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英文閱讀策略的訓練應於英文閱讀課程之研究

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摘要

本研究在探討適當地應用不同英文閱讀策略的訓練，是否會有效率地提升科技大學學生的英文閱讀能力?並且進一步深入探討這些英文閱讀策略的介入，對於低、中、高不同閱讀能力的讀者，是否皆有效益。本研究共有九十六名科技大學的學生參與。在英文閱讀策略訓練開始之前，所有的參與者均接受閱讀測驗之前測，在所有參與者均接受了3個月，一共36小時的訓練課程後，再讓所有參與者再接受與前測題目相同之後測。本研究共介入了三種閱讀策略：分別是1.尋找文章主旨、2.推測、3.尋找文章中特有的訊息。根據成對樣本T測驗，結果顯示:閱讀策略的介入能提升科技大學應用外語系低、中學習階層者的閱讀能力。然而，對於高學習階層者的閱讀能力提升並無顯著效果。再者，在本研究所介入的三種英文閱讀策略中，「推測」對於全體低、中、高閱讀程度的學生而言，是最具成效的閱讀策略。

關鍵詞：英文閱讀訓練方法、閱讀能力、英文閱讀程度

1. Introduction

Strategies refer to the mental mechanism used to make a cognitive task easier to understand or perform. Reading strategies indicate how readers conceive of a reading task, how they make sense of what they read, and what they do when they don't understand[2]. The EFL (English as Foreign Language) curriculum and instruction require teachers to give readers explicit instruction in reading strategies that will teach them to be more skillful and strategic readers. Students become better readers when they know why they are reading. Teachers have to teach students to recognize when they are reading to be informed, reading for literacy experience, or reading to perform a task, and help them to select and apply appropriate strategies.

Since the late 1970's, a number of EFL and ESL (English as a Second Language) researchers have focused on the importance of the strategies EFL and ESL readers adopt while reading. Numerous empirical studies have been conducted on reading strategies and their relationships to successful and unsuccessful second language reading [2,13,15]. The research results have also demonstrated that strategy use is different in proficient and

non-proficient readers, and that more proficient readers tend to use a variety of strategies, and they adopt them in different methods. Besides this, skillful readers are differentiated from unskillful readers in the degree to which they can be selective or flexible in the choice of strategy for a specific purpose, and the degree to which they use cognitive and metacognitive strategies to monitor their reading progress[14].

Research on strategy has been an important role of educational research for two decades. A great deal of recent research results suggest that strategy intervention programs can be extremely effective ways of improving learning and self-regulation. Besides this, strategy instruction programs that emphasize the role of conditional knowledge are especially effective. One explanation is that conditional knowledge enables students to determine when and where to use a newly acquired strategy [12,14]. In recent years, a number of studies in L1 (First Language) and L2 (Second Language) have been conducted on reading strategy training instruction. The assumption of strategy training states that success in learning mainly depends on appreciate strategy training and that non-proficient learners can improve their learning by being trained to use more effective strategies[10,18]. Many studies have indicated that reading strategies can be taught to and learned by students, and strategy trainings help to improve student performance on comprehension exams[3,4,17].

The first objective of the present study was to explore whether the EFL reading strategy training methods were effective in improving University of Technology EFL students' reading comprehension ability. Because this study was conducted at a University of Technology English reading class where students' reading proficiency was mixed, the second objective of this study was to investigate how students with various reading proficiency levels are impacted by the strategy training. The specific research questions were as the followings:

1. Does strategy training increase University of Technology EFL students' reading proficiency?
2. What kinds of reading strategies have the most influence on the students' reading comprehension performances?

2.Literature Review

2.1. The Effects of Reading Comprehension Strategy Instruction on L2 Reading

A number of studies conducted on reading instruction and strategies showed that non-proficient L1 and L2 students did not use knowledge about strategies. The findings of these studies also indicated that strategy instruction with a concentration on comprehension monitoring could help less skilled readers overcome their difficulties and challenges in reading. The kinds of strategies instruction used in these studies mainly consisted of teacher modeling of the strategies followed by reader practice[4,6,8]. A study conducted by Carrell et al.[5] in the L2 context to investigate the combined effects of cognitive and metacognitive strategy instruction on reading comprehension showed that the combined effects of cognitive

and metacognitive strategy instruction were effective in enhancing reading comprehension.

