

**Effects of Cooperative Learning on the Oral Proficiency of Chinese
Students in the Tertiary-level EFL Classroom**

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Abstract

To explore the impact of cooperative learning (CL) on Chinese students' English oral proficiency, a 15-week quasi-experiment was conducted in a Chinese university during the first term of the Academic Year 2007-2008. A non-randomized pre-test-post-test control group research design was adopted with 37 first-year students in the experimental class (the EC) and 36 in the control class (the CC). The EC students participated in CL in conjunction with regular language instruction in an integrated skills course. They were exposed to CL activities for about 30 minutes in each session, making up a total of 90 minutes every other week. The CC students only received conventional whole-class instruction.

The oral pre-test and post-test were conducted before and after the intervention to measure the students' gains in oral proficiency. The National College Entrance English Exam (NCEEE) and a final term English exam (FTEE) were employed to measure their improvement in general proficiency. Interactional data of two EC groups (the ESs) and two CC groups (the CSs) were collected by the oral pre-test and post-test, and a pre-task and post-task in the classroom. The purpose was to detect any change in their interactional strategy use. The interactional data of the ESs and the CSs were transcribed, and interactional strategies were identified in the transcriptions. The quantitative results are presented using descriptive analysis as well as inferential analysis. Effect size was also measured to examine the relative magnitude of the treatment. The interactional strategies used by these two groups were compared.

The quantitative results revealed a null experimental effect on overall oral proficiency and on its components: grammar and vocabulary, pronunciation and discourse management, but the effect on interactive communication was inconclusive. Conversation analysis showed that the ESs appeared to do somewhat better in interactional strategy use than the CSs. Also, the results did not significantly favour CL in comparison with conventional whole-class instruction in helping Chinese students improve their general proficiency. As this study was conducted with intact classes with a small sample, the results may only be generalized to similar universities in China, and may not be generalized to all the foreign language learners or institutions in China.

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List of Abbreviations

ANOVA	Analysis of variance
CC	The control class
CET-4	College English Test Band 4
CL	Cooperative learning
CS	The student in the control class
CSs	The two CC groups
DM	Discourse management
EC	The experimental class
EFL	English as a foreign language
ES	The student in the experimental class
ESL	English as a second language
ESs	The two EC groups
FCE	First Certificate in English
FTEE	The final term English exam
GV	Grammar and vocabulary
IC	Interactive communication
L1	First language
L2	Second language
NCEEE	The National College Entrance English Exam
PETS-3	The Public English Test System Level 3

Chapter One Introduction

1.1 Aims of the Study

This study is an empirical exploration of the effects of cooperative learning (CL) on Chinese students' English achievement in a Chinese University. It particularly aims to investigate the effect of CL on their oral proficiency, the effect of CL on their interactional strategy use in conversation and finally the effect of CL on their general proficiency. The objective of this study is to extend CL research by examining the effect of CL on oral proficiency in the EFL context. It is expected that the findings of this study are indicative of the effect of CL on the EFL learners' oral communicative ability and contributory to the teaching and learning of spoken English in the tertiary-level context in China.

1.2 Motivation of the Study

There were several factors that motivated the present study. First of all, since gaining my MA in TESOL in a UK university in 2002, I have always attempted to maximize my students' opportunities to engage in use of the language so as to develop their oral communication skills within the constraints imposed by the teaching schedules and testing practices. I believe that enhancing the learners' oral skills facilitates other language learning skills such as listening, reading and writing. I also believe that creating opportunities for students to use language in the classroom enhances their enjoyment and motivation to learn the language. Secondly, in my own professional context, many of the students enter the university with a poor English foundation. I considered whether there were some easily-used techniques to encourage the students to talk to each other within the limited classroom time and to increase their confidence in learning English. Finally, there is a growing need to learn English in China. With the increasing need for global cooperation, international trade, cultural exchange among countries in the 21st century, and with the rapid economic development in China, English plays an increasingly important role in facilitating international exchanges, and thus having good command of English is considered very necessary for international communication. However, when they graduate from university, many students in China are not competent enough to communicate orally as will be discussed below.

1.3 Background to the Study

More frequent international exchanges with other countries and the rapid economic development in China have given rise to a pressing demand for large numbers of competent users of English in a wide range of professions and businesses; the demand is especially high for fluent English speakers. On the whole, in the last decade the English level of graduates has improved as a result of college English education reform. However, their overall English level is not satisfactory, in particular their oral skills. Zhu (2006) reports the result of a survey on oral skills of graduates in the country: ‘those who are good at oral communication just account for 5%, those who are able to or are basically able to attend international conferences or lectures just account for 7%, those who are able to or are basically able to involve in international trade negotiation just account for 14%’(p.86). ‘EFL in many educational institutions in China is still unable to meet the requirements of the political and economic growth of the country as many graduates find it hard to communicate effectively after spending a long time studying the language’ (Luchini, 2004:2). It is important and necessary for university students to develop their ability to use the language for meaningful communication, and thus this has important implications for College English education brought about by the economic growth.

College English is a compulsory course for all first- and second-year students at the university level in China. It normally offers 4 hours of classroom English training per week in ‘intensive reading’ (3 hours) and ‘listening’ (1 hour). In the intensive reading course language teachers teach English based on the prescribed textbooks and, despite the name, are required to teach all aspects of the English language such as vocabulary, grammar, speaking, reading and writing. It is also named an integrated skills course. At the end of the second semester of Year 2, students take the College English Test Band 4 (CET-4) which is administered by the National College English Testing Committee on behalf of the Chinese Ministry of Education. This test aims to promote College English teaching and measure objectively the real English ability of college students in China. The CET4 spoken test is allowed to be taken only after the written CET4 score reaches above 550 out of the maximum mark 710. To meet the needs of the rapid economic growth and social development in China, the latest revised *College English Curriculum Teaching Requirement* for non-English major undergraduates (2007:1) is to develop students’ ability to use English in an all-round

way, especially in listening and speaking, enabling them to communicate effectively in both spoken and written English in their future careers. It states the basic requirement for oral ability as follows.

Students are able to communicate in English and discuss a certain topic during the process of learning; to communicate with native-speakers in daily-life situations; to make a brief speech over a familiar topic with preparation in advance, expressing himself/herself clearly with fairly correct pronunciation and intonation; and to use basic communication strategies in conversations. (2007:2)

The newest textbooks at college English level are based on communicative principles and greater emphasis is put on communicative activities. In practice, however, traditional Chinese teaching methodology which sees language teaching as a process of delivering knowledge rather than communicative skills may have hampered the effectiveness of EFL learning. The teacher remains the centre of the classroom and provides all the input like a transmitter, while the students are the passive recipients. The study of successful and unsuccessful EFL students in Chinese universities by Gan et al (2004) reveals that the teacher lectures in front of the blackboard most of the time and students rarely have any opportunity to develop communicative competence in class. Teachers play an important role in acquainting the students with rules and usages of the English language different from their own (Guo, 2004). Some teachers tend to teach students about English through grammar-translation rather than for communication. In addition, students' English competence is assessed through written exam papers where speaking skills are rarely tested. As Luchini (2004) argues, this testing and evaluation system has had a great impact on teaching practices and thus teachers teach English to a test rather than help their learners to develop their communicative competence. Another contributing factor is the large class size (usually 35-70 students in a class) which makes it difficult to carry out communicative activities. Finally, there are also some constraints on communicative activities because of the limited classroom time.

As Gao (2007:199) states, although at present intensive reading and listening courses are offered in many universities, students in both are given few opportunities to open their mouths and speak. As can be seen, on the whole students have few

opportunities to engage in using the language for communication, and thus there is a lack of communicative output. As a result, although many of them have passed CET4, they are not competent to perform orally in daily communication. Nevertheless, it is clear that the current *College English Curriculum Teaching Requirement for non-English Major Undergraduates* (reported above) in effect directs teachers to regard the task of developing students' oral ability as an indispensable part of language teaching to cater for the current situation in China. 'Language is communication, and learning a language is learning to communicate' (Li, 1984:2). Hence it would seem necessary to integrate speaking into the curriculum so as to build up students' oral skills as well as other language skills.

For many language learners, the ultimate goal of learning a language is to be able to apply what they have learned to real life situations (Savignon & Wang, 2003). In the literature, the role of communicative practice in the language classroom has been emphasized. For example, Gwyn-Paquette & Tochon (2003) note that in order to achieve a higher level of language proficiency, foreign language learners need to get involved in oral communication and problem solving. Learning to speak in a second or foreign language will be facilitated when learners are actively engaged in attempting to communicate (Nunan, 1991a). Kumaravadivelu's (1993) description gives us the key idea associated with communicative practice:

...a communicative classroom seeks to promote interpretation, expression, and negotiation of meaning. This means learners ought to be active, not just reactive in class. They should be encouraged to ask for information, seek clarification, express an opinion, agree and/or disagree with peers and teachers. More importantly, they should be guided to go beyond memorised patterns and monitored repetitions in order to participate in meaningful interaction.

(Kumaravadivelu, 1993: 12)

Group work is the basic context for communicative practice. 'A small group of peers provides a relatively intimate setting and usually a more supportive environment in which to try out embryonic second language skills' (Long & Porter, 1985: 211). It is argued that CL, which involves carefully-structured group work, would create opportunities for students to use language to learn language, and would help them

maximize their peer interaction and learning in the classroom (Kagan & McGroarty, 1993; Jacobs, 1998; Crandall, 1999; McCafferty et al, 2006). These proponents of CL suggest that CL provides many opportunities for meaningful input and output in a supportive learning environment. McGroarty (1991) in particular claims that student participation in pair and small-group work following CL principles facilitates second language acquisition. I feel that it would be worth investigating how CL works in the particular EFL context with which I am concerned.

1.4 Significance of the Study

The research on specific applications of CL began in the early 1970s. Many studies have been conducted to examine the effects of CL as an instructional approach in all domains in education settings and the findings suggest that CL produces positive results in general in terms of academic achievement, social skills and student learning (Slavin, 1995; Johnson et al, 2000). CL only began as an area of major interest in second language acquisition in the late 1980s. It was first used to organize group work to aid the understanding and practice of both language and subject content of limited English proficient students in North American settings (McGroarty, 1989; Kessler, 1992; Holt, 1993; Kagan, 1992, 1995). These researchers and others (e.g. Oxford, 1997; Dörnyei, 1997; Jacobs, 1998; Crandall, 1999; McCafferty et al, 2006) have already argued for the theoretical relevance of CL in the ESL/EFL classroom, and suggest that CL facilitates the development of second language acquisition. Studies in the context of ESL/EFL suggest that the benefits of various CL techniques include enhancing motivation (Clément et al, 1994; Dörnyei, 1997), increasing self-confidence and reducing anxiety (Tsui, 1996), developing positive attitude toward language learning (Gunderson & Johnson, 1980) and contributing to language development (Bejarano, 1987; Ghaith & Yaghi, 1998; Ghaith, 2003; Ghaith & El-Malak, 2004; Stevens, 2003; Almaguer, 2005; Chen, 2005; Jalilifar, 2010).

In China, some researchers (e.g. Wang, 2005; Liu & Huang, 2004; You, 2000; Yang, 2003) have specifically discussed the theoretical aspects of CL such as its bases, essential elements, characteristics, techniques and potential effects in the EFL context. A few researchers (Wang, 2002; Yuan, 2003; Chen, 2003; Shao, 2004; Yin, 2005; Han, 2006; Zhao, 2008; Deng, 2010) have carried out empirical research on CL in the English classroom, mainly exploring the effects of CL on Chinese students' English

achievement. These studies also reveal its positive effects on their English development.

However, CL techniques have not been widely applied and studied in the EFL classroom. The CL techniques selected for this study (Think-Pair-Share, Timed-Pair-Share, Three-step Interview, Roundrobin, Group Discussion and Brainstorming, which will be reviewed in Chapter Two) aim to structure interaction among the students, but a thorough literature search found few empirical studies that specifically target the use of these CL techniques as teaching methods to increase students' language achievement, in particular, their oral proficiency. Also, there has been little research on the impact of interactive practice in the CL context on students' interactional strategy use in an on-going conversation. Thus there is a need to explore what effects CL has on English learners' oral proficiency and their interactional strategy use in the EFL classroom. This study aims to extend CL research by examining the effects of CL on oral proficiency in the EFL context.

