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Chapter 7: Implementing Cooperative Learning with Secondary School Students

Sheila Wee and George Jacobs

Background

I (Sheila)¹ work at the Teachers' Network², a part of the Singapore Ministry of Education (MOE) that promotes teacher-directed professional self-development. In this chapter, I describe my use of cooperative learning in the mid-1990s when I was teaching students in their final year at a secondary school in Singapore. At the end of this final year, students take a major exam that strongly affects whether they will continue their education and, if so, at what type of institution. This exam is either the Cambridge GCE (General Certificate of Education) 'O' (Ordinary) level or 'N' (Normal) level exam. The school where I taught is classified as a neighbourhood school. This is the most common type of Singapore secondary school. The other two types, autonomous and independent schools, are more selective in their admission criteria.

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¹ Although this account is written in the voice of the first author, both authors were involved in the writing of the chapter.

² <www3.moe.edu.sg/tn>

In Singapore, students enter secondary school at about age 13 and stay four or five years until approximately the age of 16 or 17. Students are placed in streams based on examinations and past achievement. The three main streams are, from highest to lowest, Express, Normal Academic, and Normal Technical. Singapore has three major ethnic groups. In descending order of size of population, these are Chinese, Malay, and Indian. English is the medium of instruction for almost all courses in Singapore schools. Thus, by the time they near the end of secondary school the level of students' second language proficiency is higher than that of many students in other second language settings. Alongside the prominence of English in Singapore schools, the MOE also strives to help students with their mother tongue. Toward this goal of bilingualism, students take a language course in their first language.

Teaching and groupwork

I've been using group activities ever since I started teaching, but I did not use them regularly during my first years of teaching. It was usually my "special lessons" which featured group work. Those lessons were special because the students came alive when they were given opportunities to work together. Having students work in groups appealed to me because I believe that students have much to learn from each other. I had done group activities such as Jigsaw Reading (although I didn't know the name), and I had asked students to work in groups to play the role of characters in a novel when being interviewed by another student, a reporter. However, I inevitably ran

into problems when using groups. These problems ranged from one or two group members not participating to conflicts in groups that resulted in students coming to me to complain that they didn't want someone in their group and asking me if I would remove that person. Because I was doing group activities without any theoretical framework, I couldn't fall back on any principles to overcome such problems. My fellow teachers didn't talk much about their classes, so I didn't know how to get ideas from them about how to improve. Actually, I also suspected that my colleagues were not using groups regularly, in which case they wouldn't have been able to help me anyway.

In this chapter, I will first discuss how I came to learn about cooperative learning. Then, I will illustrate how I set up the classroom for cooperative learning and how I used it in the teaching of three language skills: writing, reading, and oral skills in a Normal Academic class. In the chapter's final section, I will explain how the teachers at my school cooperated with each other to make our work easier and more successful. In each of these sections of the chapter, I will also be talking about how principles that I learned from the cooperative learning literature provided me the framework I had been missing in my previous use of group activities.

Learning about cooperative learning

I took a course taught by George Jacobs, which met weekly for three hours a session over 10 weeks for a total of 30 hours. We learned many

different principles and techniques in the course and had opportunities to experience the techniques as students during the course sessions and time to plan how to use the techniques with our own students. The fact that the course met only once a week gave us a chance to go back to our classes to try out the techniques we had explored at each session and then to discuss our experiences at the subsequent session. Such discussion was relatively easy for me because colleagues from my school, whom I saw every day, were taking the course at the same time and trying out the same techniques. Knowing what I do now about *action research*, what was happening as I experimented with cooperative learning could have been the beginnings of an effort to systematically inquire into my practice of using groups in class more effectively and confidently.

In the year after I took the cooperative learning course, I felt more comfortable using groups. Principles such as positive interdependence, individual accountability, and the teaching of collaborative skills were starting to make sense, and I was finding ways to apply them in this class. I discovered it was not difficult to use cooperative learning in nearly every lesson, even though some lessons only lasted 35 minutes. Many cooperative learning techniques are very versatile and can be used in a brief period of time.

One easy cooperative learning technique I started to use was Think-Pair-Share (Lyman, 1992) (see appendix), and I soon found it to come in handy in many different settings. One way in which I used it was for generating ideas in the prewriting phase of the *process approach* to writing. Students had previously had great difficulty developing ideas for their compositions. So, after some preliminary whole class discussion, I would have students first *think* alone to brainstorm possible ideas for writing. Next, they would *pair* with a member of their group to share and discuss their ideas. Then, I would call on students to *share* their partner's ideas with the class. The sharing helped the class build up useful ideas for their compositions. Also, the fact that students might be called on to share their partner's ideas encouraged them to listen carefully and to clarify so that comprehension also took place, and of course this promoted individual accountability as well.

