An essay on use of cooperative learning (CL) techniques in the second language classroom looks at the benefits of CL, examines the current status of their use, particularly in Singapore, and makes recommendations for implementing CL techniques in second language reading instruction. The discussion begins with a review of literature on group instruction and group activities in second language teaching, and looks at how group activities are, first, incorporated into second language curriculum plans and instructional materials and then implemented in the classroom. Singapore's situation is highlighted here. A second section looks at what distinguishes CL group instruction approach and its potential to improve group activities. Five advantageous features of CL are noted: positive interdependence; individual accountability; collaborative skills; use of group time to process interactions; and heterogeneous grouping. Variables in task design that affect language learning are also discussed briefly. Three ways to increase the use of CL in reading instruction are outlined and explored: (1) inclusion of CL in pre- and inservice teacher education; (2) incorporation of CL activities in teachers' instructional materials; and (3) inclusion of CL activities in student materials. Several specific classroom techniques and procedures are noted. Contains 19 references. (MSE)
FOUR OR MORE EYES ARE BETTER THAN TWO:
USING COOPERATIVE LEARNING TO
MAXIMIZE THE SUCCESS OF
GROUP ACTIVITIES IN READING

Paper presented at the “Singapore Symposium on Reading for Success”

6-8 March 1997

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The key point of this paper is not to say that people with glasses read better than people who are not so fortunate as to have four eyes. Instead, the key point is that the literature on cooperative learning (CL) offers insights into how we can improve reading instruction. The paper begins with brief discussions of:

1. Why groups are used in language teaching
2. What CL is
3. How CL can improve group activities.

After this introduction, the main part of the paper is devoted to options for implementing CL in reading instruction.

WHY GROUPS ARE USED IN LANGUAGE TEACHING

A prominent view in current language acquisition theory is that of the interactionists (Hatch, et al., 1986; Long & Porter, 1985). While the interactionists are diverse as to the theory and research from which they draw inspiration (e.g., Swain, 1993; Vygotsky, 1978), in general they believe that the interaction which takes place in groups can facilitate language acquisition. In their classic paper, Long and Porter (1985) list five reasons for this possible facilitative effect of groups. These benefits should be seen as part of an integrated, four-skills approach to language instruction.

1. Increased student language production
2. Greater variety of language functions in student language production
3. Lower anxiety
4. More individualization of instruction
5. Higher motivation.

In light of these potential benefits of group activities, many curriculum documents including those in Singapore (e.g., Curriculum Planning Division, 1991), now advocate group activities, and many coursebooks, including many in Singapore (e.g., Curriculum Development Institute of Singapore, 1995a, b), now include such activities. For example, an informal survey of an English coursebook written for fifth-year primary school students in Singapore (Curriculum Development Institute of Singapore, 1995a) showed that of the 43 activities in the book, 23 seemed to be written with at least the option of being done in groups.

However, in their actual classroom implementation, group activities often fall short of their potential for promoting language acquisition for a wide variety of reasons, e.g., students are off task or do not help each other (Rodgers, 1988). These problems have led some educationists to believe that group activities are inappropriate in many contexts. In contrast, such difficulties have led other educationists, including those working in
cooperative learning, to seek solutions which will allow groups to blossom forth.

**WHAT COOPERATIVE LEARNING IS AND HOW IT CAN IMPROVE GROUP ACTIVITIES**

CL represents many years of research, theorizing, and practical efforts toward understanding how to improve group functioning in educational contexts (Johnson, et al., 1993; Kagan, 1994; and Slavin, 1990). While definitions of CL vary, characteristics that are often seen by at least some scholars as criterial are:

1. **Positive interdependence** - the feeling among group members that by helping other group members, they are helping themselves. If students feel they are positively interdependent with their groupmates, they are more likely to stay on task and to help one another learn.

2. **Individual accountability** - the feeling that all group members are responsible for participating in and learning from the activity. Along with positive interdependence, this is the characteristic which is in almost everyone's definition of CL. If students feel individually accountable, they are more likely to try to learn, rather than letting others do the work and the learning for them.

3. **Collaborative skills** - the development among students of the skills they need to work with others. With appropriate skills, students know how to help one another, how to disagree constructively, etc.

4. **Processing group interaction** - the use of group time to reflect on how well the group has functioned and how that functioning can be improved. This processing time further encourages students to develop the ability to learn together.

5. **Heterogeneous grouping** - the forming of groups so that they are reflective of the diversity which exists in the classroom on a variety of traits. Such grouping arrangements help to break down divisions in classrooms, encourage diverse thinking, and provide practice in working with different kinds of people.

