

## Cooperative Learning in Small EFL Early Reading Groups

Yu-Ju Lan, Kuo-En Chang, and Yao-Ting Sung\*

National Taiwan Normal University

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The purpose of this study is to explore the interactive behaviors and intra-group discourse in a cooperative reading group when students were asked to do meaning-based reading tasks with their group mates cooperatively. The subjects were 52 third graders from an elementary school of Taipei, Taiwan. For ten weeks, both video and audio data were collected. Based on the finding of qualitative data analysis, we found four main types of group interactive behavior which we called Ardent, Be-forced, Supervisory, and Wait-on. According to the intra-group discourse, we also found that peer-assisted learning existed in cooperative reading groups and most of the peer discourse provided essential scaffolding, modeling, and direct instruction dialogs that help children with lower reading abilities do meaning-based reading.

**Key Words:** cooperative reading, group interactive behavior, peer-assisted learning

### 1 Introduction

Due to globalization and internationalization, English has achieved the status as the world's *lingua franca* because of its wide use in academia, business, commerce, and technology (Spolsky & Shohamy, 1999). English learning is a worldwide issue, especially in Asia. Because children's reading abilities is so important to their academic achievement, we can say, for children, "Reading is a key to the world." In addition, there is a growing recognition that reading provides important opportunities for second language (L2) development (Day & Bamford, 1998). This is especially so for learners in an EFL setting with limited L2 resources (Gehard, 1996). As a result, the teaching of English reading has been drawing increasing attention from EFL/ESL teachers and researchers.

\*First corresponding author: Yu-Ju Lan, second author: Kuo-En Chang, third author: Yao-Ting Sung

An intense intervention program has been viewed as an effective approach to prevent children from encountering reading difficulties (Clay, 1993; Foorman & Torgesen, 2001; Hiebert, Colt, Catto, & Gury, 1992; Slavin, Madden, Karweit, Dolan, & Wasik, 1992; Taylor, Frye, Short, & Shearer, 1992). In addition, reported research stresses the importance of increasing intensity on an effective reading intervention programs. For increasing intensity, small group, cooperative learning and scaffolding are three wide used strategies to increase intensity and thereby benefit English reading instruction and reading achievement of EFL learners. According to Foorman and Torgesen (2001) and National Reading Panel (2000), efficient classroom reading instruction with effective small group and one-on-one reading instruction can meet the literacy needs of all children. As for the impact of cooperative learning (CL) on student reading skills, research evidence showed that CL can promote students' learning motivation and satisfaction (Ushioda, 1996), help students actively pursue the group goals (Nichols & Miller, 1994), and improve students' EFL reading achievement and academic self-esteem, and decrease the feeling of school alienation (Ghaith, 2003). Regarding scaffolding, there are two types of scaffolding involved in reading instruction for at-risk children: peer-assisted learning strategies (Fuchs, Fuchs, Mathes, & Simmons, 1997; George & Patrick, 2002; Mathes, Torgesen, & Allor, 2001) and adult-child interactive dialogue (Bellon, Ogleetree, & Harn, 2000; Juel, 1996; ). Hartup (1992) has said that children teaching each other are generally successful in cognitive activities. Cazden (1983) argued that three forms of adult "input" play an important role in a child's language development and occur as parents communicate with young children: scaffolds, models, and direct instruction.

To sum up, the potential strategies of preventing children from meeting reading difficulties are small group, scaffolding, and CL. Although numerous researches have supported the effect of these strategies on young children learning to read, most of the subjects were native speakers of English. Are those strategies also applicable for young EFL learners in Asia? The EFL teaching environments in Asia are quite different from those in the West. The pedagogical challenges, such as class size, time constraints, and available resources (Lan, Chang, & Sung, 2004; Reed, 2002), hinder most of the EFL teachers in Asia.

Considering that there are currently few studies related to the issue of how young EFL readers behave in a small cooperative learning group, the purpose of this study is to explore the interactive behaviors and intra-group discourse in a cooperative reading group when students are asked to do meaning-based reading tasks with their group mates cooperatively. We wanted to answer the following questions. How do small group and cooperative learning influence EFL learners' reading

attitudes? Does peer-assisted learning happen in a cooperative reading group? If it does, do the intra-group discourses provide children with helpful scaffolding, modeling, and direct instruction dialogue to learn to read an assigned article?

The next sections give a brief description of methodology, results, and finally a discussion and conclusion.

## **2 Methodology**

### **2.1 Participants**

The subjects of this study were 52 third-grade students in 2 classes (each had 14 boys and 12 girls) from an elementary school of Taipei, Taiwan. Each class was randomly assigned into either the experiment group or the control group. Each of the third graders at the beginning of the study had two school year's experience of EFL learning. Based on the elementary English curriculum standard dictated by the Taipei Municipal Educational Department, all the students should master the names and sounds of the 26 English letters, 30 spoken words, 20 sentences of basic daily conversation and classroom English.

