Effects of English Proficiency and Gender on Collaborative Strategic Reading

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Introduction

The effectiveness of Collaborative Strategic Reading (CSR) in facilitating students' reading comprehension has been highly commended in the literature (e.g., Klingner & Vaughn, 2000; Klingner, Vaughn, Arguelles, Hughes, & Leftwich, 2004; Klingner, Vaughn, & Schumm, 1998; Vaughn, Klingner, & Bryant, 2001). Basically, CSR is designed to facilitate reading comprehension, in particular, for students with reading, learning, or behavior problems (Klingner & Vaughn, 1996). It integrates two main instructional approaches: reciprocal teaching and cooperative learning (CL). This strategic instruction is meant to teach students techniques to comprehend expository texts, to meet diverse learning needs in the classroom, and to provide interaction opportunities in the context of multi-ability groups (Klingner et al., 2004; Vaughn et al., 2001).

CSR encompasses four reading strategies. It usually works with students of differing abilities in small cooperative groups to assist one another in utilizing the strategies to comprehend the text. These strategies associated with CSR instruction (Klingner & Vaughn, 1998, 1999) are described as follows:

(a) *Preview* (Brainstorm & Predict): This strategy aims to activate students' background knowledge about the topic. In this pre-reading stage, students present their ideas, discuss their prior knowledge, and make predictions.

(b) Click and clunk (Locate problems): Click refers to portions of the text that make sense to the reader, and clunk means comprehension breakdowns. In this reading stage, students monitor their reading process and locate their own problems from the given text.

(c) *Get the gist* (Identify the main idea): While reading, students learn to identify the most important idea from the assigned text. This strategy helps improve their understanding and memory of what they have read.

(d) *Wrap-up* (Integrate the text): In the post-reading stage, students review key ideas and learn to formulate questions that might be asked by the teacher. Five wh- and one how questions are involved in the final consolidating process.

In the CSR instruction, the four strategies are first taught to the class as a whole. Through the Think-aloud Method, the teacher explains and models each strategy and provides his/her students with opportunities to demonstrate it in class. When they are familiar with the strategies, students are divided into cooperative groups to practice them with different expository texts. At this time, the teacher shifted the focus on to monitoring the progress of the group studies and providing ongoing assistance as needed. Obviously, strategies like CSR help promote interpersonal interactions and learning autonomy. Teaching students how to use strategies should be a priority in a reading classroom (Chamot & O'Malley, 1994; Oxford, 1990). Unfortunately, EFL teachers in Taiwan mainly use GTM (Grammar Translation Method) to teach English reading (Chang, 2004; Liang, 1996; Tsao, 1992) and other instructional approaches are often overlooked. Vocabulary decoding, grammar analysis and bottom-up processing characterize the traditional teacher-led instruction of GTM here. As well-described by Liang (1996), a local educator and researcher, our students "learn everything about the language but not language itself" (p. 75).

Though CSR research has consistently yielded favorable instructional effects in the ESL literature to date (e.g., Klingner & Vaughn, 2000; Klingner et al., 2004; Klingner et al., 1998; Vaughn et al., 2001), very few studies have been conducted in the EFL context (e.g., Huang, 2004; Lee, 2003). The effectiveness of CSR with EFL learners still remains undetermined. Even worse, inconsistent findings were produced in the scant literature. Huang (2004) probed the effect of an Inquiry-Based CSR instruction with senior high school EFL students and found that there was no significant difference in the reading achievement for the CSR instruction and conventional teacher-led instruction. In contrast, Lee (2003) detected successful CSR effect with younger EFL students (i.e., fifth graders) in studying storybooks and lyrics. Due to the limited research with the inconsistent CSR findings in the EFL context, the present study intended to compare the effects of CSR and GTM to add credence to the existing literature.

In addition, the effects of English proficiency and gender on CSR instruction have not been well-explored, in particular, in the EFL classroom. To date, the

effect of English proficiency on the effectiveness of CSR has not been confirmed yet. Klingner et al. (2004) reported that high- and mid-achievers benefited more from CSR than from conventional teacher-centered instruction; however, Klingner et al. (1998) revealed that high-, mid- and low-achievers did not particularly benefit from either teacher-led or CSR instruction. Unfortunately, the specific effect of gender on the effectiveness of CSR has never been explored yet although previous literature has indicated gender affects strategy use (e.g., Gu, 2002; Oxford & Nyikos, 1989; Phakiti, 2003; Yu, 2006). It calls for further research to detect CSR effect in relation to individual differences in proficiency and gender.

The present study aimed to determine the effects of proficiency and gender on the effectiveness of CSR instruction. More specifically, there were four main purposes of this study: 1) to explore the effect of Collaborative Strategic Reading (CSR) in contrast to that of conventional Grammar Translation Method (GTM) on the reading performance of junior high school students; 2) to examine the effect of English proficiency (high-, mid- and low-ability) on the instructional benefit of CSR; 3) to probe the effect of gender (male vs. female) on the instructional benefit of CSR, and 4) to find out students' general perceptions of CSR instruction.