1.5 Research Questions

More specifically, this study adopts a quasi-experiment to investigate the impact of CL on Chinese students' English oral skills at a Chinese university. As the context is an integrated skills course, the aim is also to investigate whether CL contributes to the development of the students' general proficiency as well. General proficiency refers to the overall level of listening, reading, vocabulary and structures, and writing. This kind of comprehensive test with these categories is generally used as final term exam in China. Specifically, the study will address the following research questions and test the accompanying hypotheses.

Research Question 1

To what extent do the university students improve their oral proficiency in an integrated skills language learning course with a CL element?

Sub-question 1

What impact does CL have on the English learners' overall oral proficiency?

Hypothesis: The university students who participate in CL make more progress in their overall oral proficiency than their counterparts in the control class.

Sub-question 2

What impact does CL have on the English learners' interactional strategy use from the angle of conversation analysis?

Research Question 2

Does CL contribute to the development of the university students' general proficiency?

Null Hypothesis: There is no difference between the general proficiency of the students participating in CL and that of their counterparts in the control class.

1.6 Organisation of the Thesis

The thesis is divided into seven chapters. Chapter One has given a brief introduction to the study by establishing the aim of the study, describing its motivation, providing the background, explaining its significance and stating the research questions. Chapter Two discusses some relevant theoretical perspectives on second language acquisition. It firstly focuses on the CL principles and the CL techniques selected for the present study to provide a critical understanding of how CL was implemented in the subsequent experiment. Following this, the theoretical perspectives from the literature on CL, focusing on CL's theoretical roots: Cognitive Developmental Theory and Cognitive Elaboration Theory; theoretical perspectives such as the Input Hypothesis, the Interactional Hypothesis and the Output Hypothesis; affective factors in language learning, especially motivation and anxiety, are discussed to provide a basis for the investigation of CL, and reveal how CL would contribute to language development in this EFL context. In addition, literature on conversation analysis, strategic competence and interactional strategies in conversation is reviewed, offering a useful guide to the framework for conversation analysis used in this study.

Chapter Three describes the methodological issues in this study. Following a review of the qualitative and quantitative approach, a justification for the choice of method in this study is provided. Then the rationale for using the quasi-experiment in this study is discussed along with quasi-experimental characteristics, experimental validity and the specific research design employed. Next, this chapter gives background information about the research setting and subjects, and describes the experimental treatment in detail. Furthermore, the research instruments are discussed. Issues related to data collection, such as validity and reliability, are also addressed. A detailed description of the data analysis process is then provided. This chapter ends with a discussion of the ethical issues involved in this study.

Chapter Four presents the quantitative results of the students' scores on the various measuring instruments. Their general proficiency is reported on first as background information to the other findings in an attempt to see whether CL in the integrated skills course would contribute to general proficiency. Next, it compares the pre-test and post-test scores of the EC and the CC, and reports the statistical results of their overall oral proficiency. To have a full picture of their improvement, it also provides the results on the components of the oral skills: pronunciation, grammar and vocabulary, discourse management and interactive communication.

Chapter Five presents the results of the conversation analysis carried out on two groups (the ESs and the CSs) in each of the two classes regarding the impact of CL on the students' interactional strategy use. First, the interactional strategies used in the oral pre-test and post-test are analyzed to see whether there was a change in their performance after the intervention, and the ESs and the CSs are compared. Similarly, the interactional strategies used in the pre-task and post-task are also analyzed. Finally, this chapter ends with a summary of whether the ESs made a greater improvement in interactional strategy use than the CSs after the intervention.

In Chapter Six, drawing upon the findings from the students' achievement in oral proficiency and general proficiency after the intervention, possible explanations for such results are provided. It presents a discussion of the factors that were likely to lead to the null experimental effect on their overall oral proficiency and general proficiency. It also attempts to explore why the effects of CL may have had on the students' interactional skills. This chapter ends by arguing that there are a number of factors influencing the outcome of language learning.

Chapter Seven, the final chapter, summarizes and provides an overview of the main outcomes of this study. Following this, it draws out implications for language teaching and learning in the EFL context. It is hoped that this study can provide some useful insight into the way CL is implemented in this specific EFL context. It then addresses the limitations of this study. Finally, directions and recommendations for future research are discussed.

Chapter Two Literature Review

2.1 Introduction

This chapter addresses the theoretical framework for the study. It provides background on CL in terms of its principles, techniques and theoretical perspectives, and a review of interactional strategies. Specifically, this chapter discusses theoretical perspectives from the literature on CL, beginning with a brief review of CL principles, CL techniques selected for the study, and the differences between CL and traditional group work. The discussion encompasses the connection between second language learning and CL, focusing in particular on CL's theoretical roots: Cognitive Developmental Theory and Cognitive Elaboration Theory, theoretical perspectives such as the Input Hypothesis, the Interactional Hypothesis and the Output Hypothesis, and affective factors in language learning, particularly motivation and anxiety. Finally it goes on to discuss conversation analysis, strategic competence and interactional strategies.

2.2 Overview of CL

2.2.1 Definition of CL

CL refers to a variety of teaching methods in which students work in small groups to help one another learn academic content (Slavin, 1995). Olsen and Kagan (1992) describe it as follows:

CL is group learning activity organized so that learning is dependent on the socially structured exchange of information between learners in groups and in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others.

(Olsen & Kagan, 1992:8)

Similarly, Jacobs et al (2002) define CL as principles and techniques for helping students work together more effectively. To improve student learning and engagement, they state how to employ CL principles to facilitate CL in the classroom along with a variety of CL techniques. The point here is that CL involves not only getting students to work together in groups or forming a group, but also appropriately employing some strategies to help them maximize their peer

interaction and their learning in the classroom. Tong-Fredericks (1984) suggests that pair/group work, if structured and managed properly, can facilitate language development.

2.2.2 CL and Traditional Group Work

There is a difference between simply having students work in a group and structuring groups of students to work cooperatively (Johnson & Johnson, 1994). Seven major aspects of differences between traditional group work and CL are summarized by Jacobs (1998) in Table 2.1.

Table 2.1 Differences between Traditional Group Activities and CL

Difference	Traditional groups	CL groups
Group formation	Students form groups with whoever they want or whoever is sitting near them.	Teachers (and students) plan group size and composition so as to maximize the potential of the groups.
Seating arrangements	Students arrange their groups as they see fit.	Group members sit in such a way as to see and hear one another easily and, at the same time, bother other groups as little as possible.
Collaborative skills	Students are assumed to know how to work together.	Collaborative skills are explicitly taught.
Duration of groups	When groups finish an activity, they disband.	Groups often stay together for more than one activity—perhaps for weeks or months and spend time discussing how they can work together better.
Group solidarity	Students are assumed to feel a common purpose with their fellow group members and to care about one another.	Teachers attempt to build group solidarity.
Individual participation and learning	Group members are assumed to be interested in participating and learning.	Teachers encourage each group member to feel responsible for participating and learning.
Teachers' roles	Teachers use time while students are in groups to catch up on grading and other paperwork.	Teachers actively monitor groups to see if they are learning and functioning smoothly.

(Jacobs, 1998:180)

It can be seen that CL differs from traditional group work in various aspects such as group dynamics, learning experiences and teacher's role. CL tasks take place in a structured and organized way while traditional group activities are organized randomly. It should be pointed out that perhaps Jacobs wants to present CL in a positive light and he does not seem to correctly describe traditional group work in some aspects. Take teachers' roles as example. During traditional group work language teachers are also busy monitoring their students. As Johnson & Johnson (1994a) note, putting students into groups does not necessarily engender a cooperative relationship; they have to be structured and managed by the teacher. In other words, CL activities are carefully

prepared, planned, monitored and managed by the teacher or tutor to encourage students to work together more effectively. If a group of students has been assigned to do a report, but only one student does all the work and the others go along for a 'free ride', it is not a cooperative group (Johnson & Johnson, 1994a). In a CL situation, each member is concerned with their contribution to the task, but also how well their peers do to achieve their task objectives. Such productive CL is supposed to take place according to certain principles, which are discussed below.

2.2.3 Principles of CL

Group work may create opportunities for students to use language for learning. Carefully structured interactions between students are said to contribute to improvement in second language acquisition (Long & Porter, 1985). To utilize students' collaboration to enhance learning and maximize interaction among students, CL is organized on the basis of the principles below, which are summarized from Johnson & Johnson (1994b), Kagan (1994) and Jacobs et al (2002).

(1) Positive Interdependence

The first and most important element of CL is 'positive interdependence', described as enabling students to recognize that their goals can only be attained when the goals of all members in the group are also attained (Johnson et al, 1994). 'All work for one' and 'one works for all' (Holt, 1993:5). The aim is that whatever tasks the students are given to do, each group member will feel that his or her contribution is necessary for the group's success. In order to reach their common goal, each group member should have the responsibility to understand what the assigned tasks are and try their best to make sure that their group members understand the tasks as well. This is said to motivate students to work together to maximize the learning of all members in a group, sharing their resources and providing mutual support. Kagan (1998) states that if we want to know whether a group activity promotes positive interdependence, we should see whether a benefit for one group member is a benefit for another and whether collaboration is needed.

Positive interdependence in any particular CL task can be promoted in a number of ways, such as through positive reward interdependence, positive identity interdependence, positive resource interdependence and positive role interdependence.

The last two (discussed in Jacobs, 2006) were applied in this study. One way of promoting positive resource interdependence is to have the students hand in one piece of paper containing their groupwork. Also, assigning each group member a specific role is an important way in CL to promote positive interdependence. The different roles shown below can be assigned to every group member so that everybody has a specific responsibility.

1) Monitor: to be responsible for the group activity, to reinforce the members' contribution and keep everyone talking.

2) Secretary: to take notes, to sum up the group work and to present the group summary to the class.

3) Timekeeper: to keep the group within time limits set or agreed upon.

4) Checker: to check whether the members are clear about what they are going to do, to see whether they stay on task and whether they speak English.

(2) Individual Accountability

Individual accountability means that each participant is responsible for contributing to the learning and success of the group (Jacobs et al, 2002). The aim is for all members in a CL group to feel a responsibility to participate in the learning process. Every member is held accountable for doing a share of the work, and the accomplishment of the CL task depends on the individual learning of all the group members. Individual accountability and positive interdependence contribute to each other. It is assumed that if a CL task is structured, there is positive interdependence thus motivating learners to take their responsibility for one part of the group work. Individual accountability can be engendered, according to Slavin (1995), by having each group member do a share of the group work, or by testing the group members so that each group member has a clear picture of each other's level for them to improve on through peer help. The teacher can also structure individual accountability by randomly selecting a student from a group to respond to questions or explain what they have learnt to the class. For example, the CL activity Think-Pair-Share (discussed in 2.2.3 below), as Kagan (1994) argues, encourages the students to listen to their partner carefully because each student may be called on to report their partner's ideas to the class, and thus this activity would structure their individual accountability.

(3) Collaborative Skills

Collaborative skills are the key to group productivity (Johnson & Johnson, 1994b), including such skills as how to interrupt appropriately, listen attentively, ask for help, keep the group on the task, make suggestions and encourage others to participate. Many of these skills can be regarded as language functions and are different for different age groups of learners. In order to achieve their task objectives, in CL learners need to learn how to work together as a team and how to help each other. It is argued that collaborative skills can create trust and enhance communication in group interaction.

‘These skills help students interact successfully, not only with group-mates but also in the situations in which they use the L2’ (Jacobs, 2006:36). Cooperative group work is said to promote purposeful, task-oriented communication (Coelho, 1992). Jacobs (2006) points out that in the second language context, it is important for students to learn how to interact in argumentative circumstances. In other words, the improvement of their collaborative skills in classroom discussions may contribute to better co-operation with their group-mates, but also more successful interaction in the target language. It is suggested that collaborative skills should be taught one at a time with teachers’ modelling, students’ role-playing and performance feedback to have them gradually become accustomed to using the skills (Putnam, 1993). The students in the study, university students, working cooperatively in groups in English also needed collaborative skills. In this EFL context it was necessary for the teacher to focus on the corresponding language functions of the collaborative skills and to provide assistance or examples needed in their interaction.

(4) Equal Participation

According to Kagan (1994), equal participation means that each member is offered an equal opportunity to participate in the learning task. In the real rather than ideal classroom, it is common that one or two group members dominate the group, and one student or another has more or less to contribute to the learning task. This could impede the participation of some in the group work. CL techniques provide many ways which aim to promote equal participation. For example, the Roundrobin, Think-Pair-Share and Three-Step Interview activities (see below) provide each group member with a turn to participate. As Jacobs et al (2002) point out, we cannot, however, ensure that having been given this opportunity to take turns, the students will take them and actively

participate in the CL activity. In the present study, language functions corresponding to collaborative skills were provided to facilitate their learning roles. For example, checkers were provided with phrases such as

Are you clear about what we are going to do?

