The Use of EFL Reading Strategies among High School Students in Taiwan

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ABSTRACT

In the traditional English language classroom, reading is the skill that receives the most emphasis (Susser & Rob, 1990). Learners should use reading strategies to plan how to read and to enhance their reading comprehension (Poole, 2010). The purpose of this study was to explore the use of English as a Foreign Language (EFL) reading strategies used by high school students. The participants were 1,259 students from 34 high schools in Taiwan. The Survey of Reading Strategies (SORS) by Mokhtari and Reichard (2002) was used as the instrument to collect data on the participants’ usage of reading strategies. The results indicated a high awareness of reading strategy use among EFL high school students. Students had a preference for global reading strategies, followed by problem-solving strategies and support strategies. Female students used EFL reading strategies significantly more frequently than male students. Implications for the use of EFL reading strategies were also discussed.

INTRODUCTION

Reading in a second or foreign language (SL/FL) has been a significant component of language learning over the past forty years (Zoghi, Mustapha, Rizan & Maasum, 2010). This significance has made reading education an important issue in educational policy and practice for English language learners (Slavin & Cheung, 2005). However, reading is a complex, interactive cognitive process of extracting meaning from text. In the reading process, the reader is an active participant, constructing meaning from clues in the reading text. Reading is also an individual process, which explains the different interpretations of different readers (Maarof & Yaacob, 2011). Cogmen and Saracaloglu (2009) reported that simple methods such as underlining, taking notes, or highlighting the text can help readers understand and remember the content. Their findings indicated that in reading text, good readers often use effective reading strategies to enhance their comprehension. According to the above, learning to read is an absolutely necessary skill for understanding SL/FL texts. Readers may use useful strategies to help them read SL/FL texts as they construct meaning. Using such strategies will help learners not only to understand general information in the reading text at very fast rates but also to remember new lexical items from the text.

Statement of the Problem
Most learners have reading problems because they lack the specific strategies necessary for efficient reading. When FL reading is a laborious, unpleasant, and unsuccessful process, readers will often be unwilling to read in the target language. This explains why most ESL/EFL learners do not enjoy reading in English. They simply do not understand what they are reading (Arnold, 2009; Nuttall, 1982). In addition, most ESL/EFL learners encounter difficulties in reading text. In 1998, Vogel indicated that about 52% of adults with reading problems had difficulties in learning a FL. Schiff and Calif (2004) further explained that EFL students had reading problems because of a lack of knowledge and awareness of how to apply reading strategies. Consequently, ESL/EFL students need to master sufficient reading strategies to construct the meaning of the text.

In non-native English speaking countries, the high school English curriculum often adopts a reading skill oriented textbook that focuses on vocabulary, sentence structure, and grammar. The content primarily consists of articles with exercises to extend vocabulary and sentence patterns. However, most of students lack knowledge of appropriate EFL reading strategies, or they use such strategies inadequately. The use of sufficient EFL reading strategies is considered to be one of the important factors contributing to successful language learning (Ikeda & Takeuchi, 2006). Oxford and Crookall (1989) suggested that SL/FL learners use reading strategies to develop more efficient and effective language learning. Using these strategies provides ESL/EFL learners with good models for writing, gives opportunities to introduce new topics, stimulates discussion, and allows the study of linguistic components such as vocabulary, grammar, and idioms (Richards & Renandya, 2002). Reading strategies can also help ESL/EFL students to overcome reading difficulties. These studies provided constructive suggestions, such as teachers could help “correct” poor EFL readers’ strategic knowledge and help them to deal effectively with the academic reading they face. Therefore, it is necessary to investigate the EFL reading strategies that high school students currently use in order to find out what reading strategies the students need to use to comprehend what they read, to develop reading skills, and to unconsciously increase their vocabularies and syntactic knowledge.

**Purpose of the Study**

In Taiwan, most EFL students in high schools learn from reading-based English textbooks without using efficient reading strategies. More importantly, the EFL reading strategies they use to comprehend the text also remain unknown. In addition, many studies in past decades have investigated EFL reading strategies, but few have used high school students as participants. The present study explores the current use of EFL reading strategies among high school students and identifies gender-specific differences in strategy use. The results of this study serve as a valuable source for understanding students’ uses of EFL reading strategies at the high school level.

