Bringing extensive reading and reading strategies into the Taiwanese junior college classroom

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Abstract

An intact 10th grade English as a Foreign Language vocational business junior college reading intervention class \((n = 52)\) received 16 weeks of integrated reading strategy instruction with extensive reading while an intact traditional class \((n = 48)\) received traditional intensive reading instruction with extensive reading. The intervention class showed reading proficiency improvements and increased use of reading strategies, especially strategies activating background knowledge. Furthermore, reading proficiency could be differentiated by learners’ use/disuse of context to aid reading comprehension. Outcomes shed light on English reading instruction in Taiwan and offer language teachers an alternative to the traditional approach. Guidelines helpful in designing quality instructional procedures to improve vocational school students’ reading proficiency and pedagogical implications for reading strategy instruction in the global language classroom are discussed.

Keywords: extensive reading, reading proficiency, reading strategies, adolescent literacy, instructional intervention

Since the late 1970s, many researchers have recognized the importance of knowing more about the reading strategies used by English as a first language (EL1) as well as English as a second language (ESL) learners. Many empirical investigations have been conducted to examine the relationship between reading strategy use and successful reading (e.g., Barrot, 2016; Block, 1986, 1992; Hosenfeld, 1976, 1977; Knight, Padron, & Waxman, 1985). This body of research has demonstrated proficient and less proficient readers use different strategies while reading (e.g., Barnett, 1988; Carrell, 1989) and proficient readers use varied strategies more frequently than
less proficient readers (Dole, Duffy, Roehler, & Pearson, 1991; Irwin & Baker, 1989). Several studies have also shown that the use of reading strategies is effective in enhancing comprehension (Anderson, 1991; Carrell, Pharis, & Liberto, 1989; Paris, Lipson, & Wixson, 1983) and that less proficient readers can improve comprehension after receiving reading strategy instruction (e.g., Carrell, 1998; Carrell et al., 1989; Janzen & Stoller, 1998; Loranger, 1997; Song, 1998; Tierney, Readence, & Dishner, 1995).

In the 2000s, researchers began serious examination of the English as a foreign language (EFL) classroom and how learners in this context need reading strategy instruction. For instance, Al-Nujaidi (2003) explored the relationship between EFL learners’ reading strategy use, vocabulary size, and reading comprehension. While the results indicated that all 226 university EFL students reported applying many reading strategies, only those with larger vocabulary sizes and proficient reading comprehension abilities frequently applied different reading strategies, indicating a relationship between application of reading strategies and reading skills. Many other studies have also made comparisons between proficient and less proficient readers (e.g., J. Chen, 2005; L. Chen, 2008; Huang, 1999; Kuo, 2002; C. M. Lee, 2011; Shen, 2003) and their disuse and use of reading strategies (e.g., Hung, 2005; M. L. Lee, 2006; Lin, 2005; Sun, 2011). Overall, these exploratory studies indicate that less proficient readers possess and make use of smaller reading strategy repertoires than their more proficient reading counterparts and that a correlation exists between higher levels of reading proficiency (i.e., comprehension) and an increased use of reading strategies. In attempts to further synthesize this finding, Taylor et al. (2006) conducted a meta-analysis of 23 studies to investigate whether reading strategy instruction affects reading proficiency. They found learners that received explicit reading strategy instruction could comprehend second language texts better than those that did not receive such training. This result lends credibility to the notion that reading strategy instruction can have a positive effect on L2 learners’ reading proficiency.

Reading Strategies and Extensive Reading
As with reading strategies, extensive reading has also been recognized by EL1, ESL, and EFL researchers as an effective means of encouraging language growth and acquisition (e.g., Adams, 1990; Cho & Krashen, 1994; Elley, 1991; Hafiz & Tudor, 1989, 1990; Hayashi, 1999; Krashen, 1993, 1994a, 1994b, 2013; Lao & Krashen, 2000; Mason & Krashen, 1997; Robb & Susser, 1989; Smith, 2011; Tsang, 1996; Walker, 1997), and in particular extensive reading succeeds in improving EL1, ESL, and EFL reading comprehension and vocabulary growth (e.g., Hafiz & Tudor, 1989; Mason & Krashen, 1997; Nagy, 1997; Nagy & Anderson, 1984; Nagy, Herman, & Anderson, 1985; Robb & Susser, 1989). However, as Sheu (2003) notes, rote methods of learning still receive more acceptance in Taiwan and other EFL contexts by both teachers and students. Moreover, in the Greater China region, programs that aim to use extensive reading as a method to encourage language growth are unable to be completely followed through by teachers (Renandya, Hu, & Xiang, 2015). This is an unfortunate reality, since when designing an EFL reading curriculum a teacher should aim to maintain a well-balanced language course that provides equal time to four language learning strands, namely “...meaning-focused input, meaning-focused output, language-focused learning, and fluency development” (Nation, 2009, p. 1). Unfortunately, in many EFL contexts, including the Taiwanese EFL secondary classroom, meaning-focused input and fluency development often take a backseat to language-focused...
learning; however, it is important for EFL teachers to provide students with opportunities to take part in extensive reading, a type of “meaning-focused input [that] involves getting input through…reading where the learners’ focus is on understanding the message and where only a small proportion of language features are outside the learners’ present level of proficiency” (Nation, 2009, p. 1). Thus, it might be more sensible to combine extensive reading with one or more teaching methods to better address the complex needs of learners in EFL classrooms (Shih & Reynolds, 2015). Doing so provides students with a greater balance of meaning-focused input, language-focused learning, and fluency development. Nation and Webb (2011) note that while there is much evidence in the research literature for the benefits of extensive reading, there are few classroom-based or action research studies conducted by teachers assessing its effectiveness. The reluctance of teachers to incorporate extensive reading into their English reading curriculum originates from an inclination that students may not be willing to complete the extensive reading outside the classroom. Takase (2007) suggests that teachers may overcome this hesitation by setting up a compulsory extensive reading activity that takes place within the classroom, and then once students are engaged and “hooked” on reading, the students may be more willing to continue with the extensive reading program outside the classroom.