Do you think what we are saying is relevant to our task?

It seems we have gone too far. Let's get back to our topic.

(5) Simultaneous Interaction

The principle of simultaneous interaction is put forward by Kagan (1994). It is realized when class time is allocated to allow students to work simultaneously in pairs and small groups. As Long & Porter (1985) argue, in an L2 class of 30 students, under traditional teacher-fronted instruction, the average talking time for a student is only 30 seconds per 50-minute lesson. On the contrary, when students work in groups of three for just one quarter of a 50-minute lesson, the student talking time increases to more than 800 percent. That is to say, under teacher-fronted instruction, only one student is called on to speak at a time while in groups, it is assumed, there is at least one student per group talking at any one time. It is also assumed that the selective CL techniques (discussed in 2.2.4 below) in this study would offer ways of encouraging and maintaining simultaneous interaction, thus increasing the students' time in talking in the target language to interact with their peers.

(6) Group Processing

Group processing is defined by Johnson & Johnson (1994b:7) as reflecting on a group session to describe what member actions were helpful and unhelpful, and make decisions about what actions to continue or change. In CL, after learning together, learners need to reflect on their group experiences, noting how group members interacted with each other, the contributions each made, and the difficulties they encountered. The purpose of group processing is to clarify and improve the effectiveness of the members in contributing to the collaborative efforts to achieve their task objectives (Johnson & Johnson, 1994:7). To ensure that group processing takes place, the CL teacher is advised to allocate some time at the end of each class for each group to process how effectively members have worked together. To have successful group processing, the teacher should provide a specific structure for processing such as using a group evaluation form with specific evaluation items, or asking the groups to list

some things which they have done well in and some things which need to improve. Following group processing, it is necessary for the teacher to provide related feedback. It is argued that through group processing, interpersonal conflict is reduced, and the probability of desired behaviours to complete the task and members caring for one another increases, resulting in a highly motivated group (Cohen, 1994). How group processing worked in this study will be discussed in Chapter Three.

2.2.4 Techniques of CL

Within its principles various CL techniques have been developed over the years and put into practice in the classroom. CL techniques include Student Teams Achievement Divisions (STAD), Learning Together, Jigsaw, Cooperative Integrated Reading & Composition (CIRC), Teams-Games-Tournaments (TGT), Group Investigation and other structural techniques. Since they are relevant to the present study, the paper will now review the following techniques of organizing the interaction of individuals in a classroom. Some techniques regulate interaction between pairs, and some are for group work. These techniques aim to promote exchanges between students and to increase the quantity of communication in a supportive learning environment.

(1) Think-pair-share (Lyman, 1992)

Step 1: Individuals think silently about a question presented by the teacher.

Step 2: Individuals pair up and talk about their ideas.

Step 3: The pair share their ideas with the other pair, or the class.

(2) Timed-pair-share (Kagan, 1992)

Step 1: A specific amount of time is assigned to each partner's speaking turn.

Step 2: While Partner A is speaking, Partner B only listens except to respond to him or her by asking questions or offering prompts if Partner A has not used all of the designated time.

Step 3: Partners switch roles.

Step 4: One partner is asked to share with the class or the group what the other said.

(3) Three-step interview (Kagan, 1992)

Step 1: Students interview each other in pair; one is interviewer and the other is interviewee.

Step 2: Students reverse roles.

Step 3: Each student shares with the group what s/he has learned during the two interviews.

(4) **Roundrobin** (Kagan, 1992)

Step 1: The group has a speaking task or question.

Step 2: Each person takes a turn to speak.

Step 3: The turn to speak passes around the group for as many rounds as possible.

Step 4: One group member may be asked to share with the class what their groupmates have said.

(5) **Group discussion** (discussed by Olsen & Kagan, 1992).

Step 1: Teacher presents a topic or question.

Step 2: Students discuss in small groups.

Step 3: A group member presents the group summary to the class.

(6) **Brainstorming** (discussed by Olsen & Kagan, 1992).

Step 1: Teacher presents a topic or question.

Step 2: Students give as many ideas as they can in a group.

Step 3: A group member presents the group's ideas to the class.

The CL activities in this study would be carried out according to the principles discussed above. It might be argued that when the CL task promotes more interactional practices, it would be motivating for the more ambitious students, and it would also be quite stressful for some shy students. I believed that once the students got familiar with their group members and used to CL activities, they would feel comfortable.

2.3 Theoretical Perspectives on CL

After a brief review of CL, it is necessary to present an overview of its theoretical basis in education so as to have an understanding of its significance to second language learning and teaching. Hence, the relevant theoretical perspectives related to second language learning and teaching will also be discussed.

2.3.1 Theoretical Basis for CL

2.3.1.1 Cognitive Developmental Theory

Two of the most notable developmental psychologists of the twentieth century were Jean Piaget (1896-1980) and Lev S. Vygotsky (1896-1934). According to the work of Piaget (reviewed by Wagner, 2008), a child's knowledge is composed of schemas. Schemas are basic units of knowledge that are used to organize past experiences and serve as a basis for understanding new ones. Cognitive development, in Piaget's analysis, involves two processes: assimilation and accommodation. Assimilation refers to the process of taking in new information into an existing schema. Accommodation refers to the process of changing the existing schemas as a result of new information. The two processes are used simultaneously and alternately throughout life. Piaget argues that cognitive development is likely to occur when there is a balance between assimilation and accommodation, termed equilibrium. Such a balance is more likely to occur in collaborative situations. In Piaget's view, cognitive development depends largely on the child's active interaction with the environment, and knowledge comes from action (Wadsworth, 1989). When a child interacts with his environment, he performs an action and observes a response. If the response is positive and his mental model is confirmed, he will repeat the action and then assimilates the result of the action into his cognitive structures. Eventually the child changes his cognitive structures to accommodate new knowledge. Also, Piaget proposes that cognitive development follows a fixed sequence. According to this aspect of his theory, what happens at the previous stage of development determines what happens at a later stage of development. This has been criticized by some theorists such as Berger (1988) and Wagner (2008).

Piaget's theory provides an equilibration model for explaining developmental changes. One of its implications is that peer interaction plays a major role in a child's cognitive development. This has had an important influence on education practice today. Some scholars emphasize the creation of collaborative learning situations in which students play active roles when working with their peers. Based on the research findings they review, Slavin (1995) and Nastasi & Clements (1991) strongly recommend the use of CL activities in schools to encourage students to learn from each other through interaction and discussion, which will contribute to academic achievement.

Like Piaget, Vygotsky (1978) argues that young children are curious and actively

involved in their own learning and development of new schema. However, Vygotsky lays more emphasis on the importance of social interaction to the process of cognitive development. Vygotsky evokes the metaphor of the Zone of Proximal Development (ZPD), which is defined as ‘the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers’(1978:86). Vygotsky suggests that the only ‘good’ learning is learning that is ahead of actual development. Peer interaction, scaffolding and modelling are important ways to facilitate individual cognitive growth and knowledge development. In his view, a child learns through social interaction with a skillful tutor (often the parent or teacher). The tutor may model behaviors or provide verbal instructions for the child. Vygotsky views this as a cooperative or collaborative dialogue, which promotes cognitive development. During this process, the child seeks to understand the actions or instructions provided by the tutor, then to internalize the information, thus developing skills they will use for their own performance. The ZPD is considered as the area where the most sensitive instruction or guidance should be given. Vygotsky also views interaction with peers as an effective way of facilitating cognitive growth. Doolittle (1995) argues that Vygotsky’s theory concerning the ZPD provides strong support for the inclusion of CL in the classroom, and on the basis of this theory, he provides a series of recommendations for the use of CL in education.

Wood et al (1976) develop Vygotsky’s notion of the ZPD. They introduce the concept of scaffolding, which means appropriate assistance provided by the tutor to help children to develop their cognitive skills. Once the children’s knowledge and confidence increase, the scaffolding can be removed gradually and they will be able to do the task again on their own. When children are at the ZPD for a particular task, scaffolding will help them to achieve the task and enable them to perform on their own. Drawing on this perspective on human development, a great number of CL techniques have been developed such as dyad reading (Eldredge, 1988) and peer tutoring (Palincsar et al, 1987). Although I am aware of no documentation of how more skilled peers gain from the interaction, they would be likely to be responsible for their own learning while they get an opportunity to provide guidance and assistance to less skilled peers, and to benefit from giving explanations as will be discussed below.

2.3.1.2 Cognitive Elaboration Theory

While cognitive developmental theory puts the emphasis mainly on children's construction of knowledge through interaction with others, cognitive elaboration theory focuses mainly on the individual elaboration of knowledge in individual children's mental process. Research in cognitive psychology has found that if information is to be retained in memory and related to information already in memory, the learner must engage in some sort of cognitive restructuring, or elaboration, of the material (Wittrock, 1978, cited in Slavin, 1995). As Slavin (1995) suggests, one of the most effective means of elaboration is explaining the material to some one else. Working in groups makes it possible to provide chances for learners to recall and restructure the knowledge they have learnt so as to achieve better internalization. It is argued that peer tutoring is beneficial for learning. In a study by Webb & Farivar (1994) on the differences between math lesson with and without explanation for primary school students, the results show that greater learning achievement was obtained when students asked for assistance from group members and received explanations compared with times when they were given no assistance or given answers without explanations. In the studies on the nature of interactions of CL and regular classes, Cohen (1994) reports that 'the most consistent, positive predictor of achievement in these studies is the giving of detailed, elaborate explanations' (Webb, 1983). It seems that the student who does the explaining will benefit from it.

Many scholars have applied this notion to education, and some CL techniques have been developed in the field of the learning and teaching of the second language. An example is Three-step Interview (Kagan, 1992) briefly outlined above. It encourages students to take a more active role in their own learning processes and enables them to restate what their peers have said. It is believed to enhance students' language development (Kagan, 1992).

2.3.2 Second Language Acquisition and CL

2.3.2.1 The Input Hypothesis

An influential theory in second language acquisition is the input hypothesis put forward by Krashen (1985). It is superficially similar to Vygotsky's ZPD. Lantolf (2005), however, argues that Vygotsky's is a theory of human development while Krashen's is a model of language acquisition. Krashen posited five hypotheses, but the input

hypothesis (1985, 1994) is the most widely known and used in discussions of second language acquisition. The input hypothesis is represented by the equation $i + 1$, where 'i' stands for the information or linguistic competence one has acquired earlier while '1' means an addition of something new to the former knowledge; 'an extra linguistic competence' to be acquired (Krashen, 1985:2). This hypothesis makes the claim that there is a 'natural order' of acquisition and that learners progress along this path by understanding input that contains structures a little bit beyond their current level of competence. Krashen suggests that input becomes comprehensible when it is contextually embedded and is roughly tuned to the learners' level of proficiency. The hypothesis represents the ability to move from one structure already acquired to the next structure in the process of acquiring a new language (Krashen, 2003). In Krashen's view, learners are essentially quite passive processors of whatever input they are exposed to, which is different from Vygotsky's ZPD. The input hypothesis is concerned with the language itself while the ZPD's emphasizes social interaction between individuals in language acquisition.

Krashen's Input Hypothesis has faced a number of criticisms, mostly due to the fact that in this hypothesis the concept 'comprehensible input' and the 'learning-acquisition' distinction are not clearly defined or testable. McLaughlin (1987), for example, points out that Krashen's argument that 'effective input contains structures just beyond the syntactic complexity of those found in the current grammar of the acquirer leads to nowhere, because it assumes a non-existent theory of the acquisition sequence' (p.56). In other words, we cannot determine what '+1' in 'i+1' means. However, he did not elaborate further on his criticism. The Input Hypothesis has also been criticized for overstating the importance of comprehensible input for language acquisition. That is, in Krashen's theory, acquisition is caused by the comprehensible input to which the learner is exposed, but the theory fails to take into account student output (Ellis, 1986, 1994).