### **2.2 Design**

This study employed a qualitative approach, and the data was collected via field observation. Both video and audio data were collected for 10 weeks. The foci were the discourse between group mates and the intra-group interactive behaviors while doing reading tasks.

### **2.3 Measure instrument**

#### **2.3.1 questionnaire of reading attitude**

The questionnaire of reading attitude was developed by the authors, and Appendix A is the questionnaire. Five dimensions were included in the questionnaire: the degree of English learning preference (item 1), the confidence in English reading (items 2 and 3), the problems in English reading (items 7 and 8), the enthusiasm for dealing with the reading problems (items 4, 5, and 6), and the learning expectation of English reading (items 9, 10, and 11).

#### **2.3.2 in-class observation checklists**

Two kinds of in-class observation checklists were developed by the authors: a video shooting record and audio recording table as seen in

Appendix B. In the video shooting record, group reading behavior (GRB) was defined as a vector GRB (I, P, G) where “I” means that students do meaning-based reading individually, “P” represents pair of students reading together, and “G” stands for all the group members reading together. In addition, in Appendix B, IP refers to two members reading together and the others (maybe one or two members) reading individually; IG refers to one member reading individually, and the others reading together in the case of the group of four members; PP refers to two pairs of two students reading together in the case of group of four members. Besides this, there are 3 types of behavior patterns belonging to behavior I, and they are active, helpless, and nonsense. Both behaviors P and G contain 5 different types of behavior patterns, and they are blame, cooperation, domination, support, and nonsense. Tables 1 and 2 are the definitions of the attributes of each pattern type in GRB. On the other hand, in the audio recording table, four types of discourse (scaffolding, modeling, nonsense, and blame) were expected to be observed in the small group reading activities. The definitions of those discourse types are shown in Table 3.

Table 1. Definition of pattern I in GRB

Pattern	Definition
A	Active: A student actively involves in reading activities.
H	Helpless: A student is not able to read by themselves and needs some one's help
N	Nonsense: What the student does has nothing to do with the reading activities.

Table 2. Definition of patterns P and G in GRB

Pattern	Definition
B	Blame: A student is blamed because he or she does not know how to read.
C	Cooperative: Two or more students cooperatively read together.
D	Dominate: The reading activities are dominated by the group leader.
S	Support: The student(s) read(s) the article with the group leader's or other teammate's help.
N	Nonsense: What students do has nothing to do with the reading activities.

Table 3. Definitions of discourse types in small group reading activities

Pattern	Definition
C	Coaching: A student tries to read with a hint or reading strategy offered by the others.
M	Modeling: A student repeats after what the others read.
N	Nonsense: What students talk about is not anything to do with the reading activities.
B	Blame: A student is blamed because he or she does not know how to read.

### 2.3.3 Teaching packages

Five teaching packages were taught during 10 weeks. Each of the five short vowels a, e, i, o, and u was taught in a corresponding package. Two components were included in each package. One was phonological knowledge training which included phonemic awareness, phonic skill training, sight words, and related spoken vocabulary. And the other was a meaning-based reading activity. The reading materials used in the meaning-based reading activity were constructed based on the specific phonological knowledge, sight word, and spoken language that had been taught in both the same and prior packages along with a copy of the reading instruction which contained a step-by-step reading guidance. Appendix C is the step-by-step reading guidance used by the experiment group while that used by the control group only contained the same first four steps in Appendix C. The last two steps (step 5 and step 6) for control group were modified as whole class activities, *i.e.* the whole class checked the answers and read the story together.

### 2.4 Procedure

In advance of the experimental treatment, the students in the experiment group were heterogeneously grouped in a reading group based on their English achievement in the second grade. The students whose grade was A went into the high reading ability group, while those whose grade was B or C went into the medium reading ability group, and those whose grade was D or Fail went into the low reading ability group. The experimental group had 7 high-ability, 8 medium-ability, and 11 low-ability students. The control group had 7 high-ability, 14 medium-ability, and 5 low-ability students.

In each reading group, one student with higher English achievement (we called them group leaders) coupled with two or three ones with lower achievement. In total, we had 7 reading groups in the experiment group, five groups with 4 members and two with 3 members. In contrast, the

students in the control group were not grouped in small reading groups for they were asked to do meaning-based reading individually.