A literature search revealed few studies investigating an integrated extensive reading and reading strategy approach to the teaching of EFL—one that might offer a more balanced language learning environment for students. One of the few found was Cheng’s (2003) quasi-experimental study conducted in Taiwan with two classes of EFL university freshmen. Results showed students that received extensive reading plus word-guessing strategy instruction outperformed students who received extensive reading plus L1 translations of unknown vocabulary. Further analysis of the extensive reading plus strategy instruction group data indicated that higher-proficiency readers benefited more from the strategy instruction than lower-proficiency readers. Burrows’s (2012) yearlong study further teased apart the effects of strategy instruction in combination with extensive reading by investigating the difference in learning outcomes of four groups of participants: intensive reading (i.e., control); extensive reading; reading strategies; and extensive reading with reading strategies. Results indicated that the learners in two groups, “reading strategy instruction” and “reading strategy instruction and extensive reading,” outperformed those participants in the other two groups, “extensive reading” and “intensive reading.”

Based on the review of previous studies, it could be concluded that teaching reading strategies facilitates reading comprehension and that taking part in extensive reading can improve reading comprehension. Combining reading strategy instruction with extensive reading is one method of providing EFL students with a more balanced language learning curriculum, allowing for an equal opportunity of meaning-focused input, language-focused learning, and fluency development. Previous research further suggests that proficient readers have already amassed larger reading strategy inventories than less proficient readers. However, what is left uncertain is what impact combining extensive reading and reading strategy instruction may have on less proficient readers. Thus, this initial investigation hopes to fill this research gap by bringing extensive reading and reading strategy instruction into a traditional Taiwanese EFL reading classroom. Specifically, the following research questions were addressed:
1. Does “extensive reading with reading strategy instruction” and “extensive reading with traditional intensive reading instruction” differentially affect EFL students’ (a) second language reading proficiency; and (b) reading strategy use?
2. Does “extensive reading with reading strategy instruction” affect which reading strategies EFL students use most and least frequently?
3. To what extent do proficient and less proficient EFL readers use different reading strategies?

Methodology

Participants

The participants were 100 non-English majors (23 males, 77 females; age 15–16), who were from two intact classes in the first year of a five-year junior vocational business college (i.e., 10th graders). They were enrolled in a required English language course to fulfill one of their general education requirements. Both groups were taught by the same teacher (the first author) to eliminate the teacher variable. One of the classes was randomly selected to receive “extensive reading with reading strategy instruction” (i.e., the intervention group) while the other class received “extensive reading with traditional intensive reading instruction” (i.e., the control group). There was no significant difference between the two groups in terms of previous English language learning or English proficiency assessment experiences. The participants reported that they had learned English on average for over seven years with an average of four hours of English instruction per week. The majority \( n = 67 \) reported never having taken any English language proficiency examination; of those that had taken such an exam, twenty had passed the elementary level of the General English Proficiency Test (GEPT) and two had passed the high-intermediate level of the GEPT. Three participants reported passing other unofficial institution exams. Eight participants reported taking other levels of the GEPT but without passing the exams.

Instruments

To answer the research questions, two instruments were used: (a) the reading section of the General English Proficiency Test (GEPT) — Intermediate Level; and (b) a reading strategy questionnaire.

The General English Proficiency Test. The GEPT was developed in 1999 and commissioned by the Language Training and Testing Center (LTTC) in Taiwan. The GEPT aims to provide individuals with a measurement of English proficiency and help employers and educational institutions in selection and placement of employees and students (Roever & Pan, 2008). The GEPT, a skill-based test battery, assesses test takers’ listening, speaking, reading, and writing competence at five levels: Elementary, Intermediate, High-Intermediate, Advanced, and Superior. Reliability statistics published by the LTTC show reliabilities mostly in the high 0.8 range, which are suitable for most purposes (Roever & Pan, 2008).
Two equivalent reading sections of the GEPT at the Intermediate level were adopted to measure reading proficiency. Passing the Intermediate level of the GEPT reading is equivalent to CEFR B1, IELTS 5.0, or a score below 79 on the TOEFL iBT (LTTC, 2016; Weir, Chan, & Nakatsuhara, 2013; J. R. W. Wu & R. Y. F. Wu, 2010). The GEPT reading section is comprised of vocabulary, cloze, and comprehension questions related to short passages. It consists of forty multiple-choice items with an allotted time of 45 minutes. To ensure the reliability of the GEPT reading sections, a pilot study was conducted prior to the main study. Permission was obtained from an English instructor to administer the GEPT reading sections to a class of 49 students from the Department of Public Finance and Tax Administration at the same college as the participants in the formal study. The Cronbach Alpha reliability coefficient of the GEPT reading section Version A (i.e., the pre-test reading assessment) was 0.78 and Version B (i.e., the post-test reading assessment) was 0.67. After deleting Items 2 and 40 from Version B, the Cronbach Alpha reliability coefficient became 0.71; this version was used for the main study.