Gass (1988) develops a general framework for investigating L2 acquisition: apperceived input, comprehended input, intake, integration and output. She points out that comprehended input is important for language acquisition to take place, and that it is different from comprehensible input. While comprehensible input is controlled by an input provider, comprehended input is controlled by the learner. She notes that what is

comprehended can either feed into the intake component of her model or, alternatively, it may not be used by the learner for anything beyond communication. However, she does not provide any evidence for how comprehended input contributes to language acquisition.

White (1987) also criticizes the claim that comprehensible input is necessary for acquisition. She argues that incomprehensible input is also vital for language development. In White's view, incomprehensibility or comprehension difficulties can provide important negative feedback to the learner.

More recently, Krashen (2009) expands on his Input Hypothesis, which has been named as the Comprehension Hypothesis. It is stated that 'we acquire language and develop literacy when we understand messages, that is, when we understand what we hear and what we read, when we receive 'comprehensible input' (Krashen, 2009:81). According to this statement, Weinrich (2009) argues that Krashen still lays emphasis on input when he discusses comprehension in this context and learner production does not contribute directly to acquisition.

Input in the EFL context refers to the language learners hear or read. In the CL context, students are required to accomplish their learning tasks with their group members. It is assumed that the learners get exposed to a large amount of input produced by their peers, which is relevant to the Input Hypothesis and other theories that emphasize the role of input in second language acquisition. To make themselves understood, students naturally adjust their input to make it comprehensible (Kagan, 1995). Thus CL might provide the opportunity for them to construct comprehensible input for each other. Commenting on the criticism of Krashen's Input Hypothesis, Ellis (2003:279) argues that 'comprehensible input can facilitate acquisition but is not a necessary condition of acquisition, and does not guarantee that acquisition will take place'. The input hypothesis does not, therefore, provide an answer to whether CL is an optimal method for learning the language in the EFL context.

2.3.2.2 The Interaction Hypothesis

Placing a strong emphasis on the role of comprehensible input, Long (1983, 1985, 1996) nevertheless argues that comprehensible input is not by itself sufficient to ensure

acquisition, and he focuses on the role of interaction. He proposed three ways to make input more comprehensible: by simplifying the input, by using linguistic and extra-linguistic features and by modifying the interactional structure of the conversation. Of these three ways, input from negotiated interaction is said to have a greater impact on language learning. He argues that when learners have the opportunity to negotiate meaning, such conversational adjustments promote comprehensible input, thus promoting language acquisition. Pica (1994) argues that opportunities to negotiate meaning help learners to obtain comprehensible input, receive feedback on their own use of L2 and reformulate their own utterances, which can contribute to language acquisition. Ways of negotiating meaning include asking for repetition or clarification, rephrasing an utterance, expressing lexical uncertainty, confirmation and comprehension checks. Through negotiation of meaning, interactions are changed and redirected, leading to greater comprehensibility (Shrum & Glisan, 2000: 6). Long's theory implies that learners cannot just listen to input, but they must actively interact and negotiate the input they receive in order to acquire language. As active agent of learning, learners interact with and pay attention to the type of input they receive. They attend to its specific features, compare the features to those of their own output and integrate the features into their own developing language system (Gass & Selinker, 1994). Gass (1997) further argues that 'negotiation makes learners aware of incongruity between the forms they are using and the forms used by the native-speaking community (p.158)'. The important role of interaction in L2 acquisition is further supported by Mackey (2007).

...interaction provides learners with learning opportunities through input and output processes involving critical linguistic information during exchanges of communicative importance and the cognitive mechanisms that drive learning are optimally engaged in processing form/meaning relationships in linguistic data.

(Mackey, 2007:87)

Based on a number of empirical studies on interaction-driven language development, Mackey (2007:100) argues that 'positive outcomes obtain when language learners have opportunities to negotiate for comprehensive input, receive feedback and modify their output'. Language instructors should provide learners with opportunities for meaningful communicative behaviour about relevant topics by using learner-learner

interaction as the key to teaching language for communication because ‘communication derives essentially from interaction’ (Rivers, 1987: Xiii). Wesche (1994) emphasizes the positive effects of interlanguage talk in second language acquisition and states the role of small group interaction as follows:

Small group interaction among learners in L2 classes can increase students’ opportunities for oral language use. Carefully chosen small group tasks can provide practice in extended, negotiated, varied conversation, which moves beyond the ‘display’ question-answer sequences that often characterize teacher-fronted oral activity.

(Wesche, 1994:236)

Pica (1987:4) underlines the importance of socially supportive relationships between participants in interactional modifications. As Rulon & McCreary (1986) point out, groups promote negotiation of meaning because ‘the more intimate setting provides students with the opportunity to negotiate the language they hear, free from the stress and rapid pace of the teacher-fronted classroom’ (p.182). A number of studies have been done to compare the interaction produced by second language learners in small groups compared with that in teacher-fronted activities. Long et al (1976) reported that small-group work offered more opportunities for language production in starting discussion, asking for clarification and interrupting. By analyzing negotiated interaction features in teacher-led and peer group discussions, Shi (1998) found that peer discussions had higher frequencies of negotiation, but these negotiations were restricted compared with the extended negotiations in teacher-led discussions. In a study of the role of group work in classroom second language acquisition, Pica & Doughty (1985a) compared the discourse produced by low-intermediate ESL students in carrying out one-way tasks in both teacher-fronted and small group discussions. They found that the students used fewer interactional adjustments during group interaction with each other when compared with the teacher-fronted interaction. Pica & Doughty, however, argued that ‘the students had more opportunities for using the target language in group than teacher-directed activities, either through taking more turns or producing more samples of their interlanguage’ (p.241).

Some research has investigated which type of task is more conducive to quantity and quality of negotiated interaction in small-group work. When Doughty & Pica (1986)

carried out a study to compare teacher-fronted and small group discussions by using one-way and two-way tasks, the results showed that in the group condition two-way tasks, which require information exchange in both directions, provided more opportunities to negotiate meaning than one-way tasks, with a unidirectional information flow, but there was no difference between tasks in the teacher-fronted condition. However, in the study of intermediate level ESL students, Varonis & Gass (1985) report that both one-way and two-way tasks contributed to similar amounts of conversation negotiation although activity decreased in both conditions with task familiarity when the dyad switched roles. In addition, Nakahama et al's study (2001) of how meaning was negotiated in conversational and information gap activities, revealed that 'conversational interaction has the potential to offer substantial learning opportunities at multiple levels of interaction even though it offered fewer instances of repair negotiation in the traditional sense than did the information gap activity (p.377)'.

To sum up, these studies suggest that small group interaction is a source of opportunities for meaning negotiation, and is likely to have a positive impact on the patterns of communication, which facilitates language acquisition. In the CL context, it is assumed that carefully designed group tasks would create more opportunities for students to interact and to negotiate meaning with their peers in a low-anxiety environment. In particular, the EFL learners in this study had learned English for quite some time and had linguistic knowledge as a result of formal teacher-directed instruction. It was necessary to create opportunities for them to participate in the negotiation of meaning and engage in meaning-focused communication. As Littlewood (1981, cited in Johnson, 1995:116) suggests, 'when the structural and functional aspects of the language lend themselves to formal teacher-directed instruction, the communicative aspects of the language must be acquired through more informal and meaning-focused interactions with others'.

2.3.2.3 The Output Hypothesis

While Krashen claims that the way to second language acquisition is input-driven, Swain (1985) proposes the output hypothesis, which states that output or production may contribute to language acquisition. The output hypothesis was formulated based on the findings of her studies on French immersion programmes in Canada. In the immersion programmes children received content instruction in French rather than in

their first language, English. Thus they received massive amounts of comprehensible input. However, in Swain's studies, French immersion students did not exhibit native-like grammatical performance. Swain (1985) explains that immersion classrooms are rich in comprehensible input and:

Comprehensible input is crucial to grammatical acquisition, not because the focus is on meaning, or because a two-way exchange is occurring, but because by being understood—by its match with the learner's ongoing intentions and cognitions—it permits the learner to focus on form. (Swain, 1985:248)

In an attempt to explain why despite this they could not achieve full grammatical competence, Swain argues that what was missing was not input but the lack of opportunities for output because the students talked very little in the classroom. Thus she suggests that opportunities to produce language are important for acquisition and introduces the notion of 'comprehensible output'. She defines comprehensible output as the need for a learner to be 'pushed toward the delivery of a message that is not only conveyed, but that is conveyed precisely, coherently and appropriately' (1985:249). In her view (1995), pushed output helps learners to notice that there is a gap between what they want to say and what they are able to say, provides a way for learners to try out the language and modify their output accordingly, and helps learners to reflect on their own language production. Swain (1993, 1995, 2008) suggests the following ways in which output might contribute to second language acquisition.

- 1) Developing fluency through meaningful practice. One function of producing the target language, in the sense of 'practising', is that it enhances fluency (Swain, 1995). If the teacher provides the students with the opportunity to practise and use the language in class, it would help to improve their fluency.
- 2) Pushing learners to engage in syntactic processing of language. Swain (1993) argues that producing language may force the learner to move from semantic processing to syntactic processing. Learners can understand a message through decoding certain forms and with their semantic knowledge. However, if they want to formulate sentences to

express their thought, they need to process syntax.

- 3) Allowing hypothesis testing. Learners may try out new language forms and structures to see what works and what does not.
- 4) Providing feedback. When there is a communication problem, this may provide learners with an opportunity to negotiate meaning and modify their output.
- 5) Noticing/triggering function. Producing the target language can help learners notice some of their linguistic problems. This may direct their attention to the relevant features in the input.
- 6) Metalinguistic function. Language production may lead learners to reflect on their own production as they try out language. It is claimed that ‘as learners reflect upon their own interlanguage use, their output serves a metalinguistic function, enabling them to control and internalize linguistic knowledge’ (Swain, 1995:126).

Based on Swain’s Output Hypothesis, Skehan (1998) adds more functions of output such as developing discourse skills and a personal voice. He argues that the discourse skills in conversation, such as turn taking, can be developed by actually participating in discourse. It is important to develop a personal manner of speaking so that one is able to exert an influence on conversational topics and find ways of expressing individual meanings. Izumi (2003) argues that the production process enables learners to ‘assess the possibility and limitations of their interlanguage capability’ (p.168), and this may prompt them to explore resources for a possible solution such as modifying their output when feedback is available. In a word, output is considered to play a significant role in language development.

Swain’s Output Hypothesis is one of the theoretical perspectives that support the use of CL in the EFL classroom. As Burton & Clennel (2003) note, language competence will not be developed until language learners are able to express and exchange thoughts and complete tasks in the target language. Jacobs & McCafferty

(2006) point out that one of the major concerns of CL is the opportunities for groups to work together so that students talk to one another. 'When students work collaboratively in groups, they are more likely to engage in exploratory talk and, thus, use language to learn as opposed to merely demonstrate what has been learned' (Johnson, 1995:113). As discussed in 2.2.3 on CL principles, when group or pair work is carried out in the CL context, students have to obtain and give information in terms of the task at hand, which can greatly increase the necessity for students to create output. Kagan (1995) argues that the single greatest advantage of CL for the acquisition of language is the much greater language output allowed per student in comparison to traditional classroom organization. Some research has been conducted in the L2 classroom, which supports the previously reported claim of an increase in learner talk during group work (Deen, 1991; Pica & Doughty, 1985a, 1985b; Bejarano, 1987; Magee & Jacobs, 2001). For example, in a study of comparing second language participation in teacher-fronted, unstructured group and CL (Jigsaw activity), Magee and Jacobs (2001) report that the students took significantly more turns and produced significantly more speech in the two-group modes compared to the teacher-fronted mode, and significantly more in the CL mode when compared to the unstructured group mode.

Next, scholars agree that the output generated from small group work is communicative and functional, which is facilitative of language acquisition (e.g. Long & Porter, 1985; Kagan, 1994). 'If speech is not representative of the way a speaker will use the language in everyday settings, it will add little to the speaker's actual communicative competence' (Kagan, 1994:3). CL tasks in language classrooms may create opportunities for students to participate in more spontaneous language use, negotiate meaning and more importantly, draw on their linguistic knowledge and interactional competence to engage in linguistic experimentation and to actively communicate with others. It is more likely that language is experienced as communication similar to that found outside the classroom, which may help learners to develop their interlanguage system. Bygate (1988) underlines the role of student output produced in small group work. He suggests that group work provides learners with opportunities to build up utterances by using 'satellite units' which lack a finite verb or some kind of syntactically dependent unit, and this allows for flexibility in communication and thus facilitates acquisition. In communicative activities, students have to shoulder the burden of both initiating and sustaining the discourse and this

requires the performance of a variety of speech acts (Ellis, 1984). In the CL context in an attempt to solve the problem, maintain the conversation and finish the task, group members have to give suggestions, ask for clarification, express agreement or disagreement, through which a wide range of language functions will normally be practised and gradually developed. In Maya & Cheng's (2003) study, their undergraduate students improve their speaking skills such as use of speech acts of soliciting opinions, agreeing, disagreeing and resolving conflicts or disagreement by negotiating the answers to multiple-choice questions in a reading comprehension text. During group work students may also practise their conversational management such as topic-nomination, turn-allocation, focusing, summarizing and clarifying (Long & Porter, 1985).

