readers’ After-reading Strategies

| After-reading Strategies | Mean | SD |
|--|------|------|
| 1. I sum up in my mind in order to confirm my understanding. | 3.43 | 0.78 |
| 2. I sum up or note down what I have read in Thai. | 2.98 | 1.02 |
| 3. I sum up or note down what I have read in English. | 2.05 | 0.92 |
| Mean | 2.82 | 0.68 |

Table 6 shows the poor readers’ reading strategies they use after reading. The most common ones are that they sum up in their mind in order to confirm their understanding; they sum up or note down what they have read in Thai, and they sum up or note down what they have read in English, respectively.

Table 7 Good Readers' Before-reading Strategies

| Before-reading Strategies | Mean | SD |
|--|------|------|
| 1. I look at the picture(s) and/or illustration(s) given in order to better understand the passage. | 4.38 | 0.73 |
| 2. I read the first two or three sentences of the passage in order to figure out what the passage is about. | 4.07 | 0.83 |
| 3. I read the title of the passage first and try to imagine what the passage might be about by using my prior knowledge. | 3.96 | 0.94 |
| 4. I set a purpose for reading. | 3.62 | 0.91 |
| 5. I ask myself questions to predict the content e.g. what might come next? or how might the passage end? | 3.51 | 0.97 |
| Mean | 3.91 | 0.57 |

In Table 7, the reading strategies good readers use before reading are arranged in order of their most common to the least common ones: looking at the picture(s) and/or illustration(s) given in order to better understand the passage; reading the first two or three sentences of the passage in order to figure out what the passage is about; reading the title of the passage first and try to imagine what the passage might be about by using their prior knowledge; setting a purpose for reading; and asking themselves questions to predict the content respectively. The average mean of their “before-reading” strategies is 3.91.

Table 8 Good Readers' While-reading Strategies

| While-reading Strategies | Mean | SD |
|--|-------------|-------------|
| 1. I pay attention to the general idea of the passage. | 4.25 | 0.62 |
| 2. I guess the meanings of unknown words by using the context. | 4.21 | 0.71 |
| 3. I vary reading rates according to the type of the passage. | 4.18 | 0.72 |
| 4. I pay attention to key words in sentences. | 4.10 | 0.83 |
| 5. I do not translate word for word into Thai. | 3.99 | 0.87 |
| 6. I read over each sentence quickly for main ideas. Then, go back and carefully read for details. | 3.96 | 0.85 |
| 7. I try to understand what I have read by using imagination. | 3.95 | 0.87 |
| 8. I try to relate my prior knowledge and experiences to the passage. | 3.93 | 0.82 |
| 9. I guess the meanings of unknown words through word roots and/or affixes (i.e. prefix, suffix, infix). | 3.93 | 0.87 |
| 10. I underline or mark important points of what I have read. | 3.88 | 1.00 |
| 11. I guess the meanings of unknown words by considering the syntax of the sentences. | 3.80 | 0.85 |
| 12. I use different reading strategies according to the type of the passage. | 3.78 | 0.94 |
| 13. I re-read texts in order to make sure that I do not miss any important information. | 3.72 | 0.96 |
| 14. I look up the meanings of unknown words and/or usage from an English-English dictionary. | 3.70 | 1.05 |
| 15. I separate important from unimportant information. | 3.69 | 0.85 |
| 16. I notice punctuation and use it as an aid to reading. | 3.67 | 0.86 |
| 17. I skip words I do not know. | 3.61 | 0.97 |
| 18. I find out the writer's intention. | 3.48 | 1.00 |
| 19. I look up the meanings of unknown words and/or usage from an English-Thai dictionary. | 3.38 | 1.16 |
| 20. I try not to look up the meanings of unknown words from a dictionary. | 3.31 | 0.97 |
| 21. I keep the purpose of reading in my mind. | 3.08 | 0.96 |
| 22. I ask my teacher or my classmates about unknown words. | 2.93 | 0.95 |
| 23. I read the text aloud. | 2.73 | 1.19 |
| 24. I use my finger to point at each line of the passage. | 2.52 | 1.16 |
| Mean | 3.66 | 0.36 |