Reading strategy questionnaire. Tsai’s (2000) 22-item 5-point Likert scale reading strategy questionnaire written in Chinese, based largely on Carrell (1989) and Rusciolelli (1995) and informed by Young’s (1993) reading strategy classification scheme, was adapted for the current investigation (see Appendix). First some wording in the questionnaire was revised before being placed under further scrutiny by a Chinese/English translation professional. The questionnaire was finally piloted with the same class of learners as the GEPT reading sections (see section The General English Proficiency Test), finding a reliability coefficient of .78.

Procedures

One week prior to the commencement of instruction, the two classes completed the GEPT reading section (Version A) and the Reading Strategy Questionnaire as a pretest. No significant difference was found between the two classes (see Table 1). After 16 weeks of instruction both classes were asked to take the GEPT reading section (Version B) and complete the Reading Strategy Questionnaire as a posttest.

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (n = 52)</td>
<td>M (n = 48)</td>
</tr>
<tr>
<td>Pretest</td>
<td>50.88 (13.72)</td>
<td>54.88 (18.77)</td>
</tr>
<tr>
<td>Posttest</td>
<td>58.37 (18.58)</td>
<td>55.89 (22.57)</td>
</tr>
<tr>
<td>Gain</td>
<td>7.48 (13.84)</td>
<td>1.02 (14.56)</td>
</tr>
</tbody>
</table>

Note. SD in parenthesis; *p < .05; maximum score for pretest and posttest = 120.

Both classes took part in a 16-week extensive reading program requiring them to read 30 minutes per week in class and at least 150 minutes per week outside of class; however, prior to mid-term and final exams, their inside class reading time was adjusted to 15 minutes per week and outside class reading time was adjusted to 75 minutes per week. This equaled to about 450 minutes or 7.5 hours of in-class extensive reading for both classes in total for the 16 weeks. Students in both classes should have been reading 2.5 hours each week except for prior to mid-term and final exams when the amount could drop to 1 hour 15 minutes each week. If students had followed the
teacher’s recommendations, after the 16 weeks, both classes should have read for a total of 2,250 minutes or 37.5 hours.

After the 16 weeks of instruction, the average amount of outside class extensive reading for the two classes was calculated: the intervention class spent an average of 134 minutes or a little over 2 hours per week on outside class extensive reading while the traditional class spent 118 minutes or a little under 2 hours per week on outside class extensive reading\(^1\). Combined with the in-class extensive reading of 8.5 hours, the intervention class spent an average of 2,594 minutes or a little over 43 hours on extensive reading during the 16 weeks of instruction while the traditional class spent an average of 2,338 minutes or nearly 39 hours on extensive reading during the 16 weeks of instruction. Both classes met the recommended amount of outside class extensive reading suggested by the teacher.

Inside the classroom, the participants were given guidance in selecting graded readers appropriate to their proficiency level and interest. Although there were other graded readers available in the college library, the *Oxford Bookworms* graded readers were participants’ main options for reading materials as the junior college had bought most of the *Bookworms* series. Since the participants’ vocabulary was limited, the students were recommended to select books at the 400 headwords level (ranked Stage 1, average word count 5,200). The classroom teacher created a positive classroom environment that supported and encouraged the students’ outside class reading by giving encouraging feedback and answering any questions concerning the graded readers.

Outside of class, both classes were asked to keep reading diaries that would be checked by the classroom teacher on a weekly basis. In the reading diaries, the participants listed the title of the book they were reading, the number of minutes they read per day, and whether they were enjoying what they read. Examination of their reading diaries at the end of the semester revealed that some participants selected graded readers with 250 headwords (ranked Starter, average word count depended on the genre: Comic Strip Starters 950, Narrative Starters 1,540, and Interactive Starters 1,635), and several participants chose the 700 headwords level (ranked Stage 2, average word count 6,500).

The intervention class also received reading strategy instruction for 16 weeks. The strategy instruction was integrated into the textbook used with both groups: *Cover to Cover 1: Reading Comprehension and Fluency* (Day & Yamanaka, 2007). The purpose of the textbook is to help students become skilled, strategic readers who enjoy reading English. The textbook contains 12 two-part thematic units with reading passages taken from magazines and newspapers aimed at appealing to students with different tastes and interests. The units also contain excerpts from graded readers that allow for teachers to use authentic extensive reading texts to teach about and encourage students to engage in extensive reading. Part 1 of each unit focuses on learning and practicing reading strategies and building up already acquired vocabulary knowledge, while Part 2 focuses on increasing the fluency of applying reading strategies while expanding vocabulary knowledge. The taught reading strategies are recycled throughout the textbook to ensure that students are not only introduced to strategies but also have ample opportunities to practice the learned strategies. The intervention class was taught different Comprehension Strategies, including (a) finding main ideas in paragraphs, (b) identifying meaning from context, and
Fluency Strategies, which comprised of (a) scanning for specific information, (b) skimming for main ideas, (c) predicting about a topic, (d) recognizing points of view, (e) ignoring unimportant unknown words, (f) recognizing reference words, and (g) recognizing signal words. Throughout the 16 weeks, the classroom teacher also emphasized the “Reading Strategies” sections that appeared throughout the textbook by asking the intervention group to reflect on the suggestions provided. One strategy, “Comprehension Strategy: Identifying Meaning from Context” suggested to students:

You can often work out the meaning of words you don’t know from the words and phrases nearby. Try to work out the part of speech (noun, verb, adjective, adverb) of the new word. Look at the sentences before and after the word. They may use words with the same meaning, or with the opposite meaning (Day & Yamanaka, 2007, p. 16).