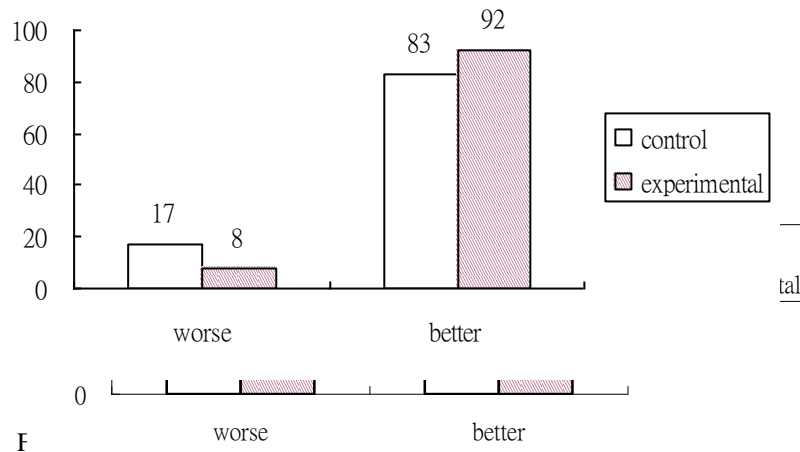
After grouping students, all the group leaders in the experiment group were given basic training in reading an assigned article following a step-by-step guidance (see Appendix C). Then 5 teaching packages were taught in the following 10 weeks. Generally a teaching package was taught in 2 weeks. In the first of each two weeks, the training activities focused on phonological knowledge. And in the second week of each teaching package, students were asked to do meaning-based reading activities: the students in the experiment group were asked to read via small group learning cooperatively, and students in the control group read individually but with the freedom to ask for help from the EFL teacher or their classmates. Finally all the subjects were given a questionnaire of reading attitude. When students did meaning-based reading, both video and audio data were collected. We used two video cameras to videotape students' cooperative behaviors. The video cameras were fixed in two corners of the room where four reading groups can be framed in each camera. We also used seven digital voice recorders to record the discourse among group members.

### **3 Results**

#### **3.1 The English reading attitude**

The reading attitude was measured by using the 5 dimensions of the degree of English learning preference, the confidence of English reading, the enthusiasm for dealing with the reading problems, the problems in English reading, and the learning expectation of English reading. Figures 1 to 5 show the respondent results of the questionnaire of English reading attitude made by the two groups (experimental and control). First, in Figure 1, we can see that more students of the experimental group (92 percent) than that of the control group (83 percent) expressed that their English learning preference was getting better. Second, in English reading confidence as in Figure 2, the sum of the percentages of the two types of the responses, 'the same' and 'better', is only one percent difference between the two groups (the experimental group is 88 percent and the control group is 87 percent), yet the control group shows 5 percent higher in the type of 'better'. Next, when dealing with the reading problems as in Figure 3, 78 percent of the experimental group showed enthusiasm for looking for learning help while 64 percent of the control group did. Then, the four major types of English reading problems (lack of a specific tutor, too many unknown words, unable to decode, and easy to forget) that the two groups had are shown in Figure 4. Except for the problem type of 'too many unknown words', higher percentages of the control group

expressed that they had the other three types of the English reading problems than that of the experimental group did. Finally, in the learning expectation of English reading as in Figure 5, a larger percentage of the experimental group (44 percent) compared to the control group (32 percent) wished that they had their own specific tutor. All of the experimental group and 96 percent of the control group wished for the improvement of their English reading abilities. Interestingly, more than one half of the experimental group (65 percent) expected that they could be English reading tutors of their peers in contrast of the control group, in which only 5 percent of them showed the expectance.



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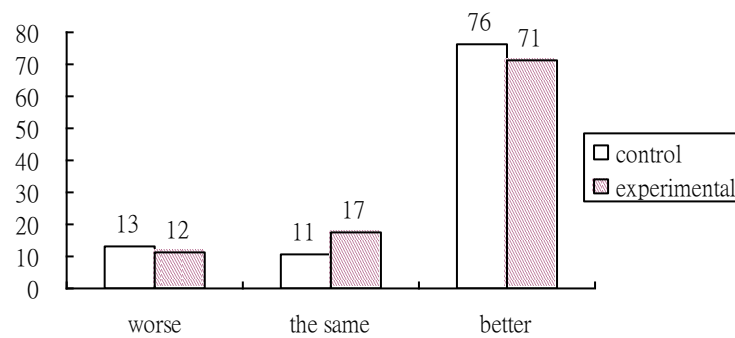