With the purposes of study in mind, several predictions were made accordingly. Since strategy instruction had generally produced successful training effects (e.g., Alfassi, 2004; Deshler & Schumaker, 1993; Gajria, Jitendra, Sood, & Sacks, 2007; Klingner & Vaughn, 1996; Schunk & Rice, 1992), it was thus predicted that the CSR group would significantly outperform the conventional GTM group. As for the ability effect, CSR was originally developed for students with limited English proficiency (LEP) with a goal to promote their reading comprehension (Klingner & Vaughn, 2000; Klingner et al., 1998; Klingner et al., 2004; Vaughn & Klingner, 1999; Vaughn et al., 2001); therefore, it was anticipated that low-achievers would benefit more from the CSR instruction than high- or mid-achievers. When the gender effect was concerned, it was predicted that females would benefit more from the CSR instruction than males because female learners had been found better strategic users than their male counterparts (e.g., Gu, 2002; Oxford & Nyikos, 1989; Phakiti, 2003; Yu, 2006). Lastly, positive attitudes toward CSR instruction would be expected because learners were generally motivated by strategy training in the previous literature (e.g. C. F. Chen, 2005; M. L. Chen, 2004; Chien, 2004; Ghaith & Bouzeineddine, 2003; Huang, 2002; Liao, 2005; Vaughn et al., 2001).

Review of the Literature

Collaborative Strategic Reading (CSR) is greatly associated with cooperative learning (CL). It takes advantages of CL and integrates it into a reading strategy instruction. John Dewey, an American educator in the 20th century and antecedent of CL, believed that students could learn better in the context of interpersonal communication and group involvement (Dewey, 1966). The philosophy of building cooperation in learning into regular classrooms on a systematic basis has been highly advocated ever since. In addition to cooperative learning, CSR is tied to reciprocal teaching. CSR was first implemented on 26 seventh and eighth graders with learning disability being instructed with CL and reciprocal teaching in the pioneer work of Klingner and Vaughn (1996), and significant improvement in reading comprehension was found in these low-achieving readers. Reciprocal teaching, originally proposed by Palincsar and Brown (1984), aimed to facilitate poor readers' reading comprehension via certain monitoring and fostering activities. Four particular reading strategies involved in reciprocal teaching are summarizing, questioning, clarifying and predicting. Students are required to practice and model the four strategies in the first place and then take turns to be the "teacher" to lead the discussion. Previous research has established the effectiveness of reciprocal teaching (e.g., Palincsar & Brown, 1984; Rosenshine & Meister, 1994).

A great number of studies have explored the effects of CL instruction in relation to four language skills and student achievement (e.g., C. F. Chen, 2005; C. Y. Chen, 2004; Chen, 1999; M. L. Chen, 2005; Chien, 2004; Huang, 2007; Liang, 2003; Liao, 2005; Sachs, Candlin, Rose, & Shum, 2003; Slavin, 1983; Stevens & Slavin, 1995). They have produced mixed findings in the comparison of student-centered CL instruction and conventional teacher-led instruction. Particularly in the domain of reading, some studies have reported favorable CL effects (e.g., Chen, 1999; M. L. Chen, 2004; Huang, 2007; Slavin, 1983; Stevens & Slavin, 1995). Students in the CL group have significantly higher achievement in English reading than their counterparts in the control group with conventional instruction. Other studies have, however, found that CL instruction and traditional instruction have produced equivalent effects in teaching English reading (e.g., C. F. Chen, 2005; M. L. Chen, 2005; Chien, 2004). Generally, research on CL reading has generated inconsistent findings in the ESL environment as well as in the EFL context.

Regardless of the mixed CL effects, Klingner and Vaughn pioneered a series of CSR studies with subjects of different age levels and cultural backgrounds, and they consistently produced positive outcomes. These studies generally indicated that native English learners or ESL learners made significant progress in understanding both text and learning content with CSR instruction (e.g., Kim, Vaughn, Klingner, Woodruff, Reutebuch, & Kouzekanani, 2006; Klingner & Bryant, 2001; Klingner & Vaughn, 2000; Klingner et al., 1998; Vaughn et al., 2004). However, inconsistent CSR effects were detected in the context of EFL. As mentioned previously, Lee (2003) detected a successful CSR effect with 5th graders while Huang (2004) found an equivalent CSR effect to GTM with senior high school learners. More research is needed to confirm the effect of CSR in the EFL reading class.