Kern [14] stated that reading strategy uses were neither good nor bad. Most strategic readers differed from non-strategic readers in the degree to which they could be selective or flexible in the choice of strategy for a given purpose, and to the degree to which they used metacognitive strategies to monitor their reading processes. Carrell [5] also noted that unskilled readers would concentrate on decoding single vocabulary. In contrast to unskilled readers, skilled readers were found to skip non-significant words, while keeping the overall meaning of the text in mind. In other words, different reading proficiency readers have differentiated strategies to deal with the reading texts.

A recent study of reading comprehension looked into the effects of strategy instruction on proficient and non-proficient reading levels and also assessed readers' continuing use of strategies after the instruction [12]. A total of 201 students of English at a Japanese university participated in this study. Students were divided into two groups based on their English language proficiency; each group was then further separated into an experimental and a control group. The experimental groups received explicit reading strategy instruction over an eight-week training period. Instructed strategies included making inference, using selective attention, using imagery, and summarizing. English reading pre-and posttests were conducted at different intervals, and a reading strategy uses survey was completed during the reading task. The research results showed that the strategy instruction had an influence on the frequency of readers' use of the strategies only for the proficient level group. In the proficient level group, they tended to use more top-down processing. In contrast, the readers of non-proficient group were inclined to adopt more bottom-up processing.

According to another Ikeda and Takeuchi's [12] research study, they further investigated the effects of task difficulty in reading comprehension and use of strategies. ESL college readers completed two reading tasks (easy and difficult tasks); these scores were used to decide whether readers were either lower or higher proficiency level readers. Both of groups completed reading questionnaires regarding their strategy use for the two reading tasks. Interestingly, in terms of the more difficult reading, lower proficiency level readers used more strategies than their higher proficiency level peers. The researchers suggested that the difficult reading text was actually an obstacle for the higher proficiency readers, and thus they did not need to adopt various reading strategies.

Besides the above, explicit reading instruction plays an important role in learning strategy training and instruction. Explicit instruction includes the development of readers' awareness of reading strategies, teacher modeling of strategic methods, identifying the strategies by name, and providing opportunities for practice. However, in both L1 and L2 contexts researchers agree that explicit reading instruction is more effective than just asking readers to use one or more strategies and also increases metacognition , readers' thinking and learning processes[7,9]. In conclusion, explicit reading instruction can foster skilled and

unskilled readers'reading strategy uses and improve their reading comprehension.

3. Method

3.1 Subjects

The subjects consisted of 96 freshmen majoring in Applied Foreign Languages at a University of Technology in Taiwan. These subjects were enrolled in an English Vocabulary and Reading class in the spring semester of 2008. Since no placement exams were administered to the subjects, they differed in their English reading proficiency. In this study, a reading proficiency pre-test and post test were given to the subjects.

3.2 Instruments

A reading proficiency pre-test was conducted one day before the reading strategy training to divide the participants into three different reading proficiency levels. The pre-test included 20 multiple-choice items and consisted of 4 passages, ranging from 253 to 312 words in length. The topic of the four passages included "*Movie Stunt*", "*the Amazon Rainforest*", "*Color and Mood*", and "*the Great Barrier Reef* "[16]. Based on Bereiter and Bird's findings [1], easier texts do not require readers to use their reading strategies. Therefore, passages which were a little beyond their current reading levels were selected. Following each passage, there were 5 multiple choice questions: (a) one main idea question, (b) three detail questions, and (c) one reference question. Among the twenty items, four items are main idea questions, twelve detail questions, and four reference questions. The total test score was 100. Based on the results of the pre-test, students were classified into three reading proficiency groups: low, intermediate, and high. 31 students who received scores below 60 were classified into the low level group; 40 students between 60 and 80 points were classified into the intermediate level group; and 25 students who obtained above 80 points were classified into the high level group.

3.3 Data Collection

Three months after the pre-test, when the participants had finished the 36-hour-long training, all participants were again given the reading comprehension pre-test as a post-test. The reason for adopting exactly the same test for both pre- and post-testing was to assure an exact comparison. The three-month interval between administrations was long enough to control the short-term memory effect, because short-term memory only lasted for a short period.

3.4 Reading Materials and Training Procedure

The researcher selected four reading passages from their textbook. The researcher had never previously taught these texts to the students. The reading texts were chosen based on participants' presumed interest and for their readability.