After pointing out the reading strategy in the textbook and asking participants to read it over silently, the teacher read it aloud and called on a student to provide a concrete example of how he or she would put this tip into action. The participants then practiced the strategies while they read and completed exercises in their textbooks that targeted the practice of the strategies. After this, the teacher selected a student to share with the class where specifically within the text the student had applied the strategy. The teacher also reminded students that these strategies can and should be applied to texts encountered outside the classroom, including not only their graded readers but any English texts.

The traditional class read the same materials as the intervention class. The material consisted of an authorized photocopied version of the textbook without the strategy instruction content. Thus, the traditional class was not given any strategy instruction. Instead, the classroom teacher used a traditional method to instruct the traditional class. The traditional method of reading instruction emphasized intensive reading exercises. These included grammar translation, comprehension questions and language analysis, and other independent reading or comprehension work. The traditional method of instruction began by the classroom teacher first introducing new words by providing an L1 translation and example sentences. Then, the participants were asked to read the text silently before the teacher explained the reading content sentence by sentence in the L1 while highlighting grammar patterns for participants’ scrutiny. After this, the participants individually and/or as a class answered comprehension questions about the text. When wrong answers were given, the teacher pointed out the contents within the text that provided the correct answers.

To sum up, the intervention class was provided extensive reading with reading strategy instruction for 16 weeks while the traditional class was provided extensive reading with traditional intensive reading instruction for 16 weeks. Before and after the instruction, both classes were administered the GEPT reading section and the Reading Strategy Questionnaire as a pretest and posttest.

**Results and Discussion**

The results and discussion are given in response to each research question.
Does “extensive reading with reading strategy instruction” and “extensive reading with traditional intensive reading instruction” differentially affect EFL students’ second language reading proficiency?

An independent samples t test run on the intervention and traditional classes’ GEPT reading post-test outcomes did not reveal a statistically significant difference ($t = 0.60, p = .552, Cohen’s d = .25$); however, a statistically significant difference ($t = 2.27, p = .025, Cohen’s d = .46$) was shown between their gain scores (see Table 1). This finding is reminiscent of Burrows (2012), which found students that received reading strategy instruction improved more than even those students that took part in only an extensive reading program. This result is inspiring to EFL reading instructors, in that even after only a short period of reading strategy instruction (16 weeks), students can make significant gains in L2 reading proficiency.

Does “extensive reading with reading strategy instruction” and “extensive reading with traditional intensive reading instruction” differentially affect EFL students’ reading strategy use?

In this investigation, the perceptions of the participants’ reading strategy use refers to self-reported strategy use obtained through administering the reading strategy questionnaire. To investigate whether reading strategy instruction influenced participants’ reading strategy use, independent samples t tests were used to compare the intervention and traditional classes’ pretest and posttest scores. As shown in Table 2, for the pretest and posttest, a statistically significant difference between the two classes was not found (pretest, $t = -.81, p = .421, Cohen’s d = .17$; posttest, $t = .88, p = .383, Cohen’s d = .17$). Students’ reading strategy use was also probed using paired samples t tests to make comparisons between the pretest and posttest scores for both classes. Results showed a statistically significant difference for the intervention class ($t = 2.11, p = .040, Cohen’s d = .27$) but not the traditional class ($t = -.39, p = .695, Cohen’s d = .05$). This result further indicates a difference between the two classes in that while the intervention class’s use of strategies increased, that of the traditional class showed a slight decline.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Class</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Intervention</td>
<td>3.48</td>
<td>.42</td>
<td>-.81</td>
<td>.421</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>3.55</td>
<td>.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>Intervention</td>
<td>3.60</td>
<td>.46</td>
<td>.88</td>
<td>.383</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>3.53</td>
<td>.36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Intervention $n = 49$ (Three learners’ data could not be analyzed due to absences); Traditional $n = 48$.

Does “extensive reading with reading strategy instruction” affect which reading strategies EFL students use most and least frequently?

On the pretest, the intervention class’s reading strategy questionnaire item means ranged from 2.76 to 4.20 whereas after the intervention, the items ranged from 2.94 to 4.49, showing higher strategy use after the intervention. The reading strategy questionnaire data was further analyzed to extract the top five reading strategies used by the intervention class before and after the intervention (see Table 3); the strategies used before and after the intervention were the same.
but their ranking was somewhat different. One finding worth noting is that the use of *Mentally sound out parts of the words* decreased slightly; this could have occurred due to strategy instruction emphasizing comprehending the gist of articles by continuing to read or using surrounding context to guess the meanings of unknown words. Participants may have opted to reduce reliance on bottom up reading strategies, which some researchers have found to be a sign of proficient reading (e.g., Carrell, 1989).