However, it is generally believed that students produce more errors during student-student interaction by groups than in the traditional classroom organization because peer output is less accurate than teacher output, and they are exposed to more ungrammatical input. 'In normal conversation, both in speaking and in listening, performers do not generally have time to think about and apply conscious grammatical rules' (Krashen, 1981:3). With regard to the findings on accuracy, Bygate (2001) states that syntactic complexity and grammatical correctness are less easily affected by external interventions than semantic and lexical complexity. In the study of how learners perceive interactional feedback, Mackey et al (2000) indicate that more phonological and lexical aspects were involved in negotiation of meaning than grammar. Skehan (1996:42) also claims that it is likely that communication tasks will 'teach learners simply how to do tasks better, to proceduralize strategic solutions to problems, and to engage in lexicalized communication'. However, research findings have shown that this is not always the case. When Pica & Doughty (1985b) compare the target language production of students in the teacher-fronted activities to that in the group activities, they found the same level of grammatical accuracy in both situations. Jacobs' (1989) and Bruton & Samuda's (1980) findings were similar. Although there is not much evidence to suggest that cooperative activities produce fewer errors than teacher-fronted activities, Deen (1987, cited in McGroarty, 1993) interprets that the proportion of errors in cooperative student work is far lower than those in teacher-led instruction primarily because students have many more practice opportunities in cooperative work. In a dialogue, learners will debate language form and lexical choice

so as to make their meaning as clear, coherent and precise as possible (Swain & Lapkin, 2002). As Kuiken & Vedder (2002) note, collaborative production tasks may prompt learners to deepen their awareness of linguistic rules.

Output practice, i.e. ‘activities designed to provide L2 learners with opportunities to produce output’ (Muranoi, 2007:76), in a group context, means that students are provided with opportunities to get engaged in joint activities and discussions so as to manipulate and use language for communication. In input-interaction-output (IIO) research, Bygate et al (2001) point out that tasks are the site in which negotiation of meaning and change in the interlanguage system occur. On the basis of a number of empirical studies, Muranoi (2007) concludes that ‘instructional treatments eliciting learner output in contextualized practice can develop L2 learners’ productive proficiency’ (p.76). As there is more interactive output practice, CL tasks may help to develop students’ linguistic and strategy competence, thus leading to the development of better oral skills.

2.3.3 Affective Factors

Many affective elements are considered important in language learning. As I consider them particularly relevant to CL, anxiety and motivation will be reviewed in this section.

2.3.3.1 Anxiety

Language anxiety is fear or apprehension that a learner has when performing in the second or foreign language. ‘It is a distinct complex of self-perceptions, beliefs, feelings and behaviour related to classroom language learning arising from the uniqueness of the language learning process’ (Horwitz et al, 1991:31).

Horwitz et al (1991) associate anxiety with three performance anxieties: (1) communication apprehension; (2) test anxiety; and (3) fear of negative evaluation. Communication apprehension is ‘a type of shyness characterised by fear or anxiety about communicating with people’ (Horwitz et al, 1991:30). It is a person’s anxiety arising from real or expected communication with others. In the foreign language classroom, some learners are anxious in communication because they worry about their ability to express themselves. They are thus reluctant to communicate with their

classmates and tend to keep silent in class. As Horwitz et al (1991) note, students who have difficulty speaking in groups will probably experience greater difficulty speaking in a foreign language classroom where the communication situation and their performance are constantly controlled and monitored. The second type, test anxiety is a type of anxiety resulting from a fear of inadequate performance on a test or other evaluation (Sarason, 1984). Horwitz et al (1991) point out that ‘test-anxious students often put unrealistic demands on themselves and feel that anything less than a perfect test performance is a failure’ (p.30). This type of student may experience great difficulty in the foreign language class. The third, fear of negative evaluation is more broadly based than test anxiety. It is defined as ‘an apprehension about others’ evaluations, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively’ (Watson & Friend, 1969, cited in Horwitz et al, 1991:31). In the foreign language classroom, a student’s over-concern with academic and personal evaluation of his or her performance in the target language is the manifestation of the fear of negative evaluation (Gardner & MacIntyre, 1993). Many students are afraid of making mistakes when speaking in the classroom. They experience apprehension when they cannot make themselves understood. They show anxiety for fear of losing face in using the target language. Price’s (1991) study reveals that students were afraid of making errors in pronunciation, and that these students believed that they were not pronouncing words as native speakers would and felt embarrassed by their inability to pronounce correctly. In the foreign language classroom, the primary aspects, communication apprehension and fear of negative evaluation can explain why some students are not willing to interact and communicate with other classmates.

Anxiety is not always detrimental to performance. In terms of its impact on behaviour, there are two types of anxiety: facilitating anxiety and debilitating anxiety. The former is viewed as a positive force in learning and may result in improved performance. As Scovel (1978) argues, it ‘motivates the learner to ‘fight’ the new learning task; it gears the learner emotionally for approach behaviour’ (p.139). In contrast, debilitating anxiety has a negative impact on the learner’s performance. It “motivates the learner to ‘flee’ the new learning task; it stimulates the individual emotionally to adopt avoidance behaviour” (Scovel,1978:139). Based on Kleinmann’s (1977) study of avoidance behaviour in the context of second language learning, Young (1991) argues that facilitating anxiety is associated with an increase in drive level which

results in improved performance while debilitating anxiety shows an decrease in arousal or drive level which leads to poor performance. For many learners a mild degree of anxiety can be helpful and stimulating; however, a high level of language-learning anxiety can become debilitating (Brown, 1987). As Oxford (1990) argues, severe language anxiety is harmful in language learning, which will reduce their confidence in themselves as language learners and lessen their willingness to experiment in the language and communicate in class.

In the field of language teaching, according to Kagan & McGroarty (1993:51), ‘it is vital to create a learning environment that combines high interest with lowered learner anxiety and positive encouragement for communicative effort’. Tsui’s study (1996) reveals that student-student collaboration was an effective means of reducing anxiety among her L2 learners. A study by Liu (2006) on anxiety in Chinese EFL students at different proficiency levels reveals that the students feel the most anxious when they respond to the teacher or are singled out to speak English in class, but they feel the least/not anxious during pair work or group work. CL proponents (e.g. Kagan, 1992; Jacobs, 1998; Crandall, 1999) argue that CL provides a supportive environment in which students work in groups to try out the language. For example, Crandall (1999) argues that working in a group gives the learners an opportunity to try out their contributions with each other before being asked to offer them to the entire class, thus lowering their anxiety in the language classroom. It is, however, likely that some learners would still suffer from anxiety as there is nowhere to ‘hide’ in the CL group while in a teacher-centred class an anxious student can perhaps sit at the back and listen.

2.3.3.2 Motivation

Motivation is another affective aspect of language learning. It is defined by Gardner (1985:11) as the combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes toward learning the language. According to this definition, a truly motivated individual will have these three characteristics: the desire to learn the L2, motivational intensity (effort) and positive attitudes toward learning the L2. Motivation can be divided into two categories: integrative and instrumental motivations. The former is associated with a positive disposition toward the L2 speech community and the desire to interact with and even become similar to valued members of that community, while the latter is related to the potential pragmatic

gains of L2 proficiency, such as getting a better job or a higher salary (Dörnyei, 1994:274). In the present EFL context, a great majority of Chinese learners study English to get a better job. Some others want to integrate with English speakers in the L2 community, and the rest want to communicate with any English users across the globe.

Apart from the focus on the social and pragmatic dimensions of language learning motivation, motivation can be divided into intrinsic and extrinsic motivations. According to Deci & Ryan (1985:328), intrinsically motivated individuals are engaged in learning for its own sake--for the pleasure and satisfaction derived from its performance. The rewards are internal. The learner gains happiness by engaging in the language learning process. If a person is intrinsically motivated to play the piano, he does not need a reward to help him to reach the goal because this activity is done for its own sake (Brown, 2000). On the other hand, extrinsic motivation behaviours are the ones that the learner performs to receive external reward (e.g. good grades) or to avoid punishment (Dörnyei, 1994). It has to do with rewards from an external source. Many students are only concerned about getting good grades or passing the exam rather than having interest in language learning. Van Lier (1996) argues that not only is there no opposition between intrinsic and extrinsic motivation, they are actually two essential forces that must work in concert to stimulate learning. They both contribute to language learning. Learners may participate in the language activities in order to get good grades, and they may also get fun and enjoyment out of this process.

Dörnyei (1994) points out that language learners are often motivated by the classroom experience itself. Thus the teacher plays an important role in student motivation to learn the language. The teacher should apply appropriate teaching methods to encourage students to learn. Instructors whose teaching styles emphasize the importance of each individual in the classroom community contribute to the creation of a supportive and motivational environment (Krashen, 1981). CL involves task or reward structures which may give every student an opportunity to participate and take responsibility. Dörnyei (1997) argues that motivation comes from peer cooperation as 'the satisfaction that students experience after they complete a task successfully is increased by the shared experience and the joint celebration' (p.489). The finding of Clément et al (1994) suggests that group cohesion is an important motivational

component in a L2 learning context. In a properly structured CL task, the students may encourage and support each other. As Crandall (1999) states, ‘individuals know that they can get feedback and assistance in making their contributions as clear, relevant and appropriate as possible. This in turn can motivate them to continue to try, especially when peers encourage and support their contributions’ (p.235). An increase in participation and responsibility in this low-anxiety environment may enhance their motivation.

2.4 Theoretical Frameworks of Interactional Strategies

2.4.1 Conversation Analysis

As one of the aims in this study was to analyze the students’ interactional strategies in conversation, it is worthwhile to review conversation analysis which is an approach to discourse derived from Ethnomethodology. It is Sacks, Schegloff and Jefferson (1974) that specifically apply conversation analysis to conversation. They consider that conversation exhibits its own order and presents its own sense of structure. Conversation analysis is defined by Hutchby & Wooffitt (1998) as ‘the systematic analysis of the talk produced in everyday situations of human interaction: talk-in-interaction’ (p.13). It looks at naturally occurring interaction as the basic data for analysis. Heritage (1984) summarizes the basic perspectives of conversation analysis in three assumptions as follows.

- 1) interaction is structurally organized;
- 2) contributions to interaction are contextually oriented;
- 3) these two properties inhere in the details of interaction so that no order of detail can be dismissed, a priori, as disorderly, accidental, or irrelevant.

(Heritage, 1984:241)

Specifically, there are recurrent patterns and forms of organization in speakers’ interaction. It is in the analysis of how their interaction is organized that the knowledge of the basic order and structure can be obtained. Any utterance is contextually located both in social context and in reference to other utterances. In Schiffrin’s (1994) view, the second sense of context means that ‘each utterance in a sequence is shaped by a prior context and provides a context for a next utterance’ (p.235). It is generally argued that in conversation analysis due attention is paid to the second sense of context but little to the social context such as setting and social identities of participants. As

information about individuals' knowledge of a specific situation is obtained from their behaviour in the interaction, details should be described attentively.

The use of recorded data in conversation analysis 'enables repeated and detailed examination of particular events in interaction and hence greatly enhances the range and precision of the observations that can be made' (Heritage & Atkinson, 1984:4). Psathas & Anderson (1990) point out that transcriptions made from the recording can only be considered as a convenient form to represent the recorded data in written form, but not as a real substitute. On the basis of the literature, Ten Have (2004) argues that although through the 'overhearing' of recordings and the construction of transcripts, conversation analysis is restricted in its study of conversational streams as situated practices, it brings a sequential/structural representation that does not appear in other methods. The aspects of interactions examined in conversation analysis include turn-taking, adjacency pairs, preference organization, topic initiation and development, feedback, repairs, conversational openings and closings, discourse markers such as 'well' and 'oh' and response tokens such as 'uh huh' and 'mmm' (Paltridge, 2000). Ten Have (1999) provides a practical guide for doing conversation analysis, introducing how to make recordings, do transcriptions and apply basic analytic strategies. This is valuable for researchers who are interested in conducting studies based on spoken data.