The instructed strategies in this study consisted of three kinds of reading strategies: looking for the main ideas, making inference, and looking for the specific information in the

text. All of the reading lessons given in this study were conducted in the English Vocabulary and Reading course. Prior to the strategy training, the researcher explained and the class discussed why learning and practicing effective strategies is significant. In doing so, the participants were aware of the importance of using reading strategies when reading a text. In addition, the researcher clearly and explicitly explained the specific procedure of the training method and its advantages. In modeling these strategies, the researcher read aloud the portion of the passage, and while doing so, used the "think-aloud" technique. When using think alouds, researchers verbalized their thoughts while they are reading orally. Students will understand comprehension strategies better because they can see how the mind can respond to thinking through trouble spots and constructing meaning from text.

In addition, the researcher always tried to provide concrete examples in order to show the readers clearly which strategies were useful, how they were used, and why they were efficient. The remaining three reading texts were taught following the same procedure.

4.Results

Internal consistence reliability was calculated on the 96 participants' responses to the reading strategy questionnaire, and a Cronbach alpha coefficient of .85 was obtained. The main results were as the followings:

Research question one: Does strategy training increase University of Technology EFL students' reading proficiency? According to an paired-samples t test analysis, these results indicated that the strategy training increased University of Technology EFL students' reading proficiency in overall groups (high, intermediate, and low groups), $t(95)=5.802$, $p=.000$ with alpha set at .05 ($p<.05$) (See Table 1). In the low reading proficiency group, the result showed that the strategy training increased University of Technology EFL students' reading proficiency in this group, $t(30)=7.654$, $p=.000$ with alpha set at .05 ($p<.05$) (See Table 2). In the intermediate reading proficiency group, the result showed that the strategy training increased University of Technology EFL students' reading proficiency in this group, $t(39)=2.238$, $p=.031$ with alpha set at .05 ($p<.05$) (See Table 3). On the contrary, in the high reading proficiency group, the result showed that the strategy training did not increase University of Technology EFL students' reading proficiency in this group, because $t(24)=0.712$, $p=.478$ with alpha set at .05 ($p>05$) (See Table 4).

Table 1. Paired Samples Test (Reading Strategy Training Effect on Overall English Reading Proficiency Levels)

M	SD	t	df	*p* (2-tailed)
7.708	13.017	5.802	95	.000*

Note:* statistically significant at alpha =.05

Table 2. Paired Samples Test (Reading Strategy Training Effect on Low English Reading

Proficiency Level)

M	SD	t	df	*p* (2-tailed)
17.903	13.024	7.654	30	.000*

Note:* statistically significant at alpha =.05

Table 3. Paired Samples Test (Reading Strategy Training Effect on Intermediate English Reading Proficiency Level)

M	SD	t	df	*p* (2-tailed)
4.250	12.012	2.238	39	.031*

Note:* statistically significant at alpha =.05

Table 4. Paired Samples Test (Reading Strategy Training Effect on High English Reading Proficiency Level)

M	SD	t	df	*p* (2-tailed)
.600	4.163	.721	24	.478

Note:* statistically significant at alpha =.05

Research question 2: What kinds of reading strategies most influence the students' reading comprehension performances?

According to the paired-samples t test, the results indicated that all three (main idea, inference, and detail) training methods increased students' reading proficiency in overall groups. The "main idea" training method refers to "looking for the main idea" in the text. The "inference" training method refers to "making inference" from the text. The "detail" training method refers to "looking for the specific information" in the text. The training method of "looking for the main ideas" increased students' reading proficiency, with $t(95)=4.228$, $p=.000$ with alpha set at .05 ($p<.05$). The training method of "making inference" increased students' reading proficiency, $t(95)=7.402$, $p=.000$ with alpha set at .05 ($p<.05$). The training method of "looking for the specific information" increased students' reading proficiency, because $t(95)=4.248$, $p=.000$ with alpha set at .05 ($p<.05$). Also, the training method of "making inference" (M=1.23, SD=1.63) was the best training method in overall groups (See Table 5). To explore them specifically, the training method of "making inference" increased students' reading proficiency in the lower group, $t(30)=2.2997$, $p=.005$ with alpha set at .05 ($p<.05$). The training method of "looking for the specific information" increased students' reading proficiency in the lower group, $t(30)=7.348$, $p=.000$ with alpha set at .05 ($p<.05$). In other words, both "inference" and "detail" training methods increased students' reading proficiency in the lower group, and "detail"(M=1.42, SD=1.07) is the best training method in the lower group