Also, at the end of lessons I would often use a variant of Think-Pair-Share to encourage students to confirm and consolidate their learning. The Pair and Share steps were the same, but in the first step, write replaced think. Students wrote in their English notebooks about two or three things they had learned in the lesson, paired with a partner to compare and check ideas, revised if appropriate, and then shared by passing in their papers to me. I like the Write step because it makes thinking visible, thus strengthening individual accountability by making students' work more accessible to others. Moreover, in the process of writing out their ideas, sometimes students develop new ones or clarify their thinking.

Using Write-Pair-Share at the end of lessons helped students gain a clearer sense of what they had learnt in class. For example, sometimes they wrote how they could apply what they had been learning. Using their

notebooks to document their emerging knowledge and skills built students' understanding of and conviction in how and what they could do to improve their command of English. In fact, so important was this notebook that it became their 'bible' for English. Because we did not use a set textbook and we teachers generated many of our own worksheets, the notebook became a place where the students' learning was consolidated. I took great pride in my students' notebooks because they were also my accountability documents. As the Head of Department, by showing my students' notebooks to the other teachers and to my supervisors, I could demonstrate transparency in that I was "walking the walk" not only "talking the talk," thus modeling the sort of practice I was encouraging in my department.

One more situation in which the class used Think (or Write)-Pair-Share was at the beginning of a lesson to recap what had been covered in the previous class session. I find that a gap often exists (sometimes a Pacific-Ocean sized one) between what has been taught, on the one hand, and, what has been learned on the other. When students have opportunities to discuss their learning with peers at the end of a lesson or at the beginning of the next one, this gap can be narrowed. Tony Buzan (1983) suggested that recall and review within a day increases learners' rate of retention of learning. As I listened in while students talked to their partners, I could see that they were not just learning the different skills of English in discrete pieces. Instead, as they reviewed each lesson, they increased their capacity to apply what they learned to other contexts, as well as to integrate the different language skills.

An example of the benefits of students collaborating to consolidate their learning was that as they learnt to explain the meaning of different metaphors in the reading comprehension class, they would add the new metaphors to the word/description banks in their notebooks. When appropriate, they would also practice using the new metaphors in their compositions. Some even experimented with creating their own metaphors, which was very satisfying to me because it gave a freshness and uniqueness to their work.

As will be discussed later, I often encouraged my students to read each other's work, whether or not it was "good." It was wonderful to see that they learnt the collaborative skill of giving praise and showed spontaneous appreciation for their classmates' work. In a way, what was being built or consolidated was a sense of class identity – that they were a community of learners striving and enjoying together. They could both critique and appreciate each other's work. They were learning from each other's mistakes and successes. This form of practice was my cooperative learning experience at its peak. With the GCE 'O' level examinations collectively seen as the outside challenge, students felt more positively interdependent with their classmates, and thus, more committed to helping each other do well on the exam.

Getting ready for cooperative learning

In preparing the groundwork for groups to collaborate successfully, I had to consider and take action in a number of areas. These included seat arrangements, group size, group composition, designating groups, getting groups' attention, giving directions, and teaching and modeling collaborative skills. These are discussed below.

Seating

In Singapore secondary schools, students stay in the same classroom for most of their classes and their teachers move from one classroom to another. This can create problems if one teacher wants students seated in groups, while another teacher uses whole-class, teacher-fronted instruction. My students sat at individual square desks arranged in rows for most of their lessons with other teachers. These desks were easy to move around and rearrange. So, what I did was to assign students to groups of four for an entire 10-week term and tell them that they should be in their groups by the time I arrived. The lesson before, I would tell them whether they would start the next lesson in groups of two or four. This way, classes were ready for group work the moment I arrived. If the next teacher was not going to use groups, the students would rearrange their desks at the end of my lesson with them.

Group size

I used groups of four for several reasons. First, four divides nicely into two groups of two. As discussed in Chapter 3, pairs offer the greatest amount

of simultaneous interaction, i.e., the largest number of students overtly active at the same time, with 50% of the class potentially speaking at any one time. Then, after the pair has worked together, they can share what they've done with the other two members of their group of four. The way I used to do groups before I learned some cooperative learning techniques was for one group at a time to send a representative to the front of the class to share what their group's work with the entire class. That takes a long time, and only one person at a time is be speaking, but when pairs share with each other, 25% of the class is potentially speaking at one time.

Who works in which group?

Group composition was decided by me. My top priority was mixing students according to ethnic group in order to encourage the use of the target language. If, for example, all the students in a group were Chinese, they might be tempted to speak in Mandarin or another Chinese dialect. My number two priority was mixing students according to proficiency level. Although the students had been streamed, variations still existed. This mix of proficiency promoted peer tutoring. I also sought to form groups composed of even numbers of girls and boys, for two reasons. One, I hoped that mixing sexes would generate different perspectives. Two, I have found that sometimes students are more on task in mixed-gender groups. Setting up such groups was difficult because 2/3 of the class was girls, and some boys seemed to freeze up when grouped with girls. As with all less than ideal

situations, we learn to make do. What I did was to form groups with two boys and two girls, until all the boys had been grouped, after which all-girl groups were formed. However, mixing girls and boys was only my number three priority; so, I did not always keep to this formula.