As for the effect of differing English proficiency on the effectiveness of CSR, Klingner et al. (2004) reported that average- and high achieving students in CSR instruction demonstrated greater gains of reading comprehension than low-achieving students. Ten fifth-grade classes with a total of 221 students from five elementary schools in the south-eastern United States participated in the study. Five intact classes were assigned to a CSR condition, and the other five, a control condition with conventional teacher-led instruction. All of the students in both conditions engaged in social studies and were instructed for 2 semesters. Comprehension tests and prompted Think-Aloud Strategy interviews were used to assess these students' achievement from instruction. The results indicated that the CSR students demonstrated greater improvement in reading comprehension than the control students. Particularly, CSR instruction benefited high- and average-learners more than low-achieving ones. CSR superiority was not found in all learners, but in specific ability groups. In contrast, Klingner et al. (1998) found high-, average- and low-achieving fourth graders did not benefit particularly from either teacher-led or CSR instruction. CSR superiority was not detected in any ability group in this case. Such inconsistencies called for further studies on the benefit effect of CSR on readers of differing proficiency.

In sum, regardless of successful CSR effect found in native English speakers and ESL learners, inconsistent CSR findings have been documented in the scant literature with EFL readers. In addition, the relationship between CSR instruction and student individual differences in ability has rarely been explored. Even worse, gender effect has never even been probed in the context of CSR strategy instruction.

Further empirical studies on CSR are very necessary to enlighten the issue of CSR in relation to individual differences in English proficiency and gender.

Methodology

Basically, this empirical study incorporated a static-group comparison design with additional post-experimental interviews to validate the results. An overview of the entire experiment is presented in Table 1.

Table 1
Design of the Study

the experimental group (n = 39)	the control group (n = 39)
Collaborative Strategic Reading	Grammar Translation Method
Six periods of class over a course of two weeks	Same
Assessed by a written test of five expository passages	Same
Interviews on individual participants	None

Subjects

Two intact classes of 78 eighth graders at one junior high school in southern Taiwan were recruited for the study. They had been instructed by the same English teacher for one and a half years. These two classes were randomly assigned to a CSR experimental group and a GTM control group with almost equivalent numbers of female and male students (M = 19, F = 20) in each group. The students had never been instructed with CSR before.

In addition, English proficiency between the two groups was found to be equivalent via a statistical analysis on the students' English term grades of the preceding semester (t = .01, p = .99> .05). This statistic suggested homogeneity of the two groups in their English performance prior to the experiment. Based on the grades, the top-one-third students were classified as high-achievers, and the mid- and bottom-one-third, as mid- and low-achievers in their respective classes. The splitting points of the three levels on both groups were 84 and 57. The subjects

were unaware of such classifications. Note that grouping students in the experimental CSR instruction involved an ability-grouping technique with two high-achievers, two mid-achievers and two low-achievers in a small cooperative group. The number of male and female learners was almost equivalent in the group. One of the two high-achievers would be chosen to assume the role of group leader. The heterogeneity of grouping with mixed ability levels would maximize the effect of peer tutoring (Chen & Chu, 2004; Liang, 1996; Naughton, 2006).

Instruments

Five primary instruments were used in this study: 1) learning materials, 2) cue cards, 3) a CSR learning log, 4) an assessment test, and 5) an oral interview form for the experimental group. They were carefully reviewed by three professors specializing in the field of English teaching and learning to ensure the content validity of these materials.

Learning Materials. Five expository passages were selected to be studied in both groups during the 2-week instruction. They were drawn from two reading books edited by Renshaw (2007) and Shy, Juang, and Guo (2008). Each passage consisted of one single paragraph within 130 – 150 words. The students had never learned these passages before. When one passage was studied, four questions in the form of multiple choice were given: (1) What does _____ (a new word or a keyword) mean?; (2) What does _____ (a pronoun) refer to in the passage?; (3) Which statement is true/false according to the passage?; (4) What is the main idea of the passage?

Cue Cards. In the CSR instruction, cue cards were used to guide the assigned role-playing in a small group. Each member assumed a constant role in the group. The six distinct roles in each CSR group included: leader, clunk expert, gist expert, time keeper, encourager, and announcer. Each role came with a corresponding cue card that outlined the procedure to be followed in the small group. The four strategic stages of CSR (i.e., preview, click and clunk, get the gist and wrap up) were integrated into the group discussion procedure. Generally, the six roles were explicitly taught by the instructor and demonstrated by a model group with the cue cards in Chinese for the first two periods of class. A sample of a leader cue card is presented in Figure 1.