Figure 2. The confidence of English reading

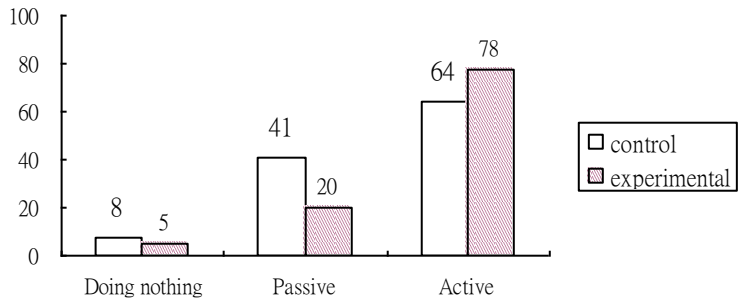


Figure 3. The enthusiasm for dealing with the reading problems

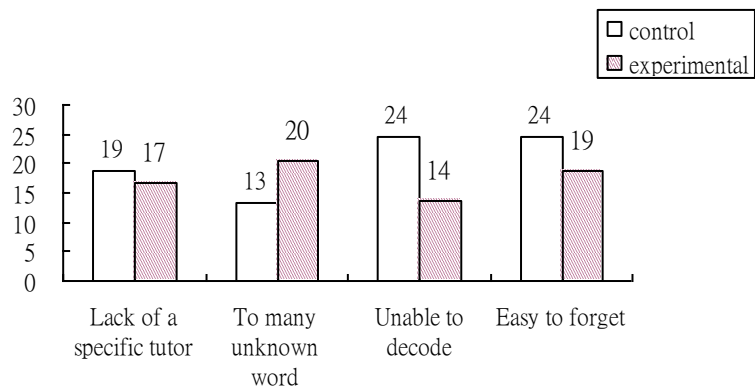


Figure 4. The problems in English reading

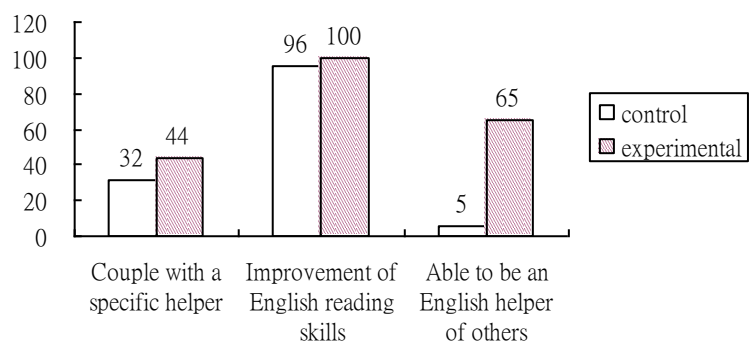


Figure 5. The learning expectation of English reading



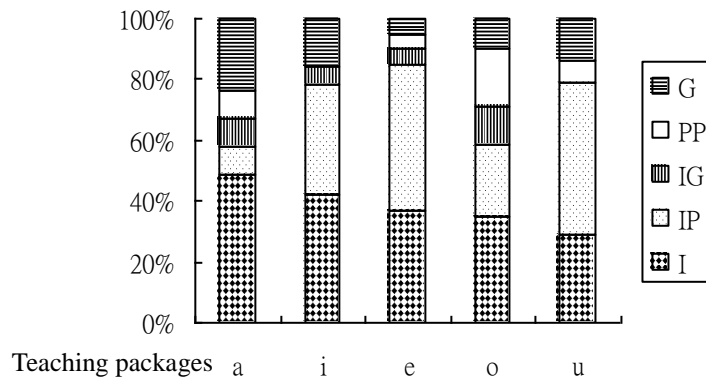


Figure 6. The whole class average of GRB patterns

### 3.2 The in-class observation

The in-class observation was focused on the cooperative behavior that happened in small reading groups in the experiment group. Two observers coded the pattern categories via watching the video tapes shot during the experiment treatments. Then the Spearman coefficient of concordance was computed from the pattern percentages of the grouping reading behavior obtained from the two copies of the records. The Spearman coefficient was 0.95.

Figure 6 is the whole class average of GRB patterns, where the definitions of the symbols G, PP, IG, IP, and I can be seen in Tables 1 and 2. As shown in Figure 6, in the first teaching package, 49 percent of the time period of the group reading activity students read the assigned text individually, and 24 percent of the time period each small group read all together, and the other 3 GRB patterns (PP, IG, and IP) were all 9 percent respectively. As the treatment progressed, from the first package to the last one, more cooperative behavior could be observed. The time period of individual working continually decreased and that of the other behavior patterns involving cooperative reading (patterns G, PP, IG, and IP) increased as the students of the experimental group got more proficient reading with others.