Designating groups

Having a way of calling on a specific group can be useful. To facilitate this, I tried having students choose a team name, which also promotes positive identity interdependence and gives students a chance to exercise their creativity. However, I found the names confusing to remember, and groups seemed to gel well without them; so, we ended up just designating the groups by letter.

Getting groups' attention

I picked up a couple of classroom management techniques that helped the groupwork go more smoothly. When students were working in their groups and I needed to interrupt because time was up, I needed to explain something, or I wanted to point out something a particular group was doing well, I used the RSPA signal. The signal begins with me clapping once and raising a hand:

1. **R**aise hand - when students see the teacher's hand raised, they raise their hands.

- 2. Silence when students raise their hands, they bring their conversations to a close.
- 3. Pass the signal students pass the signal to their classmates who are working so enthusiastically that they did not see the teacher's hand raised by tapping them on the shoulder or whispering to them.
- 4. Attention to the Teacher students stop whatever they are doing (put their pens down, take their fingers off the keyboard), look at, and listen to the teacher.

With the RSPA signal, I could usually get students' attention within a few seconds. This saved a lot of time and spared me the frustration of trying to get the attention of 40 young people absorbed in animated discussion (hopefully on the designated topic). Getting the attention signal to work did not happen overnight. It took some persistence. I had to "waste time to gain time." I did not just show students the RSPA signal once. First, I explained why it was important, and then when we used it, I insisted on it being done properly. Sometimes, after a few weeks or after a term break, students started to slip, and I had to "waste" time again to remind them.

Giving directions

Another classroom management technique I learned from other teachers helped me when I gave students directions for working in their groups. What I would do first was ensure that I gave simple, clear directions, and I gave the directions one step at a time if they were long. Then, I would

call a number and ask the member of each group with that number to repeat the directions to their groupmates. By walking around and listening in on these repetitions I could see if the directions had indeed been understood. Prior to this method, groups would get confused and not be sure what to do. I would end up wasting time, moving from group to group only to find my directions misunderstood and having to re-explain them. I didn't mind if students modified the procedure a bit, but I wanted them to at least first understand the original procedure.

Teaching collaborative skills

To enhance interaction among students, I taught them collaborative skills. Among the skills I taught were basic social interaction skills, including saying "thank you" and greetings, such as saying "good morning" and "how are you today?" Of course, students already knew how to enact these skills in English. The point is that they very seldom used them, and I found that when they started using them, the atmosphere in the groups and in the class generally turned a bit warmer and the winds blew in a bit more cooperative direction.

I also taught collaborative skills that helped students learn. These included: 1) Praising others for their good work: By giving specific praise, students could learn from each other more effectively. 2) Asking for elaborations: Often students' writing or answers were skeletal, and elaboration was needed to bring the skeletons some life. 3) Coaching others:

By helping peers evaluate their own work, students helped everyone in the group to internalize the guidelines I provided for doing good work.

To teach collaborative skills, I would choose one skill and begin by helping students see why the skill was important. For example, when I taught them the skill of listening attentively, we first brainstormed several reasons for using the skill:

- 1. We can learn more from others when we listen attentively to them.
- 2. Listening attentively to others is the polite thing to do and promotes a gracious society, one of the Singapore government's goals.
- 3. People are more likely to listen carefully to what we say if we have listened attentively to them.
- 4. Arguments are less likely to arise if we listen attentively even to those with whom we disagree.

The next step in teaching a collaborative skill was to help students begin to develop a sense of what is involved in using the skill. One means of beginning this development is via a t-chart as shown in Figure 1.

Looks like	Sounds like
Eye contact	'yes'
Nodding	ʻah, ha'
Smiling	'hmmm'
Note-taking	'what do you mean by?'
Frowning	'and…?'

Figure 1 Listening Attentively

The students enjoyed working on the t-chart I think because they had never thought about how such a simple thing as listening could look and sound. Then, I tried to choose practice activities for the collaborative skills that would very clearly exemplify the importance of developing that skill. For example, we would do an information gap activity where partners had to listen carefully to each other in order to successfully complete the exercise.

For teaching the collaborative skill of listening attentively, Paraphrase Passport (Kagan, 1994) was useful. In this cooperative learning technique, first one person in the group provides an idea. The second person paraphrases and the original speaker checks the paraphrase for accuracy. Once the paraphrase is Okayed by the partner, the second speaker gives her or his idea on the topic. Paraphrase Passport fit well with the collaborative skill of listening attentively, because partners would not be able to paraphrase answers well if they were not listening carefully.

Since Paraphrase Passport is a little bit like a game with partners practicing the skill, observing each others' use of the skill and then giving feedback, the class found the learning fun. It was very satisfying to watch the students genuinely having fun as they learnt together. Another reason I liked Paraphrase Passport was that it encourages equal participation in the groups -

no one can dominate a discussion, because each person gets a turn after paraphrasing what their partner said.