Table 3. *The top five strategies used by the intervention class (n = 49)*

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Posttest M (SD)</th>
<th>Pretest M (SD)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use a variety of context clues to understand the parts I do not understand</td>
<td>4.49 (0.62)</td>
<td>4.20 (0.58)</td>
<td>1</td>
</tr>
<tr>
<td>Use my prior knowledge and experiences to understand the content of the text</td>
<td>4.24 (0.66)</td>
<td>4.18 (0.57)</td>
<td>2</td>
</tr>
<tr>
<td>Skip the parts I do not understand and keep reading to get the overall meaning</td>
<td>4.20 (0.88)</td>
<td>3.80 (0.79)</td>
<td>3</td>
</tr>
<tr>
<td>Mentally sound out parts of the words</td>
<td>4.06 (0.77)</td>
<td>4.12 (0.60)</td>
<td>4</td>
</tr>
<tr>
<td>Relate information which comes next in the text to previous information in the text</td>
<td>3.96 (0.82)</td>
<td>3.78 (0.71)</td>
<td>5</td>
</tr>
</tbody>
</table>

*Note.* The items are arranged by posttest mean descending order. Three learners’ data could not be analyzed due to absences.

There was also little difference in the intervention class’s least frequently used strategies before and after the intervention (see Table 4). The lack of increased strategy use by the participants in the intervention class could also be due to the limited time (i.e., 16 weeks) that the class had in familiarizing themselves with the strategies.

Table 4. *The bottom five strategies used by the intervention class (n = 49)*

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Posttest M (SD)</th>
<th>Pretest M (SD)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand the meaning of each word</td>
<td>2.94 (0.99)</td>
<td>2.76 (0.83)</td>
<td>1</td>
</tr>
<tr>
<td>Pay attention to punctuation and transition words</td>
<td>2.94 (0.83)</td>
<td>2.86 (0.94)</td>
<td>2</td>
</tr>
<tr>
<td>Understand all details of the content</td>
<td>3.00 (1.00)</td>
<td>2.88 (0.90)</td>
<td>2</td>
</tr>
<tr>
<td>Recognize the differences between main points and supporting details</td>
<td>3.02 (0.83)</td>
<td>2.90 (0.82)</td>
<td>3</td>
</tr>
<tr>
<td>Question the veracity and profundity of the objects and viewpoints presented by the author in the text</td>
<td>3.10 (1.03)</td>
<td>2.90 (0.98)</td>
<td>4</td>
</tr>
</tbody>
</table>

*Note.* The items are arranged by posttest mean ascending order. Three learners’ data could not be analyzed due to absences.

Another interesting finding was the low ranking of *Question the veracity and profundity of the objects and viewpoints presented by the author in the text.* It appears that Taiwanese students tend to accept authors’ viewpoints without querying, which leaves them very disadvantaged.
when pursuing higher education (Reynolds, 2013; Reynolds & Anderson, 2015). Future teachers should emphasize the usefulness of critical thinking skills through development of while-reading intensive exercises that aim “to develop in the language learner the ability to comprehend texts, not to guide [them] to comprehension of a text” [emphasis in original] (Davies & Widdowson, 1974, p. 172).

Paired samples t tests were also run on the strategy items for the intervention class data to investigate for any significant differences in strategy use after the intervention. Only Use my prior knowledge and experiences to understand the content of the text showed a statistically significant increase in use ($t = 3.46, p = .001$, Cohen’s $d = .54$). This result can be explained by the classroom teacher providing time for before-reading exercises including the activation of background knowledge through the discussion of pictures/photos accompanying the class texts. The intervention class was led to think about the topic and discuss before reading. In doing so, the participants were encouraged to access their prior knowledge and experiences concerning each topic, which helped them comprehend the texts. This strategy may have become more salient to the participants due to its contrast with other secondary classrooms that mostly follow the so-called traditional approach of intensive reading instruction, leaving students few opportunities to think about what they are going to read. This result highlights the benefit of setting aside precious class time to pre-reading discussion and activities to foster good reading habits in learners. Prior knowledge of the topic has been found to be the best predictor of comprehension (Johnston, 1984). Dochy (1994) also pointed out that 30% to 60% of reading test variability can be explained by prior knowledge. It is evident that activating prior knowledge is of special importance to reading comprehension and EFL student readers should be encouraged to use their prior knowledge and experiences to generate predictions regarding the content of the text. For example, if a teacher assigns a reading with the title “Ads Are Everywhere,” she should ask students to attempt to answer some questions about the topic to activate background knowledge. A teacher in such a situation could ask: “1. What are some common places for advertising? 2. Have you seen ads in any unusual places? 3. In one minute, list as many as advertising slogans as you can—in English or your own language” (Anderson, 2007, p. 126).

To further tease apart the influence of teaching the intervention class particular research strategies (see Section Procedures), the pre- and post-intervention results on the Reading Strategy Questionnaire were split into two groups: Taught Strategies and Not-Taught Strategies. Two paired-samples t tests were run on the intervention group’s Reading Strategy Questionnaire results to determine whether there was a significant change in the use of taught and not-taught strategies. When analyzed separately, results did not indicate a statistically significant increase in taught ($t = -.665, p = .509$, Cohen’s $d = .096$) or not taught ($t = .489, p = .627$, Cohen’s $d = .071$) reading strategies; both yielded negligible effect sizes. Gain scores between taught and not-taught reading strategies were also compared using a paired-samples t test but this test also failed to find a significant difference ($t = 1.224, p = .227$, Cohen’s $d = .177$) and also yielded a negligible effect size. Although not a significant increase, the average score of strategy use of the taught strategies increased from the pretest to the posttest while the strategies not taught showed a slight decrease. Thus, gain score analysis showed a slight difference in the taught and not-taught strategy use. A cautious interpretation of this result could be that the teaching of reading strategies will increase the use of those strategies taught; however, 16 weeks may have been too short of an instruction time.
To what extent do proficient and less proficient EFL readers use different reading strategies?