Besides caring about the GRB of the whole class, the intra-group interactive behavior that happened in each cooperative reading group was another observation focus. Following the cycle of coding and analysis of video tape data (Jacobs, Kawanaka, & Stigler, 1999), we found that there were 4 different kinds of intra-group interactive behavior models, which we called Ardent, Be-forced, Supervisory, and Wait-on. The Ardent model, just as its name indicates, showed that the group leaders (the students with

higher English abilities in a cooperative reading group) are willing to help and support their group mates whenever they need it, as well as directly giving guidance when necessary. As compare with the Ardent model, the Be-forced model means that the group leaders have an oppositional attitude to their group mates. In the Be-forced model, the group leaders are absolutely unwilling to help or support their group mates except under the pressure given by the EFL teacher. On the other hand, similar to the Ardent model, the group leaders in the Supervisory model care about their group mates' learning to read and are willing to support their group mates whenever they required, but the leaders seldom let their group mates read individually and insisted instead that the whole group read or do the worksheets together under the leader's supervision. In comparison with the three other models, the group leaders in the Wait-on model are like stand-by helpers and are willing to help their group mates but seldom give help or support or guidance intuitively except when they are asked to do so.

Furthermore, we had found that each cooperative reading group had its specific intra-group interactive behavior model. The typical intra-group interactive behavior model of Group 1 and Group 4 was Ardent, of Group 2 was Be-forced, of Group 5 and Group 6 was Wait-on, and of Group 2 and Group 7 was supervisory. In contrast, Group 3 switched the models between Be-forced and Wait-on because of the intervention of the EFL teacher. Appendix D shows the discourse examples between group mates of each model of intra-group interactive behavior. In Appendix D, if students used Chinese (their native language) to communicate with each other, the discourses will be printed in italics and followed by the according Chinese version in parentheses. We also found that each learning group's cooperative model was attributed to the group leaders' assistance-supporting styles as well as their enthusiasm for being an English reading helper of others. This kind of enthusiasm can be seen in their responses to the reading attitude questionnaire. That is, the group leaders who belonged to both models Ardent and Supervisory strongly represented their expectation to be others' English reading helpers, and always tried to do their best to help their group mates to gain a higher reward.

In contrast to the positive results mentioned above, we found that the load of each group leader was not balanced in the small-group cooperative reading activities. That is, some of the group leaders were always busy to help their group mates, yet some of them were doing their own text most of the time. As a result, the participants in those groups with busy group leaders may have needed to wait for a while to get their leaders' help.

Based on the intra-group discourse, we found that peer-assisted learning behavior existed in such cooperative reading groups. This was

especially so in groups of Ardent, Supervisory, and Wait-on models. In these discourses, we identified the dialogs of scaffolding, modeling, and direct instruction that help students with lower English abilities read the assigned articles (see Appendix E).

Another noteworthy finding of this study is that there were some things that might hinder the cooperative reading process. The loads on the group leaders differed quite a lot; some were always willing and busy helping their group mates, and some were not. As a result, students of some groups had to wait for help even though some group leaders were available for providing support. Teasing was another problem in small groups; some of the group leaders teased their group mates because of their slow learning rate. This caused those students to become more passive while reading and they needed more encouragement from the EFL teacher.

#### **4 Discussion and Conclusions**

It is widely agreed by researchers that small-group cooperative learning approach benefits students' learning achievement. However, there remains much to be investigated on the effect of cooperative group reading approach on young students in Taiwan elementary schools. It is a worthy issue to understand how EFL learners interact with their group members and how these interactions influence their reading attitudes. This study conducted a qualitative research design to observe third graders doing cooperative reading.

We found that cooperative learning behavior and peer-assisted learning happened in small meaning-based reading group. To investigate the discourse between children, we also found that children are able to offer their peers needed scaffolding support, reading model, and direct instruction. But this study also finds that the general heterogeneous grouping strategy (that means to place students with different reading abilities, both high and low, in a learning group) does not generate an effective cooperative learning because of negative cooperative behaviors, postponed scaffolding supports, and absent learning feedback.

The group leaders' attitude towards their group members and their mission load play important roles in cooperative learning activities. An Ardent or Supervisory group leader makes their group mates actively learn to read. In contrast to the leaders of Ardent and Supervisory characteristics, a Be-forced or Wait-on group leader not only discourages their group mates from getting involved in the meaning-based reading text, but also makes their group mates look down on themselves. As a result, those children become more passive in reading activities and expressed a lack of confidence in reading a text in front of others as shown in Figure 2.

Furthermore, a group leader needed to take care of two or three group members with low reading abilities. Therefore, there were always group members were waiting for group leaders' help. The long-waiting phenomenon inhibits some students with low reading abilities from involving in group learning; moreover they showed negative attitude in both themselves and their group members. Even some of the students with medium reading abilities tried to read by themselves when their group leaders were busy with helping other group members, because of lack of real time feedback, they consequently did an unsure reading activity.