Another way I helped students learn what was involved in using a collaborative skill was by modeling. When students were working in their groups, I would walk around and listen in. If I didn't hear the skill I had selected being used, I would use it. The students generally liked commenting on my modeling too. I was also glad that we were building a culture of teacher and students being learners together in the classroom. The students didn't necessarily practice the chosen collaborative skill using all the steps in the six-step procedure outlined in Chapter 4, but I did persist in continually bringing a particular skill to students' attention, and I gave them feedback on how well and how frequently they seemed to be using the skill.

Cooperative learning and the teaching of writing

I frequently used groups for writing instruction. In this section, I describe how groups were combined with the process approach to writing and with computers.

Generating ideas

Students used a process approach to writing to help generate ideas for their writing and to provide themselves more readers, i.e., peers, to respond to ideas. Before students wrote, they read model compositions of the same genre, e.g., stories about frightening experiences. For model compositions, I tried to choose passages that students read for their reading comprehension lessons so that they would be of the same genre and field as the texts they were later to write. To build vocabulary, we created *word clines*. An example of a cline would be words showing different levels of fear, with words showing a mild level of fear toward one end of the cline and words showing a high level of fear toward the other end. As students generated words and suggested where on the cline to place them, we would think about the actions and thoughts that might indicate the level of fear felt by a particular character in a familiar text.

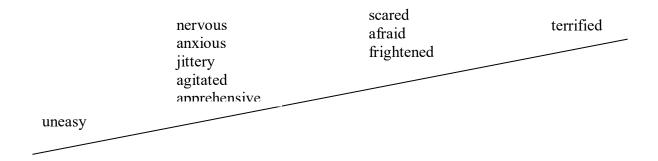


Figure 2 Word cline

To brainstorm synonyms for a word, we played a game similar to "Scattergories." Groups would work together to list as many appropriate words as possible. At the end of the time limit, each group took a turn to call out their lists, and repeated words would be struck off. Groups with the longest remaining list would win the game. This could generate a lovely long list of interesting words. In this game, positive interdependence within the groups was fostered via competition with other teams, but it was a friendly

competition; so, I wasn't worried about causing bad relations between members of different groups.

We then worked on putting the words generated on a cline according to intensity. As a follow up to this exercise we would also often look at how, for example, different levels of an emotion would be translated into facial or bodily expressions, so that in their compositions students could describe how a character was feeling in greater depth instead of simply telling the reader the character was *afraid* or *excited*.

Integrating other skills with writing

One of the nice things about cooperative learning is that it affords so many ways to integrate the four language skills (listening, speaking, reading, and writing). In the writing lessons described in the previous section, students had already read the model compositions. One part of the assessment that my students were to take at the end of the year was an oral exam that included a conversation component involving listening and speaking. So as another pre-writing activity, they had conversations in which they asked each other about past frightening experiences. After the reading, word cline, and conversations, we would do the Think-Pair-Share activity described above as the last pre-writing task.

Peer feedback

Students then individually wrote their first draft at home. The next class, we would do peer feedback on content in one of several ways. Sometimes, students used Simultaneous Roundtable (Kagan, 1994) as a vehicle for that. The way it worked was that each person passed their doublespaced draft to the person to their right who read it and wrote their feedback directly on the draft. If a student from the group didn't bring the homework, 4 students would simply have to work on 3 scripts with 1 pair reading the same script simultaneously. This activity continued until each student had received written feedback from their groupmates, at which point each author had a chance to discuss any of the feedback that they had received. I stressed that feedback should either be in the form of positive comments or questions, rather than criticisms. I wanted to avoid negative feedback for a few reasons. First, these students had a low self-image of themselves as writers; I wanted to boost that. Second, I hoped that by looking for the positive, students could learn from their peers' strengths. Third, I wanted to change offering praise and affirmation change from a novelty into a habit. As for students who did not do the homework, the penalty would fall directly on them because they wouldn't benefit from any feedback from peers.

Feedback guidelines

There were specific guidelines for peer feedback. In the beginning, students focused on matters of grammar and mechanics. To help them

concentrate more on other features of writing, I gave them guidelines on what to look for. These included:

- 1. Do the authors *show* the readers what is happening, rather than *telling* them?
- 2. Do the authors slow down the action to help readers see step-by-step what is taking place?
- 3. Do the authors elaborate on what the characters are feeling, thinking, and doing?
- 4. Is there anything that is unclear or that you would like to know more about?
- 5. How did you feel as you were reading the piece?
- 6. What part grabbed you the most? How did the author achieve this effect?

For instance, in regard to showing instead of simply telling, students would read each other's stories and comment on whether the writer had shown enough through descriptions of thoughts and actions. I was particularly pleased with their improvement in showing, not just telling. This made their stories come alive. They also started to enjoy playing the stories in their heads in a frame-by-frame way, as if they were directing a movie!