**LITERATURE REVIEW**

**ESL/EFL Reading Strategies**

Research in the field of ESL reading has identified some variables that influence the SL reading process. These variables include strategy choices, background knowledge, and reading proficiency in the first and second languages (Upton & Lee-Thompson, 2001). Of these variables, reading strategy choices is the one most often discussed and studied. Several definitions of SL/FL reading strategies can be found in the literature. Olshavsky (1977) defined SL/FL reading strategies as purposeful means of comprehending the author’s message. Wenden (1987) further defined SL/FL reading strategies as problem-oriented actions and
techniques used to achieve apprehension or production goals. Oxford and Crookall (1989) explained SL/FL reading strategies as learning techniques, behaviors, problem-solving skills, or study skills that can lead learners to more effective and efficient learning. Grabe and Stoller (2001) defined the distinction between skills and strategies. In their definition, a SL/FL reading skill could become a reading strategy when it was used intentionally, and a SL/FL strategy could be relatively automatic in its use by a fluent reader. Using SL/FL strategies has been shown to be a significant and viable approach to developing ESL and EFL ability (Day & Bamford, 1998), particularly in foreign language environments with limited sources of second language input, such as Taiwan, Vietnam, Japan, and South Korea.

Reading strategies involve how SL readers consider a task, what textual clues they attend to, how much they are aware of what is read, and how they respond when they do not understand (Block, 1986). O’Malley & Chamot (1990) further explained that SL reading strategies are conscious or unconscious procedures, actions, techniques, or behaviors; readers apply these strategies to problems with their comprehension and interpretation. Carrell, Gajdusek and Wise (1998) described ESL/EFL reading strategies as what readers reveal in the ways they manage interactions with the text and how they use strategies to achieve effective reading comprehension. In this research, EFL reading strategies are defined as conscious processes, ones in which readers understand the use of EFL reading strategies as they read the text.

ESL/EFL reading strategies have also been divided into several different types. Goodman (1970) divided SL/FL reading strategies into two types of processing: bottom-up and top-down. Bottom-up strategies involve recognizing a multiplicity of linguistic signals, such as letters, morphemes, syllables, words, phrases, grammatical cues, and discourse markers, and applying linguistic data-processing mechanisms to impose order on these signals. Top-down strategies involve drawing on one’s own intelligence and experience to understand a text through a puzzle-solving process, or inferring meaning to decide what to retain and what not to retain. Duke and Pearson (2002) proposed six SL/FL reading strategies: prediction or prior knowledge, using think-aloud strategies to monitor comprehension, using text structures, using visual models including graphic organizers and imagery, summarizing, and questioning and answering questions while reading.

ESL/EFL reading strategies are further divided into metacognitive and cognitive strategies. In the aspect of metacognitive strategies, El-Kaumy in 2004 divided SL/FL metacognitive strategies into three categories: “planning,” in which learners have a reading purpose in mind and read the text according to this purpose; “self monitoring,” in which learners regulate the reading process and use the appropriate strategy at the right time; and “self evaluation,” or the reform phase of the reading process, in which the reader changes strategies if necessary to control whether the purpose is reached or not, or rereads the text. Santrock (2008) suggested that SL metacognitive strategies involved goal setting, selective attention, planning for organization, monitoring, self-assessing, and regulating. Singhal (2001) defined cognitive strategies as those used by SL/FL learners to transform or manipulate the language, such as summarizing, paraphrasing, analyzing, and using context clues. Akyel and Ercetin (2009) maintained that cognitive strategies could assist readers in constructing meaning from the text.

In a study by Sheorey and Mokhtari (2001), ESL reading strategies were further divided into three categories: metacognitive, cognitive, and support. In their definitions, metacognitive strategies were intentionally and carefully planned techniques used by learners to monitor or manage their reading. Cognitive strategies were specific actions and procedures used by learners while working directly with the text. Support strategies referred to readers using tools to comprehend the text, such as using a dictionary, taking notes, or underlining or highlighting the text. However, according to Poole (2010), EFL reading strategies consisted of three
different categories: global, problem-solving, and support. Global strategies involved planning how to read and managing comprehension. Problem-solving strategies involved using strategies when reading difficult parts of a text. Support strategies involved using devices and techniques to understand a text. A year later, Sheorey and Mokhtari (2002) renamed two categories of their ESL reading strategies. Metacognitive strategies were renamed to global reading strategies, and cognitive strategies were renamed to problem-solving reading strategies.