This study adds to the growing body of evidence in favor of a peer-assisted cooperative learning approach for young students in Taiwan elementary schools. The findings of this study confirm with the discoveries by researchers conducting small-group instruction by Wise et al. (1999) and cooperative learning by Ghaith (2003). It is also consistent with the findings of researchers conducting studies in scaffolding, such as Greenwood (1996). Yet, another noteworthy finding of our study reveals the importance of providing students with anywhere-anytime learning support and cooperative process supervising.

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Ru-Ju Lan  
 Department of Information and Computer Education  
 National Taiwan Normal University  
 162, HoPing Road E. Sec 1  
 Taipei, Taiwan 10610  
 Tel.: 011886-939959141  
 Email: yjlan@ice.ntnu.edu.tw

Kuo-En Chang  
 Department of Information and Computer Education  
 National Taiwan Normal University  
 162, HoPing Road E. Sec 1  
 Taipei, Taiwan 10610  
 Tel.: 011886-2-23622841 ext 18  
 Email: kchang@ice.ntnu.edu.tw

Yao-Ting Sung, Ph. D.  
 Department of Information and Computer Education  
 National Taiwan Normal University  
 162, HoPing Road E. Sec 1  
 Taipei, Taiwan 10610  
 Tel.: 011886-2-23952445 ext 509  
 Email: sungtc@cc.ntnu.edu.tw

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**Appendix A**  
**The Questionnaire of Reading Attitude**

1. Compare with last semester, my preference of English learning is  
 Better    The same    Worse
2. If I am asked to read the text on the right hand side, I think that  
 I can read better than before.  
 My reading fluency is just as before.  
 I will read worse than before.
3. If I am asked to read the text at the right hand side in front of others, I think that  
 I can read with more confidence.  
 I still can not read in front of others.  
 I will feel more scared to read in front of others.
4. If I do not know how to say a word, I usually:  
 Don't care about it.  
 Listen to others and learn to say it.  
 Ask my classmate to teach me.  
 Wait for the teacher's instruction.
5. If my classmate helps me whenever there are some words I am unable to read, I think that:  
 It is helpful.  
 It is not helpful.
6. My classmate helps me whenever there are some words I am not able to read, I think that:  
 I appreciate it.  
 I feel bored.  
 It is just a rule announced by the teacher, so I just accept it.  
 It is nothing special.
7. The problems I have in group English reading are:  
 My classmates are too busy to help me.  
 It is too noisy for me to pay attention to the reading activity.  
 My classmates are not willing to help me.  
 My classmates tease me.
8. The problems I have in English reading are:  
 The length of the text is too long.  
 There are too many words that I am unable to read.  
 I am not familiar with the letter sounds and phonics skills.  
 I always forget what I learn.
9. When doing an English reading activity, I wish that:  
 There is always a classmate who can give me a hand whenever I need it.  
 I can read without help.
10. I wish my English ability is:

Dan has a pal. His pal is Tab. Tab is a fat, tan cat. Tab has a rat. Dan pats Tab.
--



getting better.

the same.

getting worse.

11. If there is an opportunity, I wish I can be a reading helper of my classmates.

Absolutely agree.

Agree.

Disagree.

Absolutely disagree.

**Appendix B  
In-Class Observation Tables**

1. Video Shooting Record

Group \_\_\_\_\_ Date:

Package ( a , e , i , o , u ) Video Shooting Record of Group Reading Behavior

Group Reading Behavior					Timing			
I	IP	IG	PP	G	Comment	Begin	End	Duration

Note: Grouping Reading Behavior; GRB (I, P, G) :  
 I = {Active, Helpless, Nonsense};  
 P, G = {Blame, Cooperation, Domination, Nonsense, Support}

2. Audio recording table

Group \_\_\_\_\_ Date:

Package ( a , e , i , o , u ) Audio Recording Table of Group Reading Activity

Discourse			
Students	Comment	Category	Timing

Note: Discourse Category (S, M, N, B)  
S: scaffolding, M: modeling, N: nonsense, B: blame

**Appendix C**  
**Step-By-Step Reading Guidance**



Story Title: \_\_\_\_\_  
 Group: \_\_\_\_\_ Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Do and check.**

- ( ) 1. **Look at the Picture and think about its meaning.**  
 Who, What, Where, When
- ( ) 2. **Read aloud the story:**  
**If there are some words that you can not read.**
  - ① Circle the words you do not know.
  - ② Try phonics rules to read.
  - ③ Are they sight words?
  - ④ Ask your group members to help you.
- ( ) 3. **Read aloud again.**
- ( ) 4. **Answer the questions by yourself.**
- ( ) 5. **Discuss the answers with your group members.**



Self-assessment: ☺ ☹ ☹

- ( ) 6. **Read the story to your group.**  
 Peer-assessment:



Performance	☺	☹	☹
Signature of group members			

## Appendix D Discourse Examples in Cooperative Reading Groups

### *Ardent model (Group 1 and Group 4)*

Tracy, the group leader: *The first step is* (第一個步驟是) picture guessing. OK, now, *every one looks at the picture and guesses what this is* (每個人仔細看圖並想一想那是什麼).