Conversation analysis has been used in the analysis of student-teacher talk and student-student talk. For example, McCormick & Donato (2000) conducted a study to investigate how an English teacher's questions served to scaffold learning during teacher-fronted activities in an ESL classroom. They used audio-recording to explore the impact of the scaffolded assistance of teacher questions in the context of teacher-student classroom interaction. Lam & Wong (2000) conducted a study to examine the effect of training students in interaction strategies during class discussion in the ESL classroom. They recorded the class discussions and used the transcribed data to show how training in interaction strategies affected the development of the students' oral competence. By applying conversation analysis, the present study will analyze and compare the interactional features before and after the treatment in order to capture and evaluate the impact of CL on the students' interactional strategy use.

2.4.2 Theoretical Frameworks of Interactional Strategies

Strategic competence has been considered as an integral part of communicative competence (Canale & Swain, 1980; Bachman, 1990; Bachman & Palmer, 1996). Communication strategies are usually regarded as manifestations of an English learner's strategic competence. They are often viewed as the techniques employed by a learner to solve language difficulties so as to achieve his or her communication goal, which is seen from the following definitions.

...a systematic technique employed by a speaker to express his or her meaning when faced with some difficulty. (Corder, 1981:103)

...potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal. (Færch & Kasper, 1983:36)

...strategies which a language user employs in order to achieve his intended meaning on becoming aware of problems arising during the planning phase of an utterance due to his own linguistic shortcomings. (Poulisse et al, 1984:72)

These definitions conceive problem orientedness and consciousness as central features of communication strategies. Communication strategies are considered as the learner's awareness of encoding problems and self-initiated efforts to overcome the linguistic gaps in formulating a message. S/he makes use of a strategy to compensate for the self-oriented problem without turning to the interlocutor for help. Viewed from their interactional function, Tarone (1983:65) describes communication strategies as 'attempts to bridge the gap between the linguistic knowledge of the second language learner, and the linguistic knowledge of the target language interlocutor in real communication situations', or 'mutual attempts of two interlocutors to agree on a meaning in situations where requisite meaning structures do not seem to be shared'. The negotiation of meaning as a joint effort between the interlocutors is central to the concept of communication strategies. The learner solves the communicative problem not only by oneself but also with the help of an interlocutor. Obviously communication strategies are considered as a set of compensatory strategies or interactional tactics used to solve specific communicative problems. As Mitchell & Myles (1998) point out,

‘communication strategies are tactics used by the non-fluent learner during L2 interaction in order to overcome specific communicative problems (p.94)’. That is, due to learners’ lack of linguistic resources, their communicative success depends on their ‘ability to communicate within restrictions’ (Savignon, 1983:43) by using strategies.

However, the problem-solving nature does not fully address the strategic competence. Other researchers interpret communication strategies in a broader sense. For example, Canale (1983:11) argues that communicative strategies can be used to enhance effectiveness of communication besides compensating for breakdowns in communication due to limiting conditions in actual communication or to insufficient competence in one or more of the other areas of communicative competence. Going further in the model of communicative language ability, Bachman (1990) claims that communication strategies are *de facto* a mental ability enabling a speaker to make the most effective use of available abilities to carry out a given task. He emphasizes the importance of knowing how to manage the language as well as language knowledge itself.

As seen from the above discussion, although there has been no complete agreement reached on the interpretations of communicative strategies, they can be considered as tactics or strategies to help to achieve a communicative goal in the course of an on-going conversation. Using these strategies in communication is part of the learner’s strategic competence. As little literature has been found about the definition of interactional strategies in face to face communication, the following section attempts to give a definition on a basis of the current literature and reviews two frameworks of classification of interactional strategies.

Based on Canale & Swain’s (1980) and Bachman’s model of communicative competence (1990), for language test purposes, Saville & Hargreaves (1999) proposed a speaking ability model for the revised First Certificate in English (FCE). This model is presented in Figure 2.1 below.

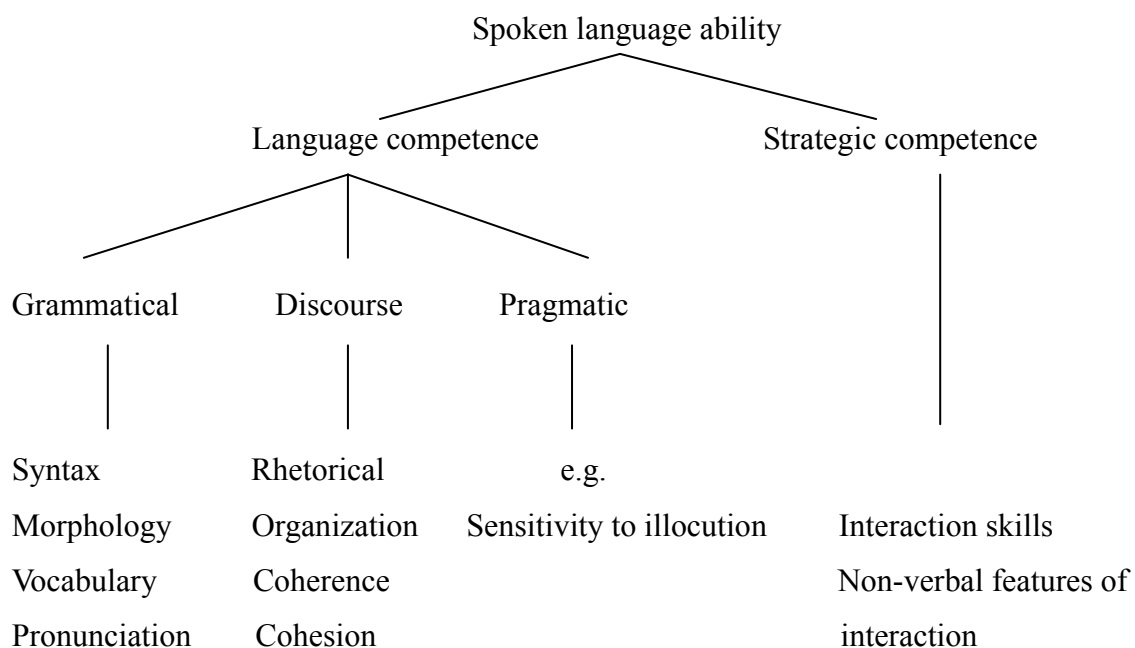


Figure 2.1 Speaking Ability Model (Saville & Hargreaves, 1999:45)

In this model strategic competence in spoken interaction consists of interaction skills and non-verbal features of interaction. Drawing on the specifications of the rating scales of FCE (2008:86), interaction skills can be viewed as the candidate's ability to develop the discourse actively, including the ability to develop discussions on a range of topics by initiating and responding appropriately, and to employ certain strategies to maintain interaction with others.

In relation to spoken interaction, North (1997) provides a brief view of strategic competence by summarizing previous research. Strategic competence includes:

- 1) *The planning, execution and assessment of the achievement of communicative goals;*
- 2) *The cognitive strategies for framing ideas in discussion, formulating and evaluating hypothesis;*
- 3) *The collaborative strategies for eliciting, commenting on and referring to other contributions; the ability to keep discourse on course through 'challenging' for clarification;*
- 4) *The turn-taking and topic management strategies which even advanced students often still have trouble with;*
- 5) *Communication compensation strategies, both reduction strategies*

and propositional strategies.

(North, 1997:95)

According to North's framework, interactional strategies can be viewed as a learner's ability to use tactics such as turn-taking, topic management, collaborative strategies and communication compensation strategies to interact verbally with others and maintain the conversation. Obviously, interactional strategies include the ability to tackle problematic communication and achieve successful oral communication. North's summary of strategic competence provides a very general classification of interactional strategies in communication. However, North does not provide any detailed explanation of each strategy, and thus it is difficult for the reader to grasp the exact meaning of each strategy.

Similarly, Riggenbach (1998) outlines interactional skills which exhibit a learner's strategic competence in conversation as follows.

- 1) The ability to claim turns of talk;*
- 2) The ability to maintain turns of talk, once claimed;*
- 3) The ability to yield turns of talk;*
- 4) The ability to backchannel;*
- 5) The ability to self-repair;*
- 6) The ability to ensure comprehension on the part of the listener (e.g. comprehension checks such as does that make sense? Are you with me? Get it?);*
- 7) The ability to initiate repair when there is a potential breakdown (e.g. clarification requests);*
- 8) The ability to employ compensatory strategies. (e.g. avoidance of structures or vocabulary beyond the learner's proficiency, word coinage, circumlocution, and even shifting topics or asking questions that stimulate the other interlocutor to share the responsibility for maintaining the conversation flow.)*

(Riggenbach, 1998:57)

The frameworks of interactional strategies proposed by North and Riggenbach above relate to each other in some ways. 'The turn-taking and topic management

strategies', 'communication compensation strategies' and "the ability to keep discourse on course through 'challenging' for clarification" in North's framework are relevant to 'turn taking', 'compensatory strategies' and 'the ability to initiate repair' in Riggenbach's framework. However, compared with Riggenbach's framework, North's gives a broader view of interactional strategies. It includes the ability to manage communication not only during an interaction, but also before and after the interaction, such as 'the planning, execution and assessment of the achievement of communicative goals'. North's framework also includes 'cognitive strategies' and 'collaborative strategies'. In my point of view, students' use of cognitive strategies can be rather difficult to locate and explore in spoken data. In an on-going conversation, it is important for speakers to manipulate the context to show their listenership and contribute to the topic they are talking about. It is thus necessary to explore students' ability to use collaborative strategies, such as elaborating on the preceding utterance, particularly in an opinion-exchange task. Next, Riggenbach's framework provides more details about interactional strategies, such as 'turn taking', 'repairing' and 'compensatory strategies'.

Lightbown (1990) notes that characterizing classroom interaction is not a straightforward exercise and it would be very useful to provide a range of categories that one might choose for a particular study. Based mainly on the two frameworks of interactional strategies above (North, 1997; Riggenbach, 1998), an analytical framework for the categorization of interactional strategies in this study will be created to enable me to identify the significant features of students' verbal interaction in the EFL classroom as it is outside the classroom. This analytical framework will be discussed in detail (see 3.8.2) in the next chapter.

2.5 Chapter Summary

In this chapter I have presented a review on CL, the theoretical roots of CL, the theoretical perspectives on the connection of second language learning and CL, and the theoretical frameworks of interactional strategies. First of all, CL activities are carefully structured and implemented on the basis of the principles such as positive interdependence, individual accountability, equal participation, simultaneous interaction, collaborative skills and group processing. The CL techniques selected for the study, Think-Pair-Share, Timed-Pair-Share, Three-Step-Interview, Roundrobin, Group

Discussion and Brainstorming, are assumed to get the students involved in language practice. Secondly, Cognitive Developmental Theory emphasizes the role of social interaction in a learner's cognitive growth while Cognitive Elaboration Theory emphasizes the role of the learner in elaborating and restructuring the learning material. CL researchers generally consider that CL has cognitive benefits for students. Thirdly, a critical review was conducted on the theoretical perspectives including the Input Hypothesis, the Interactional Hypothesis, the Output Hypothesis, and motivation and anxiety, and it examined the likelihood that CL would contribute to language learning in the present EFL context. Finally, after a brief review of conversation analysis, a review of literature was conducted on strategic competence and interactional strategies in conversation to create a framework for the conversation analysis (see 3.8.2) in this study. The next chapter will deal with how research methods were used to collect data which would address the research questions.

Chapter Three Research Methodology

3.1 Introduction

This chapter will discuss the methodological issues in relation to the research questions posed in Chapter One. First, a general discussion about the quantitative and qualitative approach are briefly reviewed and evaluated. This leads to a justification for the choice of method in this study. It provides a rationale for using a quasi-experiment, a discussion of quasi-experimental characteristics and experimental validity, and a full description of the quasi-experimental non-randomized pre-test-post-test control group research design employed in this study. This is followed by some background information about the research setting, the subjects and a detailed description of the experimental treatment. Next, the research instruments, which include the oral pre-test and post-test, the National College Entrance English Exam (NCEE) and the final term English exam (FTEE), and the pre-task and the post-task, are discussed. Issues related to data collection, such as validity and reliability, are also addressed. A detailed description of the data analysis process is then provided. Finally, related ethical issues in this study are discussed.