Review of Related Research Literature on ESL/EFL Reading Strategies

Many researchers have investigated the use of EFL/ESL reading strategies among learners. For example, Poole (2005) used the Survey of Reading Strategies (SORS) to explore the reading strategies of 248 university ESL students from the Midwest and South of the United States. The results revealed that problem-solving strategies were used with high frequency, while global and support strategies were used with medium frequency. Gorsuch and Taguchi (2008) found that Vietnamese college EFL students mostly used bottom-up, top-down, and cognitive strategies to assist comprehension in repeated reading sessions. Karbalaei (2010) compared reading strategy use in Iranian EFL and Indian ESL college students. They found that Indian ESL students used mostly global and support strategies, as well as metacognitive reading strategies, while Iranian EFL students used mostly problem-solving reading strategies.

Phakiti (2003) studied Thai university EFL students; those who frequently use metacognitive strategies had significantly better reading test performance. Mokhtari and Sheorey (2008) later explained that skilled readers of FL and SL were characterized as globally aware. They were able to think about the reading process; to draw on planning, monitoring, goal-setting and assessment strategies; and to foster global skills as well as reading comprehension. High English proficiency students seem to use more and a greater variety of strategies in the reading of English texts. Kummin and Rahman (2010) reported that ESL University students from Kebangsaan, Malaysia, who were proficient in English often used a variety of strategies, but those who were less proficient had little knowledge of metacognition. They were not able to use appropriate strategies to evaluate their own reading comprehension or performance.

In the aspect of high school students’ uses of English reading strategies, Yau’s (2009) found that EFL Chinese adolescents used metacognitive and problem-solving strategies more frequently in FL reading, yet they used support strategies more often in SL reading. Li (2010) employed the Metacognitive Awareness of Reading Strategies Inventory (Marsi) to explore the uses of reading strategies among senior middle school EFL students, and found that problem-solving reading strategies were used most often, followed by global reading strategies and support reading strategies. In this study, the participants were Taiwanese EFL high school students, and their reading strategy uses were investigated. The findings were expected to shed light on current strategy use and suggest directions for instruction to high school EFL teachers. In addition, researchers have discovered the significant differences of the unitization of English reading strategies between males and females (Sheorey, & Mokhtari, 2002; Pool, 2005; Pool, 2010; Sheorey, 2006; Sheorey & Baboczky, 2008). They all suggested that females’ overall use of English reading strategies are higher than males. Unfortunately, although much is known about gender differences between males and females from various countries, little is known about the differences in reading strategy use between male and female EFL learners in Taiwan. Therefore, this study also explored the gender issue associated with English reading strategies.
RESEARCH DESIGN

Participants

The participants consisted of 1,259 students from 34 high schools in Taiwan. Among them, 533 of them were male and 726 were female. A cluster sampling technique was used because we cannot get a complete list of the members of a population and the entire population is divided into classes. As a result, one class of third-year students from each participating school was sampled in this research. Only third-year high school students were recruited for this study because they had experienced reading-oriented teaching for two years. Compulsory textbooks based on the requirements of the examination system were provided by The Ministry of Education.

Instrument

The instrument used in this study was the Survey of Reading Strategies (SORS) by Mokhtari and Reichard (2002). This instrument was based on the Metacognitive Awareness of Reading Strategies Inventory (MARSI), which was originally developed by Mokhtari and Reichard (2002) as a tool to measure native English language learners’ awareness of reading strategy usage. However, the SORS mainly examines the type and frequency of the use of reading strategies by ESL adolescent and adult students when they read English academic materials such as textbooks and journal articles. The SORS consists of 30 items measuring three categories of English reading strategies: namely, problem-solving strategies, global reading strategies, and support strategies. For this study, it was translated into Chinese, the native language of the participants. The questionnaire items were rated on a five-point Likert-type scale: strongly agree (5), agree (4), uncertain (3), disagree (2), and strongly disagree (1). The questionnaire took approximately 10-15 minutes to complete. The score from the questionnaire indicated the frequency of respondents’ uses of SORS in general and in each SORS category. A pilot study was conducted with a sample of 90 students from the population to confirm the validity and reliability of the Chinese version of the questionnaire. The result showed that the Cronbach’s α of the overall SORS was 0.902.