Pre-reading	During-reading	Post-reading
Preview (brainstorm and predict) S: Time keeper, please remind us of the allocating time for each stage. S: We know that today's topic is _____. S: Who would like to share your ideas about the topic? S: Now let's predict. Look at the title, pictures, and the headings, and think about what we might learn today. Write your ideas in your learning logs. S: Who would like to share the ideas?	**Read-aloud** S: Let's take turns to read the passage. **Click and clunk** (locate problems) S: Do you understand what we have just read? If you don't, write down your clunks in your learning logs. S: (If someone has a clunk): Clunk expert, please help us out. **Get the gist** (identify the main idea) S: Gist expert, please in charge of this. S: Now we will go around the group and each tells about the main idea in your own words.	**Wrap-up** (integrate the text) S: Now let's think of some questions from what we just read. Remember to start your questions with who, when, what, where, why, & how, and write them down in your logs. S: Who would like to share the questions? S: Let's write down what we have learned from the passage in the log. S: Announcer, could you summarize what we have got today? **Compliments and suggestions** S: Encourager, please tell us two things we did really well as a group today. S: Is there anything that would help us do even better next time?

Figure 1. CSR Leader Cue Card

Adapted from Klingner and Vaughn (1999, p. 744)

CSR Learning Log. During the process of group discussion, the CSR students were required to record their progress of learning a certain passage in a leaning log.

It was an excellent way to promote active group participation and to ensure each student really took the responsibility for his/her own learning with the instructed strategies. A CSR learning log is given in Figure 2.

Today's Topic: _____ **Date:** _____

Pre-reading:	During-reading:	Post-reading:
Preview	**Clunks**	**Wrap up**
What do I already know about the topic? _____ _____ _____ _____ _____ _____	List the problems I have with the passage (if any). 1. 2. 3.	List "wh-questions" for the important ideas in the passage. Who_____ When_____ What_____ Where_____ Why_____ How_____
What do I want to learn? or What do I predict I will learn? _____ _____ _____ _____		What have I learned from the passage? _____ _____ _____ _____

Figure 2. CSR Learning Log
Adapted from Klingner & Vaughn (1999, p. 291)

Assessment Test. Five expository passages with 20 multiple-choice questions were selected to assess the reading progress in both groups. They were of equivalent difficulty level as those used during the instruction. The same types of questions as those used during the exercises were constructed. Generally, four questions were set up for each passage with each question accounting for five points in the test. Kuder-Richardson 20 Procedure was applied to examine the internal consistency of the test. The test reliability (r = .85) was found to be satisfactory.

Oral Interviews on the Experimental Group. Oral interviews concerning attitudes towards CSR instruction were held on 12 selected subjects of four high-,

four mid-, and four low-achievers. They were conducted in Chinese. Four interview questions were given and all of them were semi-structured to elicit more flexible responses. These interview questions were as follows:

1) Do you like to learn English with the method of CSR? Why or why not?
2) Do you think CSR facilitates the comprehension of the passages?
3) Did you encounter any difficulties during the group discussion with the CSR strategy?
4) Which teaching method do you prefer, CSR or conventional GTM? Why?

Procedures

When the permission of conducting an experimental study was obtained from the school authorities of the participants, two intact classes were assigned randomly to an experimental group and a control group. Five expository texts were taught to both groups in six 45-minute classes over a course of two weeks. The experimental group received the CSR instruction, the control group, the conventional Grammar Translation Method. The control group was taught prior to the experimental group by one English teacher on the same days during the entire instructional period. The typical teaching progress of both groups for each class is presented in Table 2. Basically, each 45-minute instruction was broken into three stages (i.e., preparatory, instructing, and evaluating) to study an expository passage. Immediately after the 2-week instruction, a test consisting of five new passages was administered to both groups to assess the students' reading achievement. Finally, to further examine student responses to the CSR instruction, oral interviews were conducted after the assessment test. Twelve students of differing ability levels received such interviews individually.

Table 2

Stages of a Typical Instruction for Both Groups

Stage	**Experimental group (CSR)**	**Control group (GTM)**	**Time** (mins)
Preparatory Stage	Review the 4 strategies of CSR	Provide prior knowledge of the new reading passage	5
Instructing Stage	1. Group discussion: (1) Preview (2) Click and clunk (3) Get the gist (4) Wrap up 2. Review activities: Orally present group products	1. Teach vocabulary 2. Analyze the sentence structures and study the involved grammar 3. Translate the text into Chinese 4. Read the whole passage aloud 5. Review important grammar 6. Summarize the passage	30
Evaluating Stage	4 multiple-choice questions for the studied passage.	same	10

Data Analyses

Two experienced English teachers were invited to grade the assessment test. The reliability coefficient (r = 1.0, $p = .000 < .01$) found in the study indicated a full scoring consistency between the two judges. The scores were later keyed in a computer file for further statistical analyses via the SPSS program. To probe the effect of CSR in contrast to a conventional GTM on comprehending expository texts, an Independent Samples *t*-test was used to compare the performance of the two conditions on the assessment test. To probe the instructional benefit effect involving English proficiency, three Independent Samples *t*-tests were conducted on the three-ability levels (high, mid, low) for their respective performances in the two instructions. Similarly, another two Independent Samples *t*-tests were executed to determine the instructional benefit effect involving gender (males and females).