Use of reading strategies by proficient and less proficient readers was compared using independent samples t tests. In this investigation, Bachman’s (2004) guidelines were followed in which the upper and lower thirds of an intact group are used to create smaller subgroups. Consequently, the researchers defined learners that received GEPT posttest reading scores in the top one third and bottom one third as proficient and less proficient readers. Results indicated only Use a variety of context clues to understand the parts I do not understand (t = 2.07, p = .047, Cohen’s d = .74) was able to differentiate the two subgroups. In other words, the proficient readers reported using this strategy significantly more often than the less proficient readers.

To use this reading strategy, an EFL student must draw upon several reading sub-strategies; these sub-strategies include noticing and analyzing title, text structure, signal words, key words, grammatical patterns, author stance, and claims/conclusions. Utilizing these skills requires the student to be an analytical and active reader. Previous research findings have shown that students with comprehension problems use a smaller set of reading strategies and use them less frequently than those with fewer comprehension problems (e.g., Block, 1986; Jimenez, Garcia, & Pearson, 1996); therefore, the use of this strategy by the proficient readers could be indicative of their application of a more varied reading strategy skill set. Future teachers should consider trying to pair less proficient and more proficient readers to encourage good reading habits through scaffolding and sharing (Shih & Reynolds, 2015).

Pedagogical Implications and Conclusions

Among studies investigating the effects of reading strategy instruction, few have explored the effects of integrating extensive reading with reading strategy instruction. This investigation aimed to fill this research gap by transforming a regular EFL reading classroom by incorporating extensive reading and reading strategy instruction. Reading proficiency outcomes and learners’ perceived use of reading strategies were analyzed to determine whether such an instructional design is helpful to EFL learners. Results indicated that extensive reading with reading strategy instruction had a positive effect on the intervention class’s reading proficiency and reading strategy use. The intervention class appears to have relied less on certain bottom up reading strategies while increasing their use of background knowledge. Results also indicated that less proficient readers need extra instruction on the use of context clues to aid in reading comprehension.

While the current investigation uncovered some interesting findings, it nevertheless has several limitations. First, part of the results relies heavily on self-reports of reading strategy use. The participants may have used reading strategies that were not assessed in the Reading Strategy Questionnaire. A future mixed-methods investigation could help to overcome this limitation by collecting online reading data from participants using eye-tracking and then using video recording to conduct stimulated recall interviews to triangulate the data. Second, due to the context of the investigation, results should be interpreted cautiously. Replications with different participant groups from different contexts are needed to strengthen the findings and to determine
whether this instructional design is transferable to other contexts. Also, the amount of extensive reading that took place inside the two classrooms during the 16 weeks was limited to 30 minutes per week by the educational institution in which the research was conducted. Under a more autonomous learning and teaching environment, future researchers may determine whether increasing the amount of in-class extensive reading may affect the amount of voluntary outside-class extensive reading students engage in. Next, there is the possibility that the difference in comprehension ability found between the two classes was due to only the reading instruction provided to students by their teacher and not necessarily reading instruction combined with engagement in extensive reading. Further analysis of the reading strategy questionnaire data resulted in finding the intervention class’s use of taught strategies did increase more than strategies not taught; however, these increases were not statistically significant and yielded negligible effect sizes. A cautious interpretation is that the slight increase in reading strategy use combined with extensive reading was what helped to nudge the intervention class’s reading comprehension scores in an upward direction, but further randomized, longitudinal, experimental research with a control and multiple experimental groups is needed to make more solid claims.

Still, the authors feel that no single instructional approach is likely to meet all the needs of English language learners, so instructional techniques may need to be adapted or combined to cater to students’ diverse needs (Shih & Reynolds, 2015). Due to the quasi-experimental nature of the current study, we felt it was best to combine techniques with the potential for helping improve the students’ English abilities. Lastly, the participants read texts from a classroom textbook that were mostly taken from newspapers, magazines, and excerpts from graded readers. Barrot (2016) found the types of strategies that ESL students applied while reading was dependent upon the type of text being read. Thus, the results of the current investigation should be cautiously delimited to EFL students reading magazine and newspaper articles or textbook materials. Future studies should request participants to read more than one reading genre to allow for the collection of more generalizable results. In addition, the use of reading strategies measured by the Reading Strategy Questionnaire consisted of a combination of strategies that would be suitable for extensive reading that usually takes place outside the traditional language classroom and intensive reading that usually takes place inside the traditional language classroom. The strategies used for intensive reading may be distinctly different from the ones used for extensive reading, and future studies should aim to determine whether the use of intensive reading strategies, extensive reading strategies, or both can be increased through such an intervention as the one described in the present study. With these thoughts in mind, pedagogical implications and conclusions of the investigation are provided.