There are many parallels between CL and the work of the interactionists in language acquisition. Frequently associated with interactionist views is task-based language teaching (Pica, et al. 1993). Scholars working in task-based instruction have identified what they believe are several variables in task design which impact language learning. These include:

1. Whether students have time for planning prior to language production
2. Whether tasks have one correct solution or more than one
3. Whether tasks require all group members to provide information to groupmates.

This last variable, the type of information exchange, provides an excellent example* of the overlap between the work in task-based instruction and the work in CL. For instance, the CL technique “Jigsaw” (Coelho, Winer, & Olsen, 1989) encourages the kind of two-way required information exchange which the task-based people advocate. In jigsaw, each member of a home team gets different information on the same topic. They then leave their home team to from expert teams with member of other home teams who have the same information. The expert teams are to study their information and prepare to teach it to their home team. The CL people would use the term “resource positive interdependence” for this kind of two-way required information exchange and also favour it because of its potential to foster individual accountability.

The point here is that if we believe that group activities promote language learning, then we should see what the CL literature can teach us about how to maximize the success of group activities, and then adapt those ideas to our specific situation. This is what we shall discuss in the next section.

OPTIONS IN IMPLEMENTING CL IN READING INSTRUCTION

There seem to be at least three overlapping possibilities for implementing CL in reading instruction:

1. Include CL in pre-service and in-service teacher education. With such preparation, teachers are able to adapt group activities using CL principles and techniques. This is already being done to some extent in Singapore, as the National Institute of Education, the Curriculum Planning Division, and RELC provide courses on CL or include CL as part of their teacher education. I do not claim to have a full picture, but I believe this is being expanded somewhat, although much more could be done.

2. Make CL activities a part of materials for teachers. Such materials include teacher resource books, as well as teacher’s handbooks which accompany instructional materials for students. For example:

   a. Resource books for teachers can include photocopy masters for teachers to use. This is the approach taken on a book which uses jigsaw reading (Coelho, Winer, & Olsen, 1989).

   b. Various CL techniques applicable to reading could be described at the beginning of the teacher’s handbook, e.g., Numbered Heads Together (Stone, 1996), MURDER (Hythecker, Dansereau, and Rocklin, 1988), and Pairs Check (Kagan, 1994). Then, later in the handbook, group activities in which these techniques would be applicable could be
indicated. Also, the idea of giving students roles, such as scribe, reporter, questioner (to ask group members to explain what they say), encourager (to encourage everyone to speak), and facilitator, could be explained.

c. CL activities can be suggested in the body of teacher's handbooks. For instance, in a PETS (Primary English Thematic Series) Teacher's Handbook (Curriculum Development Institute of Singapore, 1995b: 75), it is suggested that after two reading passages the teacher select a pupil and model how to role-play an interview. Then, students are to work in pairs to interview their partner, using the two reading passages as a model.

3. Include CL activities in the instructional materials themselves. There are several ways to do this, including:

a. Directions for CL techniques can be in the student materials. For instance, individual students could first work alone to develop an answer to a discussion question. Afterward, they would tell their answer to a partner. That pair would then join with another pair, with each student reporting their partner's answer to the other pair. Kagan (1994) calls this Think-Pair-Square.

b. Creating information gaps in the materials. This is done in Jones and von Baeyer (1983: 81, 109, 136). Students are given a task to do in pairs. Each member of the pair is assigned to turn to a different page near the back of the book for information and directions.

IMPLEMENTING THE OPTIONS

As it stands now, in my opinion, most of the group activities in the Singapore coursebook surveyed above do not have the two key characteristics of CL activities: encouraging positive interdependence and individual accountability (Jacobs & Ball, 1996). Suggestions to teachers, such as “Let pupils work in groups for maximum interaction and participation” (Curriculum Development Institute of Singapore, 1995b: 101) are not always backed up with concrete suggestions for how to promote this interaction and participation. Thus, one or more of the three overlapping options listed above seem necessary. Let us then return briefly to each.

Option 1

Option 1 for increasing the use of CL involves teacher education on CL. Johnson and Johnson (1994) make several suggestions on how best to do this. Among their suggestions are:

1. Presenting teachers with pre-planned lessons may be popular among overworked teachers because it saves them time. However, it is better to focus on principles, such as positive interdependence, which serve
as a foundation for teachers to understand existing lessons and to create more of their own.

2. Holding many workshop/course sessions over a short period of time, e.g., meeting five hours a day for five days, may fit well with teachers' vacation schedules and help teachers accumulate the number of hours of training they need. However, conducting teacher education in this quick and dirty way deprives teachers the time they need to think about and try out ideas presented in the workshop/course.

3. Presenting CL as something simple to learn and use may help entice teachers to sign up for workshop/courses on CL, but this is seriously misrepresenting the complexity of CL and the effort needed to apply it well.