The level of statistical significance for all of the tests was set at .05. In addition to these statistical tests, the students' responses regarding CSR instruction in the interviews were recorded and transcribed verbatim for further analyses.

Results

Effects of Two Teaching Methods. For the assessment test, the mean of the CSR group was 58.08 (SD = 24.00) and that of the GTM group, 46.41(SD = 24.22). An Independent Samples *t*-test was then executed, and a significant mean difference in the two groups was found (t (76) = 2.14, p = .036 < .05). The subjects with CSR instruction significantly outperformed those with conventional GTM method on the test. Namely, CSR method significantly promoted junior high school students' comprehension of English expository texts.

Effect of English Proficiency on Teaching Approach. As shown in Table 3, the means of the assessment test in the three CSR ability groups were all greater than those in the GTM contrastive groups. An Independent Samples *t*-test was then conducted to examine the mean difference in the two groups for each proficiency level. It was found that only the mean difference of the low-achieving level reached statistical significance (t (25) = 3.04, p = .006 < .05), as indicated in Table 4. The low-achievers in the CSR group performed significantly better than those in the GTM group. This suggested that low-achieving students benefited more from CSR instruction than from GTM instruction. However, such CSR instructional advantage was not found in their high- or mid-achieving counterparts. A significant mean difference in the two instructional groups was not detected in either of the two proficiency levels (high-achievers: t (23) = .20, p = .841 > .05; mid-achievers: t (24) = 1.54, p = .137 > .05). This implied that the two teaching approaches had equivalent effects in teaching high- or mid-achievers; no particular instructional superiority was thus found for these learners. A profile plot of teaching method by English proficiency is presented in Figure 3.

To sum up, low-ability learners with CSR instruction significantly outperformed those with GTM instruction, while no significant instructional difference was found in high- or mid-ability learners. It could be concluded that low-achievers significantly benefited more from CSR than high- or mid-achievers.

Table 3

Descriptive Statistics of Assessment Test in Two Groups (by English Proficiency)

Research Groups	N	M	SD
CSR	High = 13	71.15	25.83
	Mid = 13	58.08	20.48
	Low = 13	45.00	19.15
GTM	High = 12	69.17	22.85
	Mid = 13	47.31	14.81
	Low = 14	26.07	12.12

Table 4

Independent Samples *t*-tests on the Test Performance of Two Groups (by English Proficiency)

Levels	t	df	Sig.
High	.20	23	.841
Mid	1.54	24	.137
Low	3.04	25	.006*

*$p < .05$.