The instruction received by the participants recruited for the current investigation deviated from the traditional Taiwanese style of teaching EFL reading in that it developed participants’ knowledge concerning the reading process through the introduction and demonstration of an array of reading strategies. Moreover, learners were furnished with ample opportunities to practice and discuss reading strategies while reading in and outside of class through extensive reading practice. Such instruction is a better alternative to traditional EFL reading instruction because it helps improve students’ reading proficiency and reading strategy inventory. This is a better guarantee that learners will be able to transfer the skills learned and practiced, thereby assisting in the reading of other texts encountered outside the classroom context, a goal that is not targeted within the traditional approach to the teaching of EFL reading in Taiwan.
Since Taiwanese students often lack adequate training in reading strategies at the primary and junior high school levels, they are inclined to read texts word by word and thus will struggle with reading comprehension and avoid reading passages that are long or include unknown vocabulary words (W. H. Wu, 2015). Future teachers should emphasize that applying reading strategies while reading is pertinent to students’ future reading success. This should be done by direct explanation during open, frank discussion with students. Although many Taiwanese high school teachers feel it is difficult to integrate reading strategy instruction into English curriculum due to the time needed to prepare students for high stakes college entrance exams, it may be up to primary and junior high educators to assist in priming students with the importance of applying such strategies. This is not only possible but also necessary to instill habits of successful reading and writing in pupils (Tompkins, 2011). Although overall there was a significant increase in strategy use, future teachers should use pre-test results as a needs assessment for gauging which reading strategies should receive more classroom time for instruction and practice. To further encourage students to become independent readers, teachers should encourage students to become tolerant of a negligible amount of language ambiguity to finish a text without stopping to look up unknown words. Students should try to use the surrounding context and context clues in prior or subsequent sentences to help them infer unknown word meanings.

There was a difference found between the use of strategies by proficient and less proficient readers. An approach such as the one discussed in the current study that integrates reading strategy instruction and extensive reading is one means of improving reading proficiency. Less proficient readers may need more attention and instructional intervention to ensure their reading strategy repertoire is expanding and that they are applying strategies while reading. One very basic way to motivate learners to read more is to ensure reader choice (Reynolds & Bai, 2013). Less proficient readers should not only be provided opportunities to select their own reading materials, but they should also be given choices for which strategies should be practiced when reading. While the teacher involved in the current study did encourage the learners to apply strategies taught while reading, we suggest future teachers to provide a “reading strategy card” for learners to reference prior to engaging in extensive reading so that the learners can self-select a strategy and practice applying it during each extensive reading session. The learners can then record in their reading diaries which strategies were purposefully used while reading. When learners have given personal choice, they become more responsible (Paris & Turner, 1995).

Research has also shown that some of the basic requirements of reading are a developed sense of phonological awareness (Beach, 1996) and the ability to recall phonological information and decode words (Booth, Perfetti, & MacWhinney, 1999; Ntim, 2015). One of the more motivating ways of encouraging this is through having students read aloud. While reading aloud by students is frowned upon, especially at higher grades, it can be a helpful tool if used purposefully. Kao (2017) found she was able to transform her compulsory university-level English reading classes by incorporating a read-aloud warm up activity where either students or herself selected excerpts from classics or poetry to read aloud at the beginning of each class period. She found that this technique allowed her to take advantage of time at the beginning of classes to gather students’ attention, encourage interest in reading classics, and add enjoyment to her course. Providing learners with a handout of the text to be read aloud, which can be followed by all students while proficient students read, is one interesting and motivating way to encourage learners to notice the sound-letter connections. One more very important duty that language teachers need to take up is
the teaching of why a particular reading strategy is useful and when it should be applied. Most teachers have no problem explaining to students what reading strategies are and how to apply the strategies; however, most neglect to explain why the strategies are important and when they should be applied (Baumann & Schmitt, 1986). While a number of good textbooks do provide explanations of reading strategies and maybe even practice using those strategies, few provide enough explanation of when particular strategies should be employed. The Making Connections series published by Cambridge University Press (Pakenham, McEntire, & Williams, 2013; McEntire & Williams, 2013; Williams, 2013) is a good start in that it not only provides explanations but also encourages in-depth study of each introduced strategy followed by an explanation of how the strategy can be used for reading academic texts. What then follows are ample re-introductions and practice that targets the reading strategies by highlighting when and why strategies should be used to read the textbook readings. Teachers then have the option to ask students to read extra readings and apply those strategies while they read. This is especially helpful for encouraging the use of newly taught strategies.