(See Table 6). The training method of “looking for the main idea” increased students’ reading proficiency in the intermediate group, $t(39)=6.526$, $p=.000$ with alpha set at .05 ($p<.05$). The training method of “making inference” increased students’ reading proficiency in the intermediate group, $t(39)=6.910$, $p=.000$ with alpha set at .05 ($p<.05$). In other words, both training methods of “main idea” and “inference” increased students’ reading proficiency in the intermediate group. ”Inference” (M=1.53, SD=1.48) is the best training method in the intermediate group. “Detail”(M=0.67, SD=0.98) is the worst training method in the intermediate group (See Table 7). The “inferences” training method would increase students’ reading proficiency in the high group, because $t(24)=2.791$, $p=.010$ with alpha set at .05 ($p<.05$), and “inferences”(M=0.70, SD=1.25) is the best training method in the high group (See Table 8).

Table 5. Paired Samples Test (Different Training Methods’ Impact on Overall Group)

Training Methods	M	SD	t	df	*p*(2-tailed)
Main Idea	.716	1.65	4.228	95	.000*
Inference	1.23	1.63	7.402	95	.000*
Detail	.479	1.10	4.248	95	.000*

Note:* statistically significant at alpha =.05

Table 6. Paired Samples Test (Different Training Methods’ Impact on Low Reading Proficiency Group)

Training Methods	M	SD	t	df	*p* (2-tailed)
Main Idea	.040	1.78	.126	30	.901
Inference	.806	1.49	2.997	30	.005*
Detail	1.42	1.07	7.348	30	.000*

Note:* statistically significant at alpha =.05

Table 7. Paired Samples Test (Different Training Methods’ Impact on Intermediate Reading Proficiency Group)

Training Methods	M	SD	t	df	*p* (2-tailed)
Main Idea	1.53	1.48	6.526	39	.000*
Inference	1.90	1.74	6.910	39	.000*
Detail	0.67	.98	.436	39	.665

Note:* statistically significant at alpha =.05

Table 8. Paired Samples Test (Different Training Methods’ Impact on High Reading

Proficiency Group)

Training Methods	M	SD	t	df	*p*(2-tailed)
Main Idea	.25	1.19	1.044	24	.307
Inference	.70	1.25	2.791	24	.010*
Detail	.29	.35	-.408	24	.687

Note:* statistically significant at alpha =.05

5.Conclusion and Discussion

The main purpose of this study was to investigate the influence of strategy training on the reading ability of technology university EFL students. It also aimed to examine the differential impact of the strategy training on students with different reading proficiency levels. The findings of the study indicated that the English reading strategy training does improve Technical University students' reading proficiency. Furthermore, the present study demonstrated that the low and intermediate groups might benefit more from the training than the high groups. Finally, the study revealed that the students' inference ability was significantly enhanced across all three groups. These findings suggested that reading strategies can be taught and learned, and can help Technical University EFL students improve their reading comprehension ability.

Given that one of the most significant goals of training reading is to help students to develop as strategic and independent readers, some pedagogical suggestions and implications for EFL reading teachers can be made on the basis of the findings of the study. First, reading strategies could be trained and taught through direct instruction and think-aloud modeling. Second, EFL low and intermediate readers should be given intensive and direct strategy training for a long period. As Gaskins [11] states, strategy instruction without direct explanation and teacher's modeling for a short period could not have a long-term influence on students' reading proficiency to effectively help them become strategic readers. In conclusion, the results of the study suggest that University of Technology EFL students would benefit from explicit and direct reading strategy training.

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The Study of Training EFL Reading Strategies in English Reading Class

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Abstract

The main objectives of the present study were to explore whether the various EFL reading strategy training methods were effective in improving University of Technology EFL students' reading comprehension abilities and to investigate how students with various English reading proficiencies (high, intermediate, and low levels) were impacted by the training methods. The test subjects were 96 freshmen majoring in Applied Foreign Languages at a University of Technology. One day before the reading strategy training, all participants were given a reading comprehension pre-test. Three months later, when the participants finished the 36-hour-long training, all participants were given the same reading comprehension test as a post-test. The trained strategies in this study consisted of three kinds of reading strategies: looking for the main ideas, making inferences, and looking for specific information in the text. According to the paired-samples t test analyses, the result has shown that the reading strategy training has increased University of Technology EFL students' reading proficiency in the low and intermediate reading proficiency groups. On a contrary, the result has shown that the strategy training would not increase students' reading proficiency in the high reading proficiency group. Among the three training methods, the training method of "making inferences" was the best teaching method in overall groups.

Keywords: EFL reading strategy training methods, reading comprehension abilities, English reading proficiency