3.2 Quantitative and Qualitative Approaches

This study is an example of classroom-oriented research in an EFL context. Classroom-oriented research is ‘research which either derives its data from genuine language classrooms or which has been carried out in order to address issues of direct relevance to the language classroom’ (Nunan, 1991b:249). This raises the question of whether a quantitative or a qualitative approach should be employed in classroom research; or whether both the quantitative and qualitative approach can be used. Research methodologies are often divided into two paradigms, the positivist paradigm and the interpretivist paradigm. The quantitative approach is associated with the positivist paradigm. Quantitative study is defined by Creswell (1994) as follows.

An inquiry based on testing a theory composed of variables, measured with numbers and analyzed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true. (p.2)

As Bryman (1992:58) states, quantitative research is strongly associated with

social survey techniques like structured interviewing and self-administered questionnaires, experiments, structured observation, content analysis and the analysis of official statistics. It conceptualizes reality in terms of variables, and relationships between them (Punch, 2005). ‘The data enable standardized, objective comparisons to be made, and the measurements of quantitative research permit overall descriptions of situations or phenomena in a systematic and comparable way’ (Punch, 2005:238). The positivist paradigm can be viewed as fixed and objective, and produces ‘hard’ data (Descombe, 2003).

In contrast, the qualitative approach is associated with the interpretivist paradigm. It originally developed from methodologies of field anthropology and sociology. Qualitative study is defined by Creswell (1994) as follows.

An inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researchers builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting. (p.1-2)

As described by Bryman (1992:59), qualitative research is typically associated with participant observation, semi- and unstructured interviewing, focus groups, the qualitative examination of texts, and various language-based techniques like conversation and discourse analysis. Qualitative data provide depth and detail through direct quotation and careful description of program situations, events, people, interactions and observed behaviours (Patton, 1987). Mason (2002) argues that “there is more emphasis on ‘holistic’ forms of analysis and explanation in this sense, than on charting surface patterns, trends and correlations”. The interpretivist paradigm can be viewed as personal and subjective, and it produces ‘soft’ data (Descombe, 2003). Seliger & Shohamy (1989) suggest the use of a qualitative approach in classroom-oriented research:

Qualitative research appears to be more appropriate for describing the social context of second language, such as dyadic speech interactions (who says what to whom and when), frequencies and descriptions of speech acts in given language-use contexts such as the language classroom, and descriptions of teacher and learner

Quantitative research can often tap large-scale, structural features of social life, while qualitative research tends to address small-scale, behavioural aspects (Bryman, 1992). Quantitative data are information about the world in the use of numbers, whereas qualitative data are information about the world in the use of words. According to Descombe (2003), the analysis of quantitative data provides a solid foundation for description and analysis, but qualitative analysis is better able to deal with the intricacies of a situation and do justice to the subtleties of social life.

As Salamon (1991) argues, each research paradigm serves different research purposes and employs different research strategies to address different research issues. Due to the practical circumstances and context of research, combining quantitative and qualitative research in a single study can provide a more elaborate and richer understanding of a phenomenon. Johnson & Onwuegbuzie (2004) argue that mixed methods research 'is likely to result in complementary strengths and nonoverlapping weaknesses (p.18) of quantitative and qualitative research. This study involves both quantitative and qualitative aspects. A quasi-experimental, quantitative approach was employed to examine the impact of CL on Chinese students' oral proficiency in the EFL context. Conversation analysis (see 3.8.2) was also used to gain insights about the students' oral performance in their natural classroom setting and see changes in their interactional skills resulting from CL after the quasi-experiment. It was hoped that with the findings in the quantitative approach, the conversation analysis would offer proof of the possible improvement of the students' oral proficiency by looking at the changes in their interactional strategy use. Below I will justify and discuss the quasi-experiment employed in this study.

3.3 The Quasi-experiment

3.3.1 The Rationale for Using the Quasi-experiment in this Study

Quasi-experimental research is one of the strategies typical of the quantitative approach. It is employed to test causal relationships between an independent variable and a dependent variable. The quasi-experimental, quantitative approach was chosen for this study because the research questions required the use of a research method that would enable me to examine the effect of CL on students' English achievement in the

real classroom setting. By collecting quantitative data I was able to compare groups and test some hypotheses.

A qualitative case study could have been employed in this study with a small group of students carrying out CL activities in the English course. Their oral proficiency achievement would have been assessed at both the start of the research and upon completion. The students would have been interviewed regarding the effect of the CL approach on their oral proficiency. Such a case study could have provided an in-depth understanding of its efficacy from the students' progress and their comments. However, there would have been only a small number rather than many participants. As Hammersley (2004) argues, case study is the weakest research design because it is not effective either in testing hypotheses or in providing generalizable findings. A case study was not suitable for this study because while it could have allowed an in-depth understanding of the CL effects on oral proficiency, it would not have yielded results for the wider population. The quasi-experimental, quantitative approach in this study, however, enabled me to explore the general effects of CL in the real setting. As Descombe (2003) argues, the use of statistics can give researchers' interpretations of their findings additional credibility. Also, in the study there were more students in the quasi-experiment than in the conversation analysis. The small number of students in the conversation analysis groups (see 3.8.2) might make the findings vulnerable to idiosyncratic behaviour as it is likely that I just happened to get some talkative individuals in these groups. Although the sample for the quasi-experiment was still rather low, it would increase the confidence I had in the findings.

On the other hand, a well-controlled experiment can be set up so that generalizations resulting from the findings in the study can be made about the cause-effect relationship between treatment and consequence. However, the more we control the variables in an experiment, the less we are able to generalize outside of this setting. As a true experiment was not necessarily ideal in this study, the appropriate research method for this purpose was to conduct a quasi-experiment with intact classes. I believed that this quasi-experiment would be more likely to produce findings generalizable to the real classroom. Best & Kahn (2006:175) point out that little practical research value would be achieved if the observed variable relationships were valid only in the experimental setting and only for those participants. As the

quasi-experimental research is conducted in natural educational settings, ‘if we find program effects, we can at least be confident that these work in real classrooms with all their complexity rather than in the laboratory setting’ (Muijs, 2004:27). Similarly, Hatch & Farhady (1982) state:

Our goal should be to approximate as closely as possible the standards of true experimental design. The more care we take the more confidence we can be that we have valid results that we can share with others. However, if we reduce our experiments to highly artificial laboratory-type experiments, we must also worry about whether the results can be directly transferred and shared as valid for the classroom.

(Hatch & Farhady, 1982:76)

It was important for me to know how the CL approach would actually work in the real classroom. Adopting a quasi-experimental, quantitative approach was, therefore, an appropriate research method for this study. What this method entails will be discussed in the following sections.

3.3.2 Characteristics of the Quasi-experiment

Quasi-experimental situations are defined by Kerlinger (1970, cited in Cohen et al, 2000:214) as ‘compromise designs’, ‘an apt description when applied to much educational research where the random selection or random assignment of schools and classrooms is quite impracticable’. Charles (1995) argues that quasi-experimental research differs from experimental research only in that subjects are not randomly assigned to treatments as they are in experimental research. There are different types of quasi-experimental designs. The pre-test-post-test non-equivalent control group design is one of them, which can be diagrammed as follows:

Group 1→Pre-test→Experimental Treatment→Post-test
Group 2→Pre-test-----→Post-test

As subjects are not randomly assigned, Spector (1993) suggests checking for initial equivalence of groups with characteristics of the subjects or a pre-test on the dependent variable. Statistical control, analysis of covariance is a method that can be used to adjust for pre-existing differences among the intact groups. If the mean scores of the groups on the pre-test are different, this statistical procedure adjusts the post-test mean scores on

the dependent variable for each group to eliminate the initial differences between the groups on the pre-test. Also, Punch (2005) notes that there is the real possibility of extraneous sources of variation affecting the outcome. In comparison to a true experiment, intact groups are used in the quasi-experiment, so there might be bias in the research results. Wildt & Ahtola (1993) point out that:

Whereas in a properly randomized experiment all uncontrolled variables are distributed among the groups in such a way that they can be taken into account with the test of significance employed, this is not necessarily true when intact groups are employed and thus there remains the possibility that some variable has been overlooked that will bias the evaluation of the experiment.

(Wildt & Ahtola, 1993: 258)

As Muijs (2004) suggests, in educational settings extraneous variables such as student background, teacher quality and school climate may affect the experimental outcome, so it is very necessary to make the control group as similar to the experimental group as possible on all aspects except for the treatment. A brief review of experimental validity and how to conduct the quasi-experiment to enhance the validity in this study will be provided below.

3.3.3 Experimental Validity

Validity, according to Hammersley (1990:57), is truth interpreted as the extent to which an account accurately represents the social phenomena to which it refers. It is viewed by Wellington (2000:201) as the degree to which a method, a test or a research tool actually measures what it is supposed to measure. There is internal validity and external validity. Best & Kahn (2006:171) explain that ‘an experiment has internal validity to the extent that the factors that have been manipulated (independent variables) actually have a genuine effect on the observed consequences (dependent variables) in the experimental setting’.

Experimental external validity is described by Best & Kahn (2006:171) as the extent to which the variable relationships can be generalized to other settings, other treatment variables, other measurement variables and other populations. In this sense, external validity can be subcategorized into population validity and ecological validity.

Population validity refers to the ability of a research study to generalize from the sampled individuals to the larger target population and across different sub-populations within the larger population (Johnson & Christensen, 2000). Johnson & Christensen (2000) view ecological validity as the ability to generalize the results of a study across settings. 'An experiment is valid if results obtained are due only to the manipulated independent variable and if they are generalizable to individuals or contexts beyond the experimental setting' (Gay et al, 2006:236).

Compared with a tightly-controlled true experiment, when an experiment is conducted in a natural educational setting, there are many extraneous variables that a researcher attempts to control. As Gay et al (2006) argue, when they are better controlled, the experiment tends to have greater internal validity but lower external validity. On the contrary, when they are less controlled, the experiment tends to have greater external validity but lower internal validity. As this study was conducted with intact groups in the real classroom, there were some variables which might not have been controlled by the researcher and thus might have threatened the experimental internal validity. Some of them will be mentioned in 3.6 and 3.7 below, and they will also be taken into account in the interpretation of the findings.

3.3.4 The Quasi-experimental Design

As previously stated, the present study employed a quasi-experimental non-randomized pre-test-post-test control group research design considered appropriate for the investigation of some of the research questions in this study.

When a control group acts as a baseline, the experimental treatment can be compared with what would happen if there was no treatment. In this study the experimental group was exposed to CL while the control group did not get such treatment. All the participants received the regular language instruction (which will be discussed in detail in 3.6). The purpose of the between-group comparison was to see whether the causal variable, CL had an effect on the students' English achievement. The use of a quantitative approach allowed inferential analyses to answer the specific research questions of the study (Creswell, 1994), and to decide whether the observed differences were likely to be due to the independent variable or not (Opie, 2004). Tables 3.1 and 3.2 below show the research design and the variables in the present study.

Table 3.1 The non-randomized pre-test-post-test control group design

Class	Pre-test	Independent Variable	Post-test
EC	O1	CL approach	O2
CC	O3		O4

In Table 3.1, O1 and O3 stand for the oral pre-test scores and the NCEEE scores (see 3.1 & 3.7.3), which were used to measure the students' oral proficiency and general proficiency before the quasi-experiment began.

O2 and O4 stand for the oral post-test scores and the FTEE scores (see 3.1 & 3.7.3), which were used to measure gain scores after the experiment.

In the study, as shown in Table 3.2 below, the independent variable was the CL approach while the dependent variables were oral proficiency and general proficiency. More specifically, overall oral proficiency, grammar and vocabulary, pronunciation, discourse management and interactive communication were the dependent variables.

Table 3.2 Research variables

Independent variable	Dependent variables	
CL approach	Oral proficiency	Overall oral proficiency
		Grammar and vocabulary
		Pronunciation
		Discourse management
		Interactive communication
	General proficiency	

In order not to disturb the normal teaching schedule, I taught and conducted the study with two intact classes in a university in China. From the outset, these two classes seemed equivalent to me and I chose one to be the experimental class (the EC) and the other to be the control class (the CC).