Procedures and Statistical Analysis

In this study, the SORS was translated into Chinese to facilitate respondents’ understanding. Ninety students from 2 high schools were selected as the pilot study sample for examination of the reliability and validity of the Chinese version of the SORS. Then the questionnaire was revised according to the results of the pilot study. Final quantitative data were collected and analyzed using SPSS 18.0, a statistical software package. Descriptive analysis was used to explore the participants’ uses of EFL reading strategies. Then t-test was used to test for significant differences in EFL reading strategy uses between male and female participants.

RESULTS

The Use of Reading Strategies by EFL High School Students

Results for each of the 30 individual reading strategies (problem-solving, global, and support) are presented in the order of use frequency, from high (3.5 and above) and moderate
(2.5~3.4) to low (2.4 and under), in Table 1. The respondents reported 22 high-frequency strategies and 8 moderate-frequency ones. There were no low-frequency reading strategies. The most frequently used reading strategy was a global strategy, I think about what I know to help me (M=4.07); this was followed by one global strategy, I try to guess what the content of the text is about when I read (M=3.99) and one problem-solving strategy, When I read, I guess the meaning of unknown words or phrases (M=3.93).

Table 1. Means and standard deviations for the survey of English reading strategies

<table>
<thead>
<tr>
<th>Categories</th>
<th>Strategies</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-Solving</td>
<td>I read slowly and carefully to make sure I understand what I am reading.</td>
<td>3.82</td>
<td>1.65</td>
</tr>
<tr>
<td></td>
<td>I try to get back on track when I lose concentration.</td>
<td>3.87</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>I adjust my reading speed according to what I am reading.</td>
<td>3.65</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>When text becomes difficult, I pay closer attention to what I am reading.</td>
<td>3.68</td>
<td>1.50</td>
</tr>
<tr>
<td></td>
<td>I stop from time to time and think about what I am reading.</td>
<td>3.47</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>I try to picture or visualize information to help remember what I read.</td>
<td>3.65</td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td>When text becomes difficult, I re-read it to increase my understanding.</td>
<td>3.92</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>When I read, I guess the meaning of unknown words or phrases.</td>
<td>3.93</td>
<td>.84</td>
</tr>
<tr>
<td>Global Reading</td>
<td>I have a purpose in mind when I read.</td>
<td>3.63</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>I think about what I know to help me understand what I read.</td>
<td>4.07</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>I take an overall view of the text to see what it is about before reading it.</td>
<td>3.66</td>
<td>.94</td>
</tr>
<tr>
<td></td>
<td>I think about whether the content of the text fits my reading purpose.</td>
<td>3.27</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>I review the text first by noting its characteristics like length and organization.</td>
<td>3.38</td>
<td>.96</td>
</tr>
<tr>
<td></td>
<td>When reading, I decide what to read closely and what to ignore.</td>
<td>3.36</td>
<td>.95</td>
</tr>
<tr>
<td></td>
<td>I use context clues to help me better understand what I am reading.</td>
<td>3.82</td>
<td>1.18</td>
</tr>
<tr>
<td></td>
<td>I use typographical features like bold face and italics to identify key information.</td>
<td>3.87</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>I critically analyze and evaluate the information presented in the text.</td>
<td>3.45</td>
<td>.81</td>
</tr>
<tr>
<td></td>
<td>I check my understanding when I come across new information.</td>
<td>3.72</td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td>I try to guess what the content of the text is about when I read.</td>
<td>3.99</td>
<td>.82</td>
</tr>
<tr>
<td></td>
<td>I check to see if my guesses about the text are right or wrong.</td>
<td>3.71</td>
<td>.84</td>
</tr>
</tbody>
</table>
Support

I take notes while reading to help me understand what I read.
When text becomes difficult, I read aloud to help me understand what I read.
I underline or circle information in the text to help me remember it.
I use reference materials (e.g., a dictionary) to help me understand what I read.
I paraphrase (restate ideas in my own words) to better understand what I read.
I go back and forth in the text to find relationships among the ideas in it.
I ask myself questions I like to have answered in the text.
When reading, I translate from English into my native language.
When reading, I think about information in both English and my mother tongue.