(Every one looked at the picture, then discussed together.)

Pole: *I saw many mice* (我看到很多老鼠).

Joe: Yes, there *are* (有) one, two, three,.... *There are eight mice* (有八隻老鼠).

Faye: *I think this is a mouse family* (我想這是一個老鼠家庭). *See, two bigger ones, and the others are little* (看，有兩隻大的，其餘的是小的).

Tracy: I think so. Now, mmm... What are they doing?

Joe: They *stand* (站著).

Faye: I don't know.

Pole: *Me either* (我也不知道).

Tracy: OK, now every one reads the text. Step two, mmm... *You read by yourselves, and circle the words you are not able to read* (你自己讀，再把不會讀的字圈起來).

(Every one read and circled the unknown words.)

Tracy: *Don't be afraid to circle too many unknown words, what I care is honest* (不要害怕圈太多不會念的字，我在意的是誠實). *Don't cheat* (不要欺騙我). *Just let me know which word you don't know* (只要讓我知道你什麼不會). *I will teach you* (我會教你).

Pole: Tracy, *how to say the word?* (怎麼讀這個字) (Pole pointed to the word 'Rat'.)

Tracy: r r /r/r/, a a /a/a/, /r/a/ /ra/, t t /t/t/, /rat/. *Rat is a big mouse, and mouse means a small one.* (Rat 是大老鼠，mouse 是小老鼠) Got it?

Pole: Got it. Thank you.

Tracy: Joe, Faye, any question?

Joe: Tracy, *how to say the word?* (怎麼讀這個字) (Joe pointed to the word 'Will'.)

Tracy: (Cover the latter 3 letters, ids, show letter w to Joe and supported scaffolding.) w w, *say what?* (怎麼念)

Joe: w w /w/.

Tracy: i i...

Joe: /i/i/.

Tracy: l l...

Joe: (Kept silent.)

Tracy: (Modeled the sound of letter l.) l l /l/l/. /w/i/ /wi/ /l/ /wil/.

Say it. (念一遍)

Joe: /w/i/ /wi/ /l/ /wil/.

(Continued reading the text.)

*Be-forced model (Group 3)*

(Every one looked at the handout of the reading instruction, Appendix C, and the copy of the text.)

Jasmine: Richard (the group leader), *how to do step 1?* (第一步怎麼做)

Richard: (Read the guidance statement.) 'Look at the Picture and think about its meaning.' *See, look and think.* (看到沒，看一看，想一想)

(Angel looked around and did not know how to do it.)

Richard: (to Angel) Hey, what are you doing? *Quickly, do it.* (趕快讀啦)

Angel: *But, but, ..., I don't know how to read.* (但是...我不知道怎麼讀)

Richard: (Pointed to the handout of the reading instruction.) *Look at this and read.* (看這個步驟跟著讀) (Sounded like he was angry and then Richard read the text without caring about Angel.)

Angel: *How to say this?* (這個字怎麼讀)(Pointed to the word 'six' and asked Richard.)

Richard: Who knows?! *Oh, how terrible it is!* (喔！怎麼這麼慘啊！) My God!

(Richard complained about the stupid question Angel asked him and then they chatted.)

Angel: (A little bit more scared) *Please teach me say the word.* (請...教我讀這個字) (Pointed to the word 'six').

Richard: (Said the word 'six'.) /six/ /six/, don't forget. (別忘了)

Angel: *How to say this?* (這個字怎麼讀) (Pointed to the word 'kids'.)

Richard: Oh, /kidz/, /kidz/, oh, my God! Teacher, teacher, *she even does not know how to say the letter sound.* (她連字母發音都不會) *I don't know how to teach her!* (我不知道如何教她)

(The teacher came to the group and showed the peer-assisted method to Richard, then comforted and encouraged Angel.)