Future teachers of EFL reading are encouraged to incorporate extensive reading into their classroom regimes. Bamford and Day (2004) offer several useful pieces of advice to teachers who wish to incorporate extensive reading into their language curriculum, including ensuring the reading material is easy, a variety of reading material on a wide range of topics is available, learners choose what they want to read, learners read as much as possible, and the teacher is a role model. As with the current investigation, teachers need to ensure that the reading material is easy. Teachers can do this by using the Vocabulary Size Test to assess their learners’ second language vocabulary sizes and then matching them to graded readers with 98% known vocabulary coverage (Nation & Beglar, 2007; Hu & Nation, 2000). The level of the graded reader is always published on the back of the reader for quick access; the level of the graded reader refers to the number of words that are used in the book, with each higher level indicating an increase in the number of different words used in the reader. Matching students’ vocabulary sizes to appropriate graded readers ensures that students’ comprehension will not be hindered while also providing opportunities for them to encounter incidentally and acquire previously unknown words (Reynolds, 2015). As with the current investigation, the teacher should make sure that plenty of choices for reading materials are made available to students by suggesting school librarians and administrators to purchase graded readers, fiction and non-fiction books, magazines, and newspapers. Most school libraries have adequate amounts of suitable reading materials and can even assist teachers in placing the materials in a special area for easy access by students. Teachers need to encourage students to read whatever they want to read and to ensure students understand they are free to stop reading any material they have started reading if they replace it with something else. The teacher must pay careful attention to motivation in the early stages of incorporating extensive reading into their classrooms to ensure students are not selecting reading materials that are too difficult to read. Most students will need guidance on and explanation of why they should select texts that are easy and enjoyable to read when in previous English classes they may have always been given difficult texts to read. Teachers that are stretched for class time may opt to devote only a portion of a class (around 30 minutes) once a week to extensive reading. During the allotted time, the teacher should act as a role model and read with students. As with the current investigation, when extensive reading is incorporated into the course, the teacher should also set a grade for the reading done by students. The teacher may wish to “set reading targets…[by] let[ting]…students know they have to read a certain number of
books during the semester…to get a certain grade” (Day, 2011, p. 19). Teachers can do as with the current investigation and ask students to keep a reading diary or discuss their reading within reading circles (Furr, 2011). As in the current investigation, teachers can ask students to keep a reading diary or discuss their reading within reading circles (Furr, 2011). For teachers who feel the need to provide more formal assessments, many graded readers already contain language learning activities and quizzes that can be easily marked and returned to students. Another option is to create graphic organizers that students complete and return in lieu of book reports.

Future teachers of EFL reading are also encouraged to incorporate reading strategy instruction into their classroom regimes. Although teachers can create their own curriculum that incorporates any number of reading strategies, there are now many English language textbooks that have integrated the learning of reading strategies into the core of the curriculum. However, if a teacher decides to select such a textbook for a course, it will still be necessary to spend time explaining to students the importance of investing time into practicing the reading strategies presented in the book. For large classroom sizes, the teacher can pair less proficient and proficient students together for in-class reading strategy practice. Because prior knowledge activation can have an effect on comprehension, all teachers are strongly encouraged to at least devote a portion of their language classes to allowing students to discuss and activate background knowledge on topics prior to reading (see Shih & Reynolds, 2015). The current investigation found proficient readers used various context-related sub-strategies significantly more often than the less proficient readers. Consequently, teachers may consider administering a reading strategy questionnaire on the onset of a course as a form of needs assessment to determine which students should be paired. Furthermore, if the questionnaire is tailored to the strategies the teacher has planned to teach in the course—self-selected or as a part of a textbook—the teacher can then have a better idea of which strategies need to be given more emphasis throughout the term. Following these suggestions will result in ample scaffolding from teachers and more proficient peers.

The outcomes of this investigation have shed some light on English reading instruction in Taiwan and offer language teachers an alternative instructional design—extensive reading with reading strategy instruction. Several helpful guidelines have been provided in the hopes that second language reading teachers around the globe will be inspired to provide more effective reading instruction to students, thereby increasing the likelihood of improving their students’ reading proficiencies. It is hoped that this study can act as an impetus to other educators, showing that alternative methods can be employed successfully in the EFL classroom to the benefit of not only the students but also the teacher’s professional development.

Notes

1. Some participants did not complete their reading diaries for certain days/weeks, so their true outside class external reading times could have been greater than those reported.
References


Kuo, W. K. (2002). *The proficiency and gender differences in reading strategies used by junior high school students toward the Basic Competence Test* (Unpublished master’s thesis). Province University, Taichung, Taiwan.


**Appendix**

*Reading Strategy Questionnaire*

The following statements are about silent reading in English. Please indicate the level of your agreement or disagreement with each statement by circling the appropriate number:

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>neutral</th>
<th>agree</th>
<th>strongly agree</th>
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<tr>
<td>1</td>
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When reading silently in English, the things I do to read effective are to:

1. Focus on understanding the grammatical structures
2. Use a variety of context clues to understand the parts I do not understand
3. Read the first line of each paragraph to get the gist of the text
* 4. Mentally sound out parts of the words
5. Read each word and feel impulses to look up unknown words in the dictionary
6. Use my prior knowledge and experiences to understand the content of the text
7. Expect certain things from grasping the organization of the whole text
8. First glance through the text quickly to make sure that I know most of the words
9. Understand all details of the content
* 10. Underline the unknown words, phrases, sentences and translate them into Chinese as much as I can
11. Study the topic sentence and visualize a mental picture about the content of the text
12. Pay attention to the individual letters in guessing the meaning of unknown words
* 13. Break down each sentence into smaller parts in understanding its meaning
14. Recognize the differences between main points and supporting details
* 15. Understand the meaning of each word
* 16. Reread the problematic parts of the content several more times and ask myself related questions, then try to make some guesses
* 17. Relate information which comes next in the text to previous information in the text
* 18. Read slowly and carefully so that I will not miss any parts of the text
19. Skim the whole text first to grasp what the general idea is
20. Question the veracity and profundity of the objects and viewpoints presented by the author in the text
21. Pay attention to punctuation and transition words
22. Skip the parts I do not understand and keep reading to get the overall meaning

*Note.* *Strategies not taught by the classroom teacher.*
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