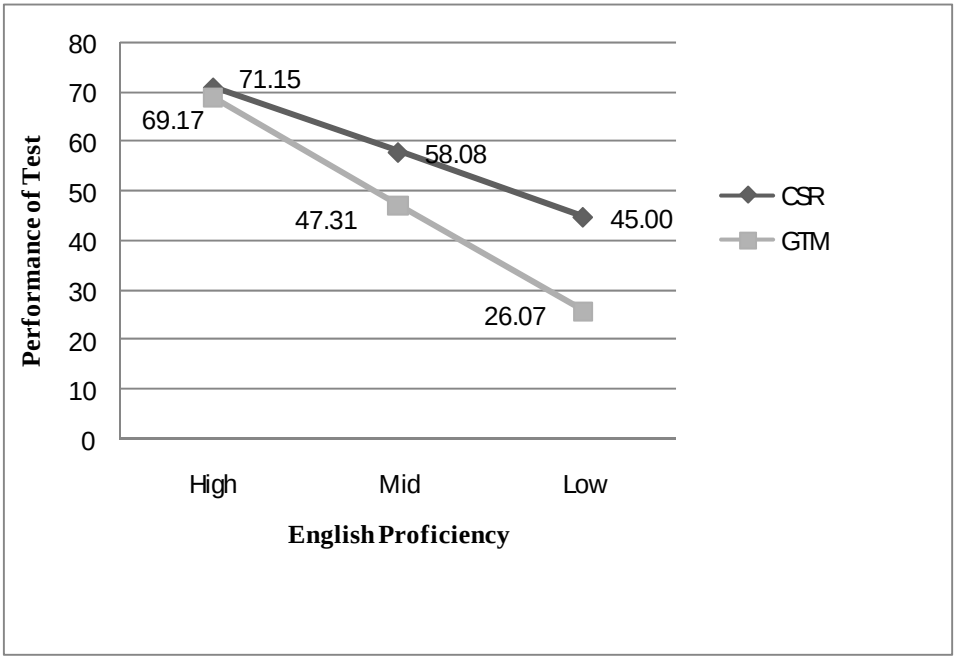

Figure 3. Profile Plot of Teaching Method X English Proficiency

Effect of Gender on Teaching Approach. Table 5 lists the mean scores and

standard deviations of the male and female students' performance on the assessment test in both of the CSR and GTM groups. To detect instructional advantage involving gender, an Independent Samples *t*-test was executed to examine if there was a significant mean difference in the male learners in both groups, and another *t*-test, in the female learners in both groups. As shown in Table 6, a significant difference was detected between the two male groups on the assessment test (t (36) = 2.39, p = .022 < .05). That is, the male learners under CSR (M = 59.47) significantly outperformed their male counterparts under GTM (M = 40.79), which suggested the male learners benefited more from the innovative CSR than from the conventional GTM. However, no such significant mean difference was found in the female learners of the two groups (t (38) = .66, p = .515 > .05), which suggested females did not particularly benefit from either of the two approaches. In sum, male learners significantly benefited more from CSR while such instructional superiority was not found in female learners in the present study. Namely, males significantly benefited more from CSR instruction than females. A profile plot of teaching method by gender is presented in Figure 4.

Table 5

Descriptive Statistics of Assessment Test in Two Groups (by Gender)

Research Groups	N	M	SD
CSR	Male = 19	59.47	26.08
	Female = 20	56.75	22.44
GTM	Male = 19	40.79	22.00
	Female = 20	51.75	25.56

Table 6

Independent Samples *t*-tests on the Test Performance of Two Groups (by Gender)

Gender	t	df	Sig.
Male	2.39	36	.022*
Female	.66	38	.515

*p < .05.

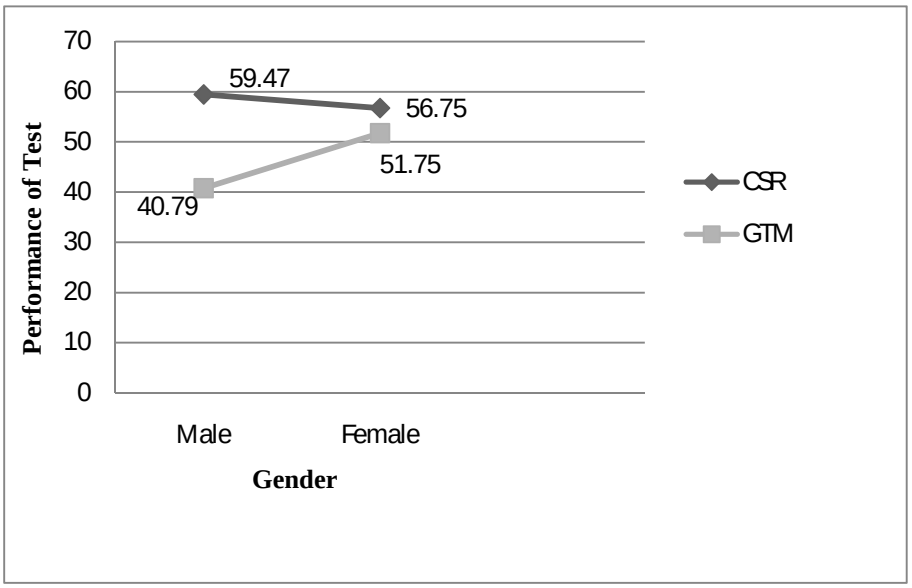

Figure 4. Profile Plot of Teaching Method X Gender

Perceptions of CSR. Immediately after the assessment test, individual interviews were held on 12 CSR learners (M = 6, F = 6) with 4 in each ability group to probe their perceptions of the CSR instruction. Generally, a great part of the students (9 out of 12 = 75%) perceived the efficacy of CSR in a positive way. Particularly, 100% of the males reported positive attitudes toward the instruction in contrast to the relatively lower percentage in the females (50%) on the CSR preference. Such finding complemented the result of CSR superiority in males only; males were more motivated by CSR than females. This implied motivation of learning might account for such gender difference in CSR instructional benefit. Differences in CSR preference were also detected in the three ability groups (high-achievers: 75%; mid-achievers: 50%; low-achievers: 100%). This might well explain the finding of CSR benefit particularly on the low-achievers.

More specifically, the students with positive CSR attitudes reported that they were excited about the new learning experience with the approach because they could discuss the reading content with their peers, come out with their own learning products, and enjoy the supportive learning atmosphere. One of the male students stated, “I like CSR better. I feel comfortable to ask my group members the questions I encounter, and we try to solve the problems by applying the learning strategies we have practiced in the group.” (我覺得英語合作閱讀比較好。我比較敢問同學我不懂的地方，大家也能用課堂上常常練習的策略來解決困難。) Generally, these students indicated that CSR instruction could facilitate their reading comprehension

and thus enhance their motivation toward English learning. On the other hand, the students who took the neutral or negative attitudes toward CSR regarded it as a boring and troublesome method, which distracted them from their own learning. One female student remarked, "I think it is too noisy during the discussion. We spend most of the time chatting instead of studying the given material. The whole class is often in a mess, which produces unfavorable learning effect." (我覺得討論過程中還滿吵的，大家幾乎都在聊天而沒有在討論，全班散成一團，學習成果不太好。) Another female student further reported that she liked to study English alone rather than studying with her peers. Some other difficulties took place during the group discussion including a lack of sufficient cooperation in the group study and being unable to carry out the assigned roles as desired. Even so, positive attitudes toward the CSR instruction were generally found in the interviewees. These students preferred CSR to GTM.