*Supervisory model (Group 2 and Group 7)*

Esther, the group leader: *Ann, you and Sandy switch the seats, Ann you sit besides me, and Sandy, you and Apple are the partners.* (Ann, 你和 Sandy 換位置, Ann 你坐我旁邊, Sandy 你和 Apple 一組) (Ann's English reading skill is the worst one in the group.) Now, look at the picture, *who are they?* (他們是誰)

Ann, Sandy, and Apple: (Counted the mice.) *There are 8 mice.* (有八隻老鼠)

Esther: Yes, this is Daddy, and this is Mommy. *I think this is a mouse hole.* (我想這是一個老鼠洞) But the time... I don't know. What are they doing? Hm... I don't know. OK. *Never mind.* (沒關係) *Let's move on the step 2.* (我們直接跳到第二步) Now read out the text and circle the words you don't know.

(Every one reads the text.)

Esther: *Hey, read out, the guidance say 'read aloud'.* (嘿, 讀出聲音, 這份 guidance 說 read aloud) Ann, *listen and say* (pointed to the words 'Mr.' and 'Mrs.' and said them out). (Ann, 聽我讀跟著念)

Ann: 'Mr.' and 'Mrs.'

Esther: Good, *now how to say the word?* (這個字怎麼讀)(pointed to the word 'had')

Ann: (kept silent.)

(Apple and Sandy began to read and discuss together.)

Esther: *When you decode a word, you cover the latter letters and sound the beginning sound, then the middle sound and say the two sounds together, and then add up the ending sound and say them together. Like this.* (當你們分解一個字時, 先蓋住後面的字母, 先讀開頭的字母, 然後是中間的字母, 再把這兩個字母拼起來, 最後再把最後一個字母加進來, 像這樣) (covered the letters a and d) h h /h/h/, a a /a/a/, /h/a/ /ha/, then d d /d/d/, then say them together, it becomes /had/. Got it? Now you try. Apple, Sandy, any question? Hey, *don't chat.* (不要聊天)

Apple and Sandy: *We don't.* (我們沒有)

Esther: Good, *let me know if you have questions.* (很好, 有問題要讓我知道) Ann, *you say the word.* (你讀這個字)

Ann: /h/a/d/ /had/.

Esther: Good.

...

Esther: *Do you finish step 2?* (第二步完成了嗎) Good. Now read aloud again, *this is step 3.* (這是第三步) Then read the questions and choose the answers. *We will discuss the results later.* (我們等一下再討論答案) Go.

(Every one read aloud the text again, and Esther continued paying attention to each group members and gave scaffolding or modeling as soon as anyone needed it. Sometimes Sandy and Apple discussed the answers with each other.)



*Wait-on model: (Group 6 and Group 5)*

(Every one looked at the copy of the text and the handout of the step-by-step reading guidance as shown in Appendix A.)

Udy: Peter, the group leader, *how to say the word?* (這個字怎麼念)  
(Pointed to the word 'grab'.)

Peter: /grab/ (Said the word directly and then continued doing his reading task.)

Udy: Thank you.

(Every one read the text.)

Bonnie: Peter, *please teach me to say the word.* (請教我讀這個字)  
(Pointed to the word 'attic')

Peter: I don't know either. (Raised hand and called.) Teacher...

(Teacher came to Peter.)

Peter: Teacher, *I don't know this word.* (我不會這個字)

Teacher: /at/-/tic/. It's a small room at the top of a house, inside the roof. 中文就是「閣樓」。

Peter and Bonnie: *I see.* (我知道了) Thank you.

...

**Appendix E**  
**Intra-Group Discourse Categories and Examples**

Categories	Examples
Scaffolding	<p>Joe: Tracy, how to say the word? (Joe pointed to the word 'Will'.)</p> <p>Tracy: (Cover the later 3 letters, ill, show letter w to Joe and supported scaffolding.) w w, say what?</p> <p>Joe: w w /w/.</p> <p>Tracy: i i...</p> <p>Joe: /i/i/.</p> <p>Tracy: l l ...</p> <p>Joe: (Kept silent.)</p> <p>Tracy: (Modeled the sound of letter l.) l l /l/. /w/i/ /wi/ /l/ /wil/. Say it.</p> <p>Joe: /w/i/ /wi/ /l/ /wil/.</p>
Modeling	<p>Esther: Hey, read out, the guidance say 'read aloud'. Ann, listen and say (pointed to the words 'Mr.' and 'Mrs.' and said them out).</p> <p>Ann: 'Mr.' and 'Mrs.'</p>
Direct instruction	<p>Esther: Good, now how to say the word? (pointed to the word 'had')</p> <p>Ann: (kept silent.)</p> <p>Esther: When you decode a word, you cover the latter letters and sound the beginning sound, then the middle sound and say the two sounds together, and then add up the ending sound and say them together. Like this. (covered the letters a and d) h h /h/h/, a a /a/a/, /h/a/ /ha/, then d d /d/d/, then say them together, it becomes /had/. Got it? Now you try.</p> <p>Ann: /h/a/d/ /had/.</p> <p>Esther: Good.</p>