Next, students would write the second draft at home. The following class period, peer feedback would be given on specified aspects of form. I limited the areas for feedback in order to make the task more manageable for students. The areas I selected were ones that I had taught recently, such as, connectors or verb tenses. In pairs, students gave feedback on each other's

compositions. Thanks to the peer feedback, I found that when students' work came to me, it was noticeably better: the content was improved and there were fewer grammatical mistakes. Furthermore, giving peer feedback helped students develop criteria for self-evaluation. To promote the development of these criteria (which were similar to performance rubrics) students kept a list in their English notebooks and referred to it when writing. When I handed back students' work, I would highlight particularly good examples and encourage other students to have a look at them, which they often did as they liked to see models written by their peers. The best work in the class represented attainable standards that gave the other students comfort and encouragement.

Writing with computers

Singapore is one of the world's most "wired" countries, and its schools are well-equipped with modern hardware and software. Furthermore, the MOE has taken many steps to encourage the use of information technology in schools. With this impetus, process writing became even more convenient.

Before we had computers the students would make comments and edit their friends' work in green ink. (I told them that that was the colour the chief examiners used in Cambridge; so, there was an added sense of importance given to the editing process.) Once we had computers students could type their draft compositions onto the computer. During editing sessions, students would display their written pieces on the monitor. Armed with the rubrics I

had given them, students would then go from terminal to terminal inserting comments on their groupmates' work using the "track changes" and "insert comments" functions in Microsoft Word. Track changes uses different colors to allow readers to differentiate between the original writing and parts added, altered, or deleted by an editor. The "insert comment" function allows readers to put an electronic "post-it" message anywhere in the text without disrupting the flow of the writing. All the writer had to do after that was read the comments and suggestions and cut, paste, delete, add and rephrase, to end up with an improved second draft. This was much better than having to rewrite the whole composition, and I had the joy of marking more coherent, better organized work. That the writing was beautifully typewritten was an added bonus!

Grading student writing

Students' grades were based solely on their own compositions; I did not give points or use any kind of group grade or a combination grade based on individual and group scores, because students were willing to help each other without me using grades as a motivator. These students had known each other in many cases for between two and four years and in general liked each other. Indeed, they were willing to sacrifice themselves to help their group mates. One example of this that stands out in my mind was of three group-mates who dealt most admirably with a group mate who was difficult to work with. The difficult student would get into a temper over a poor grade

for an assignment and kick the tables and chairs in the classroom, sometimes threatening worse when the poor grade was for a test. It was great watching the three group mates being especially nice – continuing to calm and encourage their group mate, despite continued rebuffs. Eventually, they did have some success, although the situation remained difficult. No doubt, the student's behavior would have been much worse without the group's support.

Group compositions

Not all writing was done individually. Sometimes, students wrote group compositions in their foursomes. I hoped that by working in groups students could create more realistic writing. Too often they relied on movies they had seen, making their stories a strange concoction of Hollywood and real life. To build their store of realistic story ideas, students brought in newspaper articles to share with their groups. I would let them first tell their group mates the news story they had picked and then together with the class, I would flesh out one of them as an example. When it was their turn to do the same with the other stories, they would practice describing what happened from the perspective of one of the people in the news story.

In one particularly vivid article, a staff member of Singapore's train system when attempting to pick a piece of rubbish off the track had to make a mad scramble for safety from an oncoming train which, unfortunately managed to catch her foot. The students went into how the woman might

have felt as the accident unfolded. The key lay in giving a detailed, moment-by-moment account, including describing what the character was feeling, thinking, and doing. One of my colleagues had a particularly colorful acronym to help the students check if they and their peers had described the key moments in their stories in enough detail. She said to check for FART (feeling, actions, reporting verbs, and thoughts). The students were thrilled with this trigger.

Feedback from other groups

Each group would write a story based on a different article. Then, groups would share with each other using the Stay-Stray technique (Kagan, 1994). After the groups of four had finished their first draft, three of the four members would leave and each go to a different group. These were the *strayers*. The ones left behind were the *stayers*. Stayers would read their group's draft aloud to the strayers, who had been given feedback guidelines, and the stayer would respond. In addition to the feedback guidelines mentioned previously, others that were used at various times include:

- 1. What descriptors could be added to the story?
- 2. Did the group try to use all five senses to tell the story?
- 3. Was the action slowed down?
- 4. What was your favourite part of the story? Why?

After the stayers had listened and responded to the strayers' feedback, the strayers would return to their original groups where the stayers informed

them about the feedback their draft had received. Stay-Stray promoted individual accountability because each member of the group had to be ready to explain the group's writing decisions in case their number came up to be the stayer. The strayers would pass on good ideas about writing they had picked up from other groups' drafts, another way that individual accountability was promoted. Then, the group would write a new draft. Stay-Stray could then be repeated. When the groups submitted their final draft, they all received the same grade for the work. This did not cause any protests from students, perhaps because they did not care that much about grades, as the main thing on their minds was the end-of-year exam.