Discussion

Effects of Two Teaching Methods. There was a significant difference between the CSR and GTM groups. Students with the CSR instruction outperformed their counterparts with the GTM instruction, which uncovered that CSR had better effects in teaching English expository texts to junior high school students than GTM. In general, teaching students to use strategies often produces positive results. Empirical evidence suggests that reading comprehension strategies help promote academic achievement (Anderson & Roit, 1993; Klingner & Vaughn, 1996; Schunk & Rice, 1993). This result of CSR superiority over GTM corresponded with those of Kim et al. (2006), Klingner et al. (2001) and Lee (2003), but contradicted those of Huang (2004), in which CSR and the traditional teaching approach had equivalent effects in teaching reading. This inconsistency might be due to that the subjects recruited in Huang (2004) were simply female students of senior high school. Age and gender differences might account for the inconsistent findings detected in Huang's study and the current study.

In addition, the result of CSR superiority was consistent with previous findings on CL advantages in teaching English reading (e.g., Chen, 1999; Chen, 2004; Huang, 2007; Slavin, 1983; Stevens & Slavin, 1995). Most of these CSR and CL findings directed toward a notion that an organized, strategic way of studying materials

together in small groups could enhance students' reading comprehension. Generally, CSR provides a feasible access to a student-centered instructional approach in EFL reading.

Effect of English Proficiency on teaching approach. The present study found that CSR low-achievers performed significantly better than their GTM low-achieving counterparts. Low-achieving students benefited more from the CSR instruction than from the conventional teacher-led approach. The result matched what was predicted earlier. However, no such CSR instructional superiority on high- or mid- achieving students was detected. These findings were consistent with the theoretical intention of CSR, which was originally designed to facilitate the reading comprehension of students with limited English proficiency. Note that these results, however, conflicted with what was found in Klingner et al. (2004) that high- and average- achievers in the CSR instruction demonstrated greater gains of reading comprehension than their counterparts in the traditional teacher-centered instruction, and in Klingner et al. (1998), which reported no specific CSR instructional superiority was found among three-ability groups.

The inconsistencies in findings can be discussed from three dimensions. First, the participants in Klingner et al. (2004) and Klingner et al. (1998) learned English as the first or second language; the subjects in the present study were completely EFL learners. Cultural and linguistic diversities might account for the inconsistent findings. Second, in the CSR instruction, four specific reading strategies were taught explicitly, which allowed the students to utilize their prior knowledge, to decode unknown words, to monitor the progress of their reading comprehension, and to process new information. Low-achievers are usually unaware of their own cognitive process or particular task demands in the process of reading (Deshler & Schumaker, 1993; Gajria et al., 2007). Through continuous reading strategy training, less-proficient learners in the CSR group were cultivated to be more independent and effective readers compared to their counterparts in the GTM group. Third, 100% of low-achievers reported positive attitudes toward CSR in contrast to 75% of high-achievers and 50% of mid-achievers. This implied motivation could account for such ability differences in CSR instructional privilege for less-proficient learners. In sum, although CSR instructional superiority was only found in low-achievers, CSR high- or mid-achievers still performed (though insignificantly) better than their contrastive GTM ability groups. CSR significantly benefited less

proficient learners, and more importantly, did not sacrifice more proficient learners.

Effect of Gender on Teaching Approach. Male subjects in the CSR group significantly outperformed their male counterparts in the GTM group. It suggested male learners benefited more from CSR instruction than from GTM instruction. This finding concurred with what was found in Chen (2004), in which male subjects in the CL group performed better than those in the GTM group. In contrast, no significant difference was detected for female performances in both instructional groups in this study; there was no such CSR instructional superiority on female learners. This result was somehow different from what had been predicted that females would benefit from CSR instruction more than males. Although females have been found to be better strategic users in language learning (Gu, 2002; Oxford & Nyikos, 1989), males perceive themselves as active learning roles and tend to dominate the interaction in small cooperative learning groups (Ding & Harskamp, 2006; Ghaith & Bouzeineddine, 2003). Namely, the performance of females could be restricted or moderated by learning activities that require social interactions with the opposite sex (Ding & Harskamp, 2006; Ghaith & Bouzeineddine, 2003; Goetz, 1978). In contrast to female students' sensitivity to partner gender and individual learning tendency, male students can profit from mixed-gender cooperation (Ding & Harskamp, 2006). Moreover, in the interviews, all of the male interviewees reported positive attitudes toward CSR, and only half of the female interviewees revealed such instructional preference. Males were more motivated to learn with CSR. This interview finding could complement what was found in the gender effect. Generally, males' being more active and motivated in the group discussion might lead to this specific CSR instructional benefit.