As shown in Table 8, the most common reading strategies good readers use while reading are: paying attention to the general idea of the passage; guessing the meanings of unknown words by using the context; varying reading rates according to the type of the passage;

paying attention to key words in sentences; not translating word for word into Thai; reading over each sentence quickly for main ideas. Then, going back and carefully reading for details; trying to understand what they have read by using imagination; trying to relate their prior knowledge and experiences to the passage; guessing the meanings of unknown words through word roots and/or affixes; underlining or marking important points of what they have read; guessing the meanings of unknown words by considering the syntax of the sentences; using different reading strategies according to the type of the passage; re-reading texts in order to make sure that they do not miss any important information; looking up the meanings of unknown words and/or usage from an English-English dictionary; separating important from unimportant information; and noticing punctuation and using it as an aid to reading.

In contrast, the least common reading strategies they use are: using their fingers to point each line of the passage; reading the text aloud; asking their teachers or their classmates about unknown words; keeping the purpose of reading in mind; and trying not to look up the meanings of unknown words from a dictionary. The average mean of the while-reading for the good readers is 3.66.

Table 9 Good Readers' After-reading Strategies

| After-reading Strategies | Mean | SD |
|--|-------------|-------------|
| 1. I sum up in my mind in order to confirm my understanding. | 3.54 | 0.86 |
| 2. I sum up or note down what I have read in Thai. | 2.58 | 1.06 |
| 3. I sum up or note down what I have read in English. | 3.15 | 1.05 |
| Mean | 3.09 | 0.71 |

In Table 9, the most common “after-reading” strategies of good readers are: summing up mentally in order to confirm understanding; summing up or noting down in Thai what they have read; summing up or noting down in English what they have read.

Table 10 A Comparison between Poor and Good Readers' Before-reading Strategies

| Before-reading Strategies | Poor Readers | | Good Readers | | T-test | Sig. |
|--|--------------|-------------|--------------|-------------|-----------------|-------------|
| | Mean | SD | Mean | SD | | |
| 1. I set a purpose for reading. | 3.54 | 0.84 | 3.62 | 0.81 | 0.78 | 0.44 |
| 2. I read the title of the passage first and try to imagine what the passage might be about by using my prior knowledge. | 3.81 | 0.81 | 3.96 | 0.94 | -1.41 | 0.16 |
| 3. I look at the picture(s) and/or illustration(s) given in order to better understand the passage. | 4.05 | 0.82 | 4.38 | 0.73 | -3.36 ** | 0.00 |
| 4. I read the first two or three sentences of the passage in order to figure out what the passage is about. | 3.92 | 0.80 | 4.07 | 0.83 | -1.53 | 0.13 |
| 5. I ask myself questions to predict the content e.g. what might come next? or how might the passage end. | 3.16 | 0.91 | 3.51 | 0.79 | -2.97 ** | 0.00 |
| Mean | 3.70 | 0.48 | 3.91 | 0.57 | -3.23 ** | 0.00 |

** = significant level at 0.01

From Table 10, it can be seen that both poor readers and good readers share the same common reading strategies they employ before reading. However, the good readers tend to use more reading strategies than the poor readers in all aspects. Of the five strategies, it is found that there is a statistical significance at 0.01 level between them, especially in strategy number 3 with the means of 4.05 and 4.38 and in strategy number 5 with the means of 3.16 and 3.51 for poor and good readers, respectively.