Another twist to collaborative writing was that sometimes after writing the first draft together, the students wrote individual second drafts. Because the students had fleshed out the stories together, the subsequent individual work was significantly better than work produced in isolation.

Cooperative learning and reading

In addition to composition, another major element of the English curriculum in Singapore deals with reading comprehension. Cooperative learning helped here as well.

Higher-order thinking

The class would read a text and then students would answer questions on the text for homework. These included comprehension as well as higher-order

thinking questions. I stressed to students that they should provide not only answers to the questions but that they should also explain the thinking behind their answers. Thus, asking for and giving explanations was a crucial collaborative skill. In order to accomplish this, we used Numbered Heads Together (Kagan, 1994) to discuss the questions in groups. There are 4 steps to this method:

- 1. Students number off in their groups: 1, 2, 3, and 4, i.e., their heads are now "numbered". We had already done this numbering off, as students had a regular number they used for all group activities.
- 2. The teacher asks a question or gives a task. I had done that already with the questions for the reading passage.
- 3. Students put their "heads together" together literally and figuratively to answer the question *and* develop an explanation of the thinking behind their answer.
- 4. The teacher calls a number. The student in each group with that number gives and explains their group's answer if the teacher calls their group.

Promoting individual accountability

The virtue of step 4 can be seen by comparing it to what I had been doing before I learned about cooperative learning. Students would work in groups, and then I would call on one group to give their answer. The problem with that was that the same student, the top one in the group, would usually answer. The other group members knew that they would not have to answer

and thus often would not feel the need to be prepared to answer. At the same time, the top students in each group knew that because they would answer for their group, they did not need to help their group-mates be ready to answer.

In contrast, Numbered Heads Together encourages all students to think about the question and to help their peers to understand the process behind their group's answer. The way we did this was for half of the students with the number I had called (1-4) to come to the board and write answers, including explanations, and then the others with the same number would come to the board to evaluate the answers. Next, the whole class discussed which answers were good and why. At first, I offered points and food treats to encourage students to work hard in their groups, but it turned out that the students were sufficiently excited about coming up with a good answer and defending it; so, extrinsic motivators eventually weren't necessary.

Summary writing

In Singapore, summary writing is taught as a reading comprehension skill. Writing summaries was a part of the GCE 'O' Level exam on which students seemed to do particularly poorly. They tended to just pluck points from the passage and string them together in haphazard ways. This is how I used cooperative learning to help improve students' summaries. Students would come to class with their summaries completed as homework. In class, and in pairs, they would take turns mentioning a summary point, using

Paraphrase Passport (see above) to check the clarity of their summaries.

Paraphrase Passport helped students see that what they thought they meant was not always what their partner had understood them to be saying. This experience in speaking definitely proved to be useful practice for producing clearer, better connected written summaries.

Cooperative learning and oral skills

Almost any time cooperative learning is used, oral skills come into play. However, in this section, I describe some ways that I used cooperative learning to specifically focus on oral skills.

Exam preparation

The oral exam my students took as part of their 'O' level English paper had three components, viz., reading aloud, a picture description, and conversation. My strategy was to prepare my students for the oral exam in such a way that they could work outside class to improve their oral skills both individually and collaboratively. During teaching and practice in class, I would explain the exam rubrics to the students and point out the usual mistakes candidates make during the exam, e.g., commonly mispronounced words and sounds, as well as ways to engage the examiner in a lively conversation through the sharing of personal anecdotes. In class, the students always worked in pairs, taking the roles of tester and candidate in turn. The tester's job also included pointing out strengths and areas needing improvement. The pairs were, therefore, role interdependent. The exciting

aspect of this preparation in class was that it empowered the students to become more independent from me by becoming more interdependent with their peers. I repeatedly encouraged them to work outside class on improving their oral skills, which they did, much to my delight. I was thrilled and gratified to find students staying behind after school, working together on benches the school provided in various areas outside the staff room or at the school canteen. They graded and coached each other. Sometimes they would come in their pairs to ask for an informal test with me to get my feedback. I always tried to hear the peer's feedback first before giving my own. Their peer assessments were fairly accurate.

Activities like this helped students to feel that they were responsible for their own learning instead of always depending on teacher feedback. This is why I gave them "handles" (something to hold on to) to create very clear guidelines about expectations, so that they knew how to improve. I also found that this increased responsibility increased students' confidence as well as self-esteem. For many of them it was the first time they had truly understood the expectations of the exam and could perform appropriately. The exam was not, in fact, the kind of hit-and-miss affair that many of them had assumed it to be. They just had not understood clearly that they needed to improve and how to do it. From primary school on, students had been told, "you can't study for English." However, I guided them to see that, in fact, they could. Actually, the students began to be astounded at how much they could do to develop their oral proficiency on their own, and by working with

their peers inside and outside of class to do so. No longer did they feel helpless and at the mercy of some seemingly ruthless and arbitrary examiner!