In keeping with the Johnson's' third point, I always start workshops on CL with the "7 Nots":

1. **Not new** - CL has been around for more than a generation, and its root go back more than a century.

2. **Not all the time** - CL should be combined with teacher-fronted instruction, individual work, and other modes of pedagogy.

3. **Not magic** - Although the research indicates superior results on a range of variables when CL is used, CL must be combined with other aspects of good teaching in order to succeed.

4. **Not by itself** - CL works best when there is an overall culture of cooperation in the classroom, school, and beyond.

5. **Not as easy for you as it is for me** - At this course/workshop, I'm working with a room full of teachers. Teachers make great students. Students do not always make great students.

6. **Not simple** - There is a lot to learn about CL because group activities are more complicated than teaching via the teacher-fronted mode, as the dynamics of group interaction introduce many new variables to consider.

7. **Not all at once** - CL is a big change for teachers and for students. We all need a chance to adjust. Thus, often it may be best to introduce CL gradually and slowly, although it should be said that some educators encourage more of a "great leap" approach in which CL is used on a large scale from its first use.

Another suggestion proposed for teacher education on CL is that CL should be taught via CL (Jacobs, et al., 1997). In other words, teacher educators should not just lecture to teachers about using CL; teachers should
participate in CL groups as a key vehicle for learning CL. In this way, teachers get the student perspective on CL groups.

Options 2 and 3

Option 2 for using CL in reading activities involves materials for teachers, while option 3 puts instructions for CL activities directly in materials for students. Examples of both options are shown below with reference to three activities designated as group activities in a Singapore primary school coursebook (Curriculum Development Institute of Singapore, 1995a). These activities, as written in the coursebook, do not seem designed to encourage both positive interdependence and individual accountability, the two key criteria for CL. After each activity, a technique for encouraging these two attitudes is suggested. These techniques could fit either option 2 or option 3, as well as being included in pre-service and in-service teacher education. Of course, for each of the three activities many other ways of structuring for cooperation are possible.

Activity 1 (p. 81) “Pick out the words and phrases which best describe [Miss Havisham].”

Numbered Heads Together (Stone, 1996) could be used here. This technique has four steps:

1. Students form groups. Each group member has a number.
2. The teacher/students ask a question.
3. Students put their heads together to develop an answer with an explanation.
4. The teacher calls a number. The student with that number gives and explains their group’s answer.

Activity 2 (p. 21) “Which character in the story do you feel sorry for? Explain why you feel this way. Which part of the story do you find funny?”

Three-Step Interview (Kagan, 1994) could be used here. This technique has four steps.

1. Students form groups of four which divide into pairs.
2. One member of each pair interviews the other on the question posed in the coursebook, in this case, about the character they feel sorry for and the part they find funny. Follow-up questions are also asked.
3. The interviewee now interviews the former interviewer.
4. Each student reports to the other pair what they learned when they interviewed their pairmate.
Activity 3 (p. 55) “Pick out words and phrases you do not understand. Guess the meanings and check your answers with your teacher.”

Pairs Check (Kagan, 1994) is a cooperative learning technique which could be appropriate here. This technique has nine steps:

1. Students form groups of four which divide into pairs.

2. One member of each pair does a problem while thinking aloud, in this case, guessing the meaning of a word or phrase they do not understand.

3. The other member of the pair acts as coach, listening and checking their pairmate’s guess and the process they used to come up with their guess. Then, the coach praises their pairmate.

4 & 5. Steps 4 and 5 repeat 2 and 3 with the pair members exchanging roles.

6. The two pairs in the group compare their guesses and the process by which they were derived. They, then, give each other feedback and try to reach consensus.

7. The team celebrates their effort and cooperation.

CONCLUSION

The theme of this paper has been that we educationists can help realize the potential benefits of group activities in reading instruction by availing ourselves of the knowledge to be found in the literature on cooperative learning and in related work, for example, that associated with interactionist views of language instruction. Several overlapping options for increasing the dissemination of CL ideas in reading instruction were discussed and exemplified. These were via teacher education, materials developed for teachers, and materials developed for students.

As stated above in the “7 Nots of CL”, CL is a complex form of instruction, one in which teachers and students need time to develop confidence and skill. Thus, the efforts and talents of many educationists are needed if we are to realize the full promise that group activities offer for language instruction. To return to the title of this paper, the more eyes we have looking into this area, the better we can read the situation and the sooner we can see progress.
REFERENCES


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Title: Four or More Eyes Are Better than Two: Using Cooperative Learning to Maximize the Success of Group Activities in Reading

Author(s): George M Jacobs

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