Table 11 A Comparison between Poor and Good Readers' While-reading Strategies

| While-reading Strategies | Poor Readers | | Good Readers | | T-test | Sig. |
|--|--------------|------|--------------|------|----------|------|
| | Mean | SD | Mean | SD | | |
| 1. I pay attention to the general idea of the passage. | 3.93 | 0.75 | 4.25 | 0.62 | -3.69 ** | 0.00 |
| 2. I guess the meanings of unknown words by using the context. | 3.85 | 0.79 | 4.21 | 0.71 | -3.80 ** | 0.00 |
| 3. I vary reading rates according to the type of the passage. | 3.82 | 0.77 | 4.18 | 0.72 | -3.82 ** | 0.00 |
| 4. I pay attention to key words in sentences. | 3.67 | 0.86 | 4.10 | 0.83 | -4.11 ** | 0.00 |
| 5. I do not translate word for word into Thai. | 3.42 | 0.98 | 3.99 | 0.87 | -5.03 ** | 0.00 |
| 6. I read over each sentence quickly for main ideas. Then, go back and carefully read for details. | 3.70 | 0.89 | 3.96 | 0.85 | -2.43 * | 0.02 |
| 7. I try to understand what I have read by using imagination. | 3.62 | 0.74 | 3.95 | 0.87 | -3.24 ** | 0.00 |
| 8. I try to relate my prior knowledge and experiences to the passage. | 3.72 | 0.75 | 3.93 | 0.82 | -2.21 * | 0.03 |
| 9. I guess the meanings of unknown words through word roots and/or affixes. | 3.56 | 0.93 | 3.93 | 0.87 | -3.30 ** | 0.00 |
| 10. I underline or mark important points of what I have read. | 3.72 | 0.96 | 3.88 | 1.00 | -1.33 | 0.19 |
| 11. I guess the meanings of unknown words by considering the syntax of the sentences. | 3.42 | 0.89 | 3.80 | 0.85 | -3.57 ** | 0.00 |
| 12. I use different reading strategies according to the type of the passage. | 3.50 | 0.87 | 3.78 | 0.9 | -2.46 * | 0.01 |
| 13. I re-read texts in order to make sure that I do not miss any important information. | 3.71 | 0.85 | 3.72 | 0.96 | -0.14 | 0.89 |
| 14. I look up the meanings of unknown words and/or usage from an English-English dictionary. | 3.08 | 1.05 | 3.70 | 1.05 | -4.80 ** | 0.00 |
| 15. I separate important from unimportant information. | 3.57 | 0.80 | 3.69 | 0.85 | -4.14 ** | 0.00 |

Table 11 A Comparison between Poor and Good Readers' While-reading Strategies (continued)

| While-reading Strategies | Poor Readers | | Good Readers | | T-test | Sig. |
|---|--------------|-------------|--------------|-------------|-----------------|-------------|
| | Mean | SD | Mean | SD | | |
| 16. I notice punctuation and use it as an aid to reading. | 3.45 | 0.89 | 3.67 | 0.86 | -2.06 * | 0.04 |
| 17. I skip words I do not know. | 3.75 | 0.89 | 3.61 | 0.97 | 1.20 | 0.23 |
| 18. I find out the writer's intention. | 3.21 | 0.85 | 3.48 | 1.00 | -2.41 * | 0.02 |
| 19. I look up the meanings of unknown words and/or usage from an English-Thai dictionary. | 4.04 | 0.66 | 3.38 | 1.16 | 5.63 ** | 0.00 |
| 20. I try not to look up the meanings of unknown words from a dictionary. | 2.98 | 0.92 | 3.31 | 0.97 | -2.82 * | 0.01 |
| 21. I keep the purpose of reading in my mind. | 3.06 | 0.90 | 3.08 | 0.96 | -0.13 | 0.89 |
| 22. I ask my teacher or my classmates about unknown words. | 3.08 | 0.76 | 2.93 | 0.95 | 1.44 | 0.15 |
| 23. I read the text aloud. | 2.38 | 0.93 | 2.73 | 1.19 | -2.62 * | 0.01 |
| 24. I use my finger to point at each line of the passage. | 2.79 | 1.05 | 2.52 | 1.16 | -2.02 * | 0.04 |
| Mean | 3.45 | 0.41 | 3.66 | 0.36 | -4.41 ** | 0.00 |

* = significant level at 0.05

** = significant level at 0.01

Table 11 summarizes the comparison of the reading strategies that poor and good readers used while reading. It is found that of the 24 reading strategies, eleven are statistically significant at 0.01, namely reading strategies numbers 1, 2, 3, 4, 5, 7, 9, 11, 14, 15, and 19; and eight of which are statistically significant at 0.05 level (reading strategies numbers 6, 8, 12, 16, 18, 20, 23 and 24). That is, good readers tend to use more "while reading" strategies (average mean: 3.66) than poor readers (average mean: 3.45).