Teacher-teacher collaboration

One of the things I like about cooperative learning is that I can see lots of application for cooperative learning concepts outside the classroom. For example, I found a lot of benefit in collaborating with other teachers.

Sharing the workload

Teacher-teacher collaboration was sometimes directly related to cooperative learning. An example of this was when another teacher, Daphne, and I worked collaboratively to build up teaching and learning resources for the same level of students. To support each other in materials preparation, Daphne and I would take it in turn to write or collate resources for different units of work. Since no one curriculum text could provide for the needs of our students, we needed to spend a fair amount of time on material selection and preparation. Given our time constraints, we depended on each other for alternate units of resource material and ideas. Even when exchanging materials we would suggest to the other how we would use the materials, and after class, we would share our successes and failures with one another. The feedback was the basis for modified worksheets being included in our resource packages. It was truly satisfying watching a tried and tested resource package grow collaboratively through the year!

In a very real way this working partnership also demanded a high level of individual accountability between us. The worksheets had to be professionally prepared and demonstrate our professional competence.

Because the work was open to critique not only by each other but other teachers in the level we shared the material with, I believe we both grew professionally in the process.

Observing each others' classes

While colleagues and I were taking the 10-week cooperative learning course mentioned earlier with George, we would informally talk about how it was going with implementing cooperative learning in our classes. We also did some of this as part of the cooperative learning course. In the course, ideas for professional sharing were presented from a book by Cooper and Boyd (1994). One of the ideas was to invite other teachers to watch us teaching via cooperative learning. So, I decided to organize a cooperative learning week. This was very unusual because it was the first time for many teachers to visit their fellow teachers' classes. Normally, the only visitors were the supervisors, viz., the principal, vice-principal, Head of Department, or someone from the MOE during a school appraisal exercise.

The way the cooperative learning week worked was that teachers on the cooperative learning course were asked to offer demonstration lessons for the other teachers at the school to observe and learn from. The cooperative learning-trained teachers who were willing to let others watch their lesson stated the topic and level to be taught, where and when the class would be, and which cooperative learning technique(s) they would be using. I made this into a schedule that the teachers could sign up on. Also, trainee/student teachers were encouraged to visit these classes, rather than the usual practice of staying only with their cooperating teachers. Also, no more than three teachers, trainees or regular teachers, were allowed to sign up for any particular time slot. The week seemed to be a success as many teachers, including some from other departments, signed up. We built on the cooperative learning week through adding a mentoring system in which teachers who had been using cooperative learning coached those who were just getting started. This mentoring not only helped those teachers who were the mentees - my fellow mentors and I also benefited in terms of feeling pride in our enhanced teaching knowledge and skills. Further, being in the role of mentor gave us a gentle push to use cooperative learning more often and more thoughtfully, so as to set a good example for our peers. cooperative learning week and the mentoring that followed succeeded in promoting the use of cooperative learning among other teachers. However, without having taken a course and, instead, having simply adopted or adapted a couple of cooperative learning techniques, many of the novices' first lessons were a bit rough. Fortunately, however, about 25% of the colleagues in my school signed up for the cooperative learning course the next time it was offered.

Conclusion

In the second half of the year, after I took the cooperative learning course, teaching seemed much easier because the cooperative learning techniques and the management devices were in place, and students were helping each other rather than depending on me. I had become more adept in using cooperative learning, and students had become more accustomed to cooperative learning and had improved their collaborative skills. Of course, teaching was still, and always will be, a continual learning journey with many bumps along the road. The bumps keep me from getting too complacent and push me to learn more about cooperative learning and other areas of teaching.

Toward unconscious competence

A colleague of mine who had attended a workshop by Spencer Kagan told me how Kagan had explained that teachers go through 4 phases in becoming proficient at using cooperative learning. The first stage is unconscious incompetence in which teachers are not aware of cooperative learning and have no competence in its use. That was the stage I was at when I started teaching. The next stage is conscious incompetence in which teachers are aware of cooperative learning but do not yet know about it. I was at this stage at the time the teacher from my school took the course in cooperative learning and told me about it. The third stage is when teachers become consciously competent at using cooperative learning. At this point, we know about cooperative learning and can use it, but it takes a lot of planning to figure out how to bring cooperative learning principles and techniques into

play as we organize our classrooms. This was the stage I was at in the year described in this chapter. Many teachers I've talked to at this stage worry that cooperative learning takes too much time to plan and prepare. Because of this, some of them are reluctant to use cooperative learning very often.

Fortunately, I was moving toward the fourth stage, *unconscious competence*, in which I did not need to spend so much time to create cooperative learning lessons. My increased familiarity and skill meant that I could think of which cooperative learning techniques would go with which lesson content and objectives more quickly and easily. Also, I had a better feel for how to adjust to the particularities of each of my classes, bearing in mind key cooperative learning concepts. Thus, it seems that I now have the framework for group activities that I once lacked.