Perceptions of CSR. Generally, a major part of students in the CSR group (75%) had preference for CSR. This interview result coincided with what was found in M. L. Chen (2004), Chien (2004), Ghaith and Bouzeineeddline (2003), Huang, (2002), Liao (2005), Lu (2003), and Vaughn et al. (2001), in which a great majority (male learners and/or low-achievers, in particular) perceived the efficacy of CSR or CL in a positive way. Interestingly, this study also detected CSR instructional superiority in the performance of male students and less-proficient learners. This suggested motivation was somehow associated with students' performance; CSR enhanced male students' and low-achievers' motivation of learning which, in turn, promoted their reading performance, or vice versa.

Generally speaking, the CSR students were found willing to ask for help when encountering difficulties and enjoyed the atmosphere of cooperating with their peers. However, certain problems were detected during the CSR instruction and reconfirmed in the post-experimental interviews with the learners. Confusions in classroom order and also in the practice of carrying out the assigned roles were the most challenging among them. The EFL teachers who are interested in CSR should be cautious about these problems.

Pedagogical Implications

The present study produced favorable results toward CSR instruction and the interviews validated these results. CSR appears to be feasible in EFL classrooms, especially for enhancing students' English reading comprehension and positive attitudes toward strategy training and cooperation in learning. It is thus recommended that CSR may serve as an alternative approach, in particular, in teaching English expository texts.

Traditional reading lecturing neglects interpersonal relations in learning. In regular reading classes in Taiwan, nonnative EFL teachers devote a great portion of class time to vocabulary repetition, grammar explanation, and word-to-word translation. The curriculum is exam-oriented and competitions among students are high. Social interactions with others and autonomous learning hardly take place in such classrooms. As a result, this teacher-centered practice has brought about bi-modal distribution of English grades in Junior High School Academic Proficiency Test (Chou, 2002) and students' incapability of independent reading (Liang, 1996; Tsao, 1992). In contrast, CSR provides a social framework for students to practice reading strategies and to comprehend texts in small groups, more importantly, in a less-threatening, more-autonomous atmosphere. It creates a context of learning autonomy with the strategy training for EFL readers. CSR, therefore, is worth implementing in the EFL classrooms.

Furthermore, the current study found that low-achievers and male learners significantly benefited more from CSR than from GTM. The results of interviews also revealed that male learners enjoyed group works and thus their motivation of learning was enhanced, which might well explain their greatly improved achievement outcomes. On the other hand, the reading strategy training and

interactions with group members also improved low-achievers' ability of reading expository texts. Systematic and continuous strategy training is highly recommended for these less proficient readers because they do not spontaneously develop essential skills (Alfassi, 2004; Deshler & Schumaker, 1993; Schunk & Rice, 1992). More emphasis should be given to the developing of reading strategies for the low-achieving group. Although high- and mid-achievers and female learners did not significantly benefit from CSR, CSR instruction did not sacrifice or dilute their performance. For high- or mid-achievers, both GTM and CSR could be applied alternatively in class. As to the gender factor, teachers are advised to be more aware of the differences in language learning that exist between male and female students (Ding & Harskamp, 2006; Ghaith & Bouzeineddine, 2003; Gu, 2002; Oxford & Nyikos, 1989). Besides, to promote the theory and practice of CSR, in-service teacher training programs incorporating such teaching approach should be available for all English teachers.

CSR is not an "all or nothing" approach (Klingner et al., 1998). Instead, it should be an additional tool for teachers in taking care of students' needs and diversity. CSR could not replace GTM or other teacher-facilitated instructions. Varying teaching approaches based on students' needs could maximize students' performance in language learning.

Suggestions for Future Research

With regard to the limitations of this study, some suggestions are addressed for future research. First, the participants in the present study were recruited from two intact classes of one junior high school in southern Taiwan. Future studies may incorporate a larger sample size with subjects of a different level of schooling (e.g., senior high school) from different areas of the country (e.g., central & northern Taiwan) to strengthen the generalizability of any potential CSR findings. Second, this study focused on probing two factors (i.e., English proficiency and gender) in the context of CSR instruction. Other variables such as learning styles and learning motivation are worth exploring. Third, more intensive training on CSR should be provided because it takes time to cultivate independent readers, particularly, in a context that requires interpersonal communication. Lastly, an elaborate plan of a well-sequenced CSR instruction needs to be built since the approach signifies a

brand-new teaching and learning experience for both EFL teachers and students. A highly-structured strategic instruction with better group interactions will definitely produce more promising CSR instructional effects.

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