Table 12 A Comparison between Poor and Good Readers' After-reading Strategies

| After-reading Strategies | Poor Readers | | Good Readers | | T-test | Sig. |
|--|--------------|------|--------------|------|----------|------|
| | Mean | SD | Mean | SD | | |
| 1. I sum up in my mind in order to confirm my understanding. | 3.43 | 0.78 | 3.54 | 0.86 | -1.00 | 0.29 |
| 2. I sum up or note down what I have read in Thai. | 2.98 | 1.02 | 2.58 | 1.06 | -3.16 ** | 0.00 |
| 3. I sum up or note down what I have read in English. | 2.05 | 0.92 | 3.15 | 1.05 | -9.02 ** | 0.00 |
| Mean | 2.82 | 0.68 | 3.09 | 0.71 | -3.09 ** | 0.00 |

** = significant level at 0.01

Table 12 summarizes the comparison between poor and good readers' after-reading strategies. It is found that there is a statistical significance between the good and the poor readers at 0.01 level for reading strategies numbers 2 and 3.

Table 13 A Comparison between the Means of the Poor and the Good Readers' Reading Strategies

| Reading Strategies | Poor Readers | | Good Readers | | T-test | Sig. |
|--------------------|--------------|------|--------------|------|----------|------|
| | Mean | SD | Mean | SD | | |
| Before Reading | 3.70 | 0.48 | 3.91 | 0.57 | -3.23 ** | 0.00 |
| While Reading | 3.45 | 0.41 | 3.66 | 0.36 | -4.41 ** | 0.00 |
| After Reading | 2.82 | 0.68 | 3.09 | 0.71 | -3.09 ** | 0.00 |

** = significant level at 0.01

Table 13 summarizes the comparison of the means of "before", "while" and "after-reading" strategies of poor and good readers. It can be seen that there is a statistically significant difference at 0.01 level between the three strategies of both groups. This clearly shows that the good readers tend to use more reading strategies than the poor readers

in all aspects. Both groups apply more “before-reading” strategies than “while” and “after-reading” strategies.

Conclusions and Recommendations

The results of this study indicate that there is a statistical difference between poor and good readers at both 0.01 and 0.05 levels. Answers to the research questions can be reached using the analyses of the previous tables. The findings can be summed up as follows:

1. Before reading, both poor and good readers use the same reading strategies, but the good readers tend to use more strategies than the poor ones.
2. While reading, poor readers tend to use 14 strategies, starting from looking up the meanings of unknown words and/or usage from an English-Thai dictionary; paying attention to the general idea of the passage; guessing the meanings of unknown words by using the context; varying reading rates according to the type of the passage; and skipping words they do not know before proceeding to other reading strategies. On the other hand, good readers use 16 reading strategies, starting from paying attention to the general idea of the passage; guessing the meanings of unknown words by using the context; guessing the meanings of unknown words by using the context; varying reading rates according to the type of the passage; paying attention to key words in sentences; and not translating word for word into Thai before applying other reading strategies.
3. After reading, good readers sum up mentally in order to confirm their understanding and sum up or note down what they have read in English more than poor readers do. But the poor readers tend to sum up or note down what they have read in Thai more than the good readers do.

This study suggests that reading strategies are vital for reading comprehension. Students should be taught to be aware of the reading strategies and they should also be encouraged to use them extensively. Some readers know the strategies but fail to use them successfully

(Anderson, 1991). Furthermore, in Block's (1986) study, she concluded that her college-level participants knew the reading strategies but only a few were successful in using them to aid comprehension. Her study suggests that knowing which strategies to use is marginally useful because knowledge of strategies alone cannot discriminate between successful and less successful readers, nor can it predict the usage of effective strategies. According to Block (1986), knowing what the students are doing and what they understand helps them to teach themselves (p. 488). This mainly concerns the key factor in reading comprehension, namely, meta-cognitive awareness.

Therefore, it is suggested that teachers should teach their students reading strategies and encourage them to use them as frequently as possible in order to enhance their reading comprehension. In addition, more research studies on reading strategies should be carried out at all levels since they have become widely recognized by both native and non-native English speakers. Ultimately, the findings of the studies in this field are to improve the teachers' effectiveness and to increase the students' reading comprehension as a whole.

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