N=1,259

As shown in Table 2, each dimension of the Survey of Reading Strategies (SORS) was further analyzed. The results showed that problem-solving (M=3.75), global (M=3.95), and support (M=3.60) reading strategies were all used with high frequency, and the mean of the SORS was 3.77.

Table 2. Means and standard deviations for the SORS

<table>
<thead>
<tr>
<th>Name</th>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-Solving</td>
<td>7, 9, 11, 14, 16, 19, 25, 28</td>
<td>3.75</td>
<td>.61</td>
</tr>
<tr>
<td>Global</td>
<td>1, 3, 4, 6, 8, 12, 15, 17, 20, 21, 23, 24, 27</td>
<td>3.95</td>
<td>.57</td>
</tr>
<tr>
<td></td>
<td>2, 5, 10, 13, 18, 22, 26, 29, 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>1-30</td>
<td>3.60</td>
<td>.57</td>
</tr>
<tr>
<td>SORS</td>
<td></td>
<td>3.77</td>
<td>.53</td>
</tr>
</tbody>
</table>

N=1,259

Gender Differences in EFL Reading Strategy Use

As Table 3 indicates, female students (M=3.83) had a higher overall mean than male students (M=3.68), though both genders reported using reading strategies with high frequency. In addition, there were significant differences between male and female students (t = -5.15; p < .001). The results also revealed that problem-solving reading strategies were used often by both male (M= 3.67) and female (M=3.81) students, but female students used them significantly more often than male students (t = -4.08; P < .001). In the use of global reading strategies, both male (M =3.88) students and female (M= 4.00) students used such strategies with high frequency. However, female students used them significantly more often than male students (t = -3.39; p < .01). Finally, male (M =3.47) and female (M= 3.69) students used reading strategies with moderate frequency, with female students using them slightly more often than male students (t = -6.59; P < .001).
Table 3. Differences in strategy use by gender

<table>
<thead>
<tr>
<th>SORS</th>
<th>Male (n=533)</th>
<th>Female (n=726)</th>
<th>t</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(M)</td>
<td>(M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem-solving</td>
<td>3.67</td>
<td>3.81</td>
<td>-4.08</td>
<td>.000***</td>
</tr>
<tr>
<td>Global</td>
<td>3.88</td>
<td>4.00</td>
<td>-3.39</td>
<td>.001**</td>
</tr>
<tr>
<td>Support</td>
<td>3.47</td>
<td>3.69</td>
<td>-6.59</td>
<td>.000***</td>
</tr>
<tr>
<td>Overall Mean</td>
<td>3.68</td>
<td>3.83</td>
<td>-5.15</td>
<td>.000***</td>
</tr>
</tbody>
</table>

N=1,259 Note: *P < .05    **P < .01   ***P < .001

DISCUSSION AND CONCLUSION

This study provides an overall understanding of the use of EFL reading strategies among Taiwanese high school students by investigating their uses of EFL reading strategies when reading English text. The results revealed that students used EFL reading strategies frequently. Of the three strategy sub-categories, global reading strategies were used by students the most, followed by problem-solving reading strategies and then support strategies. Female students showed greater awareness of EFL reading strategies than male students in all three sub-categories, as well as in the 30 individual reading strategies.

The study findings can help EFL teachers of high schools better understand the current use of EFL reading strategies among their students and actions they can take to help their students improve their reading abilities. The results of this study may help teachers determine the appropriate reading strategies to incorporate into English reading comprehension instruction. However, to ensure success in English reading comprehension, students need to know which strategies to use and how to use them. In addition to using these strategies with high frequency, EFL high school students need to learn to use them effectively.

It is suggested that future studies focus on the following: First, observation can be used to develop a deeper understanding of the use of reading strategies by high school students. Interviews can also be employed after survey or observation. If these approaches are used, then not only can the way EFL reading strategies are used by learners be observed, but also the reading strategies that are most effective at improving the reader’s English reading ability may be practically explored. Second, it would be worthwhile to compare the use of EFL reading strategies by proficiency level to help students better regulate the use of strategies while reading. Third, action research can be conducted to find out how effective reading strategies can be used to improve English reading among EFL high school students.

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REFERENCES