Needless to say, I've still got lots to learn about cooperative learning. My time at Teachers Network is almost up, and I'm looking forward to returning to the classroom. While at Teachers' Network, I've picked up many good ideas about cooperative learning by working with other teachers on collaborative investigations of their teaching using an action research model for investigation. Some famous person, I can't remember who, once said that the more we know, the more we realize how little we actually know. I feel that way a bit about cooperative learning. The human interactions that go on within groups inside a language classroom are so complex, and with a whole other layer of complexity added by factors from beyond the classroom, that I'm sure I'll never get it all figured out. Fortunately, I enjoy trying.

Discussion points and tasks

- 1. The authors mention that, at first, Wee only used group activities for "special lessons." This is not an uncommon attitude among teachers because groups do take more planning to organize, plus time to get students into and out of groups. What obstacles do you face in trying to use group activities more often? Make a list. Then, think about how the authors of the chapters in this book tried to overcome them. If you can't find answers there, look at the works in the references, talk to colleagues, ask your students, do some brainstorming, and then try out some of the solutions you develop.
- 2. Wee and some of her colleagues took a course on cooperative learning that other teachers at her school had already taken. She points out that so many teachers knowing about cooperative learning made implementation easier. Teachers also observed each other's classes and shared in materials preparation for cooperative learning lessons. The literature on innovations in education (e.g., Fullan, 1998) suggests that a key factor in the success of school innovations is that teachers work together in teams. In your implementation of cooperative learning, do you have colleagues at your school with whom you can work? If not, can you find colleagues at nearby schools or via the Internet?
- 3. After she was more experienced with cooperative learning, Wee found that it was not difficult to use cooperative learning in nearly every

- lesson, even though some lessons only lasted 35 minutes. Think about lessons you teach now that do not involve cooperative learning. How could you modify these lessons to include cooperative learning as at least a part of the lessons?
- 4. The author describes the large gap that often exists between what is covered by the teacher and what is learned by the students. She claims that cooperative learning can help close that gap. In your own experience as a learner (including what you learn as you teach), have you found that to be true, i.e., that by collaborating with others you strengthen and expand your learning?
- 5. Wee could see that her students were not learning the different L2 skills, such as reading and writing, in discrete pieces. Yet, many L2 courses look at language in this way, dividing it into separate skills. This book has suggested that cooperative learning offers a technology for integrating skills, because students have opportunities for listening and speaking with groupmates, and groupmates provide students with a ready set of readers for their writing and of writers to provide them with reading. What is your view on the issue of whether L2 learning is best seen as the acquisition of a discrete set of skills? How does cooperative learning fit with your view?
- 6. This chapter talks about how a group dealt with a member who was difficult to work with. Such situations arise not only among students but in all areas of life in which collaboration takes place. Have you

encountered students who didn't seem to like to work in groups or with whom no one wanted to work? How did you handle the situation? In the particular case described in the chapter, the other group members handled the situation fairly successfully. How can we prepare students to cope in such situations, both in terms of helping the one student and in terms of the other group members? To what extent should teachers intervene, and to what extent should students be left to sort things out on their own?

- 7. Sometimes when teachers conduct group activities, they attempt to motivate students by having groups compete against each other. In the chapter, we saw how an examination, rather than people, was used as an outside force to encourage collaboration in the groups. Some educators worry that if we have groups compete against each other, bad feelings may arise in the class. In contrast, other educators feel that inter-group competition makes the classroom a livelier place to learn. What is your experience with inter-group competition in education and elsewhere? Can competing against a standard, such as an examination, motivate students?
- 8. Wee assigned students to groups in an attempt to achieve groups that were balanced on a number of factors. However, the numbers of females and males was not equal, with females comprising 2/3 of the class. The solution adopted was to form groups with two females and two males, until all the males had been placed in a group, after which

- all-female groups were formed. Would you resolve this dilemma the same way, or would you try to have one male in every group, or would you try a different solution? Why?
- 9. The author explains how she worked to give clear instructions for the cooperative learning techniques. Would her way of giving instructions work with your students? If not, how might you adapt them? Wee also states that she didn't mind if students changed the techniques a bit. Would you also be so flexible, or do you think it is important for students to follow the instructions precisely?
- 10. Wee gives a good deal of attention to students' collaborative skills, spending time to explicitly teach these skills. Is such attention warranted or is it time away from the syllabus? If you feel it is worthwhile to explicitly teach collaborative skills, which skills would you select to teach to your students, and how would you go about teaching them?
- 11. Peer feedback on writing is a popular form of peer interaction in L2 instruction. Wee tried to heighten the effectiveness of the feedback by providing guidance specifically tailored to the teaching points she had been emphasizing. What are some points about good writing that you teach your students? When students supply each other with peer feedback on their writing, how can you provide guidance that jells with your teaching points?