3.4 Research Setting

The Chinese university where the study was carried out is located in X city in Y Province, China. It offers various undergraduate programs and aims to train and educate students for the local economic development. The majority of students come from X City and others from other areas in Y Province. The students take College English as a compulsory course in their first two-year university study and meet twice a week. It is divided into what is called a 'reading' and a 'listening' component. In the intensive reading course (also named an integrated skills course) language teachers are required to

teach all aspects of English language such as vocabulary, grammar, speaking, reading and writing. The students have three 90-minute sessions on the intensive reading course and one session on the listening course every other week. Every semester the course assessment consists of listening comprehension, reading comprehension, vocabulary and structure, and writing. The exam does not include a speaking component. One of the coursebooks adopted in the university is *New College English* edited by Zhejiang University and published by *Foreign Language Teaching and Research Press* in 2004. It consists of 10 units and each unit is divided into four parts: preparation, reading-centred activities, further development, writing and translation. It is a theme-based coursebook. All the themes selected are closely related to students' college and social life. All the reading materials are selected in line with the theme of the unit, and all the activities in these four parts are designed around the same theme.

3.5 Subjects

The participants in both classes in the study were first-year undergraduates majoring in marketing. They were admitted into the university after they had taken the National College Entrance Examinations. The total sample size was 73 students with 37 in the EC and 36 in the CC. Table 3.3 below presents some biographical information concerning the sample.

Table 3.3 The participants' biographical information

Class	Male	Female	Mean age	Place of origin		Mean years of English study	Subjects in high school	
				X city	Other areas		Arts	Science
EC	19	18	19.2	23/62%	14/38%	8.62	19	18
CC	20	16	19.1	22/61%	14/38%	8.59	18	18

As shown by Table 3.3, in the EC there were 19 males and 18 females. Their mean age was about 19 years old. 62% of them were from X city and 38% were from other areas in Y Province. They had studied English for more than 8 years on average before their enrolment at this university. There were 19 and 18 students studying subjects respectively in Arts and Science in high school. The CC shared similar biographical information. The CC contained one fewer student than the EC. Similarly, the number of students from X City and that of students studying subjects in Arts and Science differed slightly from the EC. There were 20 males and 16 females in the CC. It should be pointed out that one male student in the CC did not take the oral pre-test, so he was not included in Table 3.3 and in the investigation.

Both of the two classes studied on the same campus, and were exposed to the same environment and used the same facilities provided by the university. Because this study did not use a procedure like random assignment of subjects, the bias in individual variability might not be distributed equally across the groups. This was a potential weakness of the study.

Likewise, the English proficiency of both classes was an important factor in language learning. An independent-samples T-test was run to examine whether the two classes had similar English level to start with. Though the subjects were not randomly assigned to the classes, there was no significant difference between the two classes in the results of the oral pre-test ($t=1.62$, $p=.11$) (see 4.5) and the NCEEE ($t=.019$, $p=.99$) (see 4.2.1). Therefore, it can be said that the subjects in the two classes had comparable initial achievement in oral proficiency and general proficiency prior to the intervention.

3.6 Treatment

In this study, the EC students participated in CL in conjunction with regular language instruction. There were three 90-minute sessions every other week, and they were exposed to CL activities for about 30 minutes in each session, making up a total of 90 minutes every other week. CL was conducted for 15 weeks during the first semester of the Academic Year 2007-2008 in the Chinese university.

According to Kagan (1992), for the purpose of carrying out CL tasks in the classroom you get better ranges of improvement when you create heterogeneous teams by achievement than by creating teams randomly. The EC students were therefore identified as low-, average- or high-achieving English learners based on their oral pre-test results. Their NCEEE results were also taken into consideration. On this basis, the students were broken up into groups of mixed ability with roughly comparable average English level. Freeman & Freeman (1994:154, cited in Jacobs, 2006) note that ‘when students work collaboratively, diversity is an asset to be celebrated since the varied experiences, knowledge and interests students in each group bring to the task at hand add to the potential for learning’. When placing the students in groups, I also took the following secondary characteristics into consideration: gender, place of origin, and whether they had studied subjects in Arts or Science in high school.

In the CL literature, groups of four are mostly recommended for CL. For example, Kagan (1992) suggests foursomes. In this way students first work in pairs and then the two pairs of the foursome interact with one another. In order to promote participation in a cooperative manner in which the students would work together on the tasks, and to manage the groups more easily, 9 heterogeneous groups were formed with 8 groups having 4 students and 1 group having 5 students in the EC.

Jacobs, Power & Inn (2002:114) report that many teachers have had success in keeping groups together for a term or half a term, a minimum of 5 to 6 weeks. They point out that this gives students time to learn how to work with their group members, thus emphasizing the importance of allotting time for groups to discuss how well they are functioning and how they can function better. Also, to compare and analyze the pre-task and post-task data of two groups in the EC and the CC (which will be discussed in 3.8.2), the 9 heterogeneous groups in the EC stayed together for the whole period of the experiment. It should be pointed out that in order to have two groups for conversation analysis in the CC comparable to those in the EC, the CC was also broken up into groups of comparable levels, according to the grouping principles above applied to the EC. Two EC groups and two CC groups were chosen at random for conversation analysis (see 3.7.2).

The conceptual approach to CL proposed by Johnson & Johnson (1994b) requires teachers to plan and tailor CL lessons for their specific students and circumstances. Based on the assumption that they would promote active participation and meaningful interaction in the target language among the students, the selected CL techniques, Think-Pair-Share, Timed-Pair-Share, Three-Step Interview, Roundrobin, Group Discussion and Brainstorming (reviewed in 2.2.4) were incorporated into the intensive reading course taught at the university. These techniques were attempts to structure interaction among the students and were used on a rota basis. In order to involve the students in language practice within the prescribed curriculum and the regular limited classroom time, the CL tasks were designed based on the theme and the learning content of each unit as well as the students' English level. They were integrated into the four parts of each unit (Preparation, Reading-centred Activities, Further Development, Translation and Writing). In general, Group Discussion was used in talking about personal opinions and discussing reading comprehension statements. Think-Pair-Share

was used in asking and answering reading comprehension questions. Roundrobin was used in retelling the text story. Timed-Pair-Share was used in sharing personal stories and experiences. Brainstorming was used in generating ideas about a topic. Three-Step-Interview was used in exchanging personal opinions on a topic. Furthermore, the use of some of these techniques was extended to other aspects. For example, Think-Pair-Share was also used in sharing personal opinions on a topic and Three-Step Interview in talking about reading comprehension questions. Samples of how each of the six CL techniques was actually implemented in the teaching with relevant coursebook materials are provided in Appendix F. All the lesson plans are available on request. Speaking was integrated into this course to provide the students with opportunities to use the language to convey meanings, but oral skills were not explicitly taught during the course.

All members in a CL group are expected to get equal chances to interact with others in the learning activities. When carrying out Roundrobin, Group Discussion and Brainstorming tasks, different roles: monitor, secretary, timekeeper and checker (see 2.2.3) were assigned to every group member. As student roles provide means for structuring positive interdependence (Olsen & Kagan, 1992), each member in this study had a specific responsibility and was encouraged to help the group function. Their roles were rotated every session, and thus all the group members played the different roles in turn.

The students working together were engaged in the process of interaction. All CL activities were structured and implemented according to the principles of CL reviewed in 2.2.3. As the students worked in small groups, the teacher functioned as a facilitator and helper of interaction among the groups.

According to Crandall (1999: 14), ‘involving learners in assessment and evaluation can lead to a sense of shared responsibility for the learning in the classroom’. This means that evaluation plays an important part in CL. There are two types of evaluation: formative and summative evaluation. Formative evaluation is a process of ongoing feedback on performance and the purpose is to identify one’s weaknesses and to offer suggestions for improvement. Summative evaluation is a process of identifying larger patterns and trends in performance and judging these summary statements against

criteria to obtain performance ratings. Formative evaluation focuses on the process while summative evaluation focuses on the outcome.

Two types of evaluation were applied to this study to allow the students to monitor and reflect on their cooperative behaviour performance, promote participation, experience success continuously during CL activities and realize their own weaknesses so as to set up their further study aim. First, as group processing is an important principle of successful CL, at the end of each session there was a group processing procedure to help develop a climate of support and collaboration. The group monitor held a brief and quick discussion about how well the group was functioning and what needed to improve in their future collaborations by filling in the 'Group Evaluation Form' developed by Lin & Wang (2005) (available on request). Secondly, adapting the 'Evaluation Form' created by (Lin & Wang, 2005), a 'Stage Evaluation Form' was developed for this study (available on request). In the middle and at the end of the experiment, the students were asked to fill in this form. It contained five aspects: language use, communication ability, the extent of participation, cooperative behaviour and language expression. This evaluation process involved four steps: (1) Each student self-evaluated his or her general performance in CL activities; (2) The group held a discussion and assessed each member's performance; (3) The teacher evaluated each student's performance; (4) The average of the marks given by the individual, the group and the teacher was the final mark. All of the above took place in Mandarin. Initially I explained each item in these evaluation forms and provided some evaluation requirements such as how to conduct a group processing procedure. By doing so, it was hoped that the students would know what they had achieved and what needed to improve in the CL activity.

While the EC students participated in CL activities for about 30 minutes in each session in conjunction with regular language instruction, the CC students also received regular language instruction, but worked on the same activities in the traditional teacher-fronted format. That is to say, the CC students participated in these classroom activities as a class led by the teacher, such as whole-class brainstorming, discussion, question and answer and comprehension checks. The students were asked to offer their ideas or answers, or volunteered their responses to the whole class. Occasionally they worked in pairs or groups in an unstructured way. Also, to minimize the difference

between students' experience in the EC and the CC, while the EC conducted stage evaluation focusing on CL and spoken English performance, the CC did it as well, but the evaluation focused just on spoken English performance in the course.

Both classes received the same regular language instruction: (1) vocabulary study: explaining meanings and usages by giving examples, and introducing some vocabulary learning strategies; (2) detailed study of the text: culture and background information, its writing style, its organization and content, useful expressions, grammatical structures and complex sentences; (3) providing instruction on reading comprehension strategies; (4) translation and writing: introducing some basic translation skills and helping students develop their writing skills; (5) exercise guidance: going over the exercises and explaining the difficult points where necessary. It should be pointed out that as the EC students spent more time on CL activities, the CC students spent more time studying the text and language points in more detail, and doing more exercises. For the two classes, English was used as the major language of instruction with Chinese only as a necessary aid. The students were required to speak English in class. Student attendance records were verified to ensure the attendance in both groups during the experiment. In addition, the two classes received the same language instruction for the listening course every other week.

If adequate steps can be taken by the researcher, validity is strengthened, and this enhances the value of the research project. Payne & Whitney (2002) point out that carrying out research in a real classroom with intact groups presents challenges, one of which is the issue of unequal treatment or of a 'teacher effect'. Teaching quality has been found to be a major factor affecting pupil achievement (Muijs, 2004). If the teachers in the two classes have different teaching ability, it constitutes an implementation threat to the experimental internal validity. In order to ensure parallel class activities and to avoid the possible implementation threats, I was responsible for the teaching of the two classes. This in turn introduced another potential problem: 'Experimenter expectancy is a type of reactivity and threat to internal validity due to the experimenter indirectly making subjects aware of the hypothesis or desired results' (Neuman, 2006:263). In an attempt to minimize any potential experimenter bias due to my expectations of the experimental results, I tried to avoid expressing my emotions and expectations to the participants when I explained the objectives of the research

project to the participants of both classes before the intervention. As stated in the Informed Consent Form in Appendix E, the students were only informed that the study was to examine the development of Chinese students' oral proficiency and their roles in this project. To reduce their reactive effects, I did not indicate their experimental or control condition.

Researcher bias is commonly considered as inevitable in doing research. As a teacher-researcher, what I had to deal with in implementing the lessons was to control this bias so that it would not interfere with the experiment. When performing the teaching experiment, I always kept the research belief of finding the truth in mind. I behaved as a teacher as normally as possible, not showing any expectation of the experimental results. To keep the CL activities as the only difference in both classes, detailed lesson plans were prepared in advance. Prior to the experiment, I had taught English for 8 years with a MA degree in TESOL (Teaching English to Speakers of Other Languages) from a university in Northern Ireland. I felt confident that my teaching knowledge and experience enabled me to give the lessons appropriately.

3.7 Instruments

Table 3.4 below shows the instruments that were used to collect data to answer the research questions. Data collection will be explained in detail in the following sections.

Table 3.4 Instruments used for data collection

Instrument	Measure
1. The oral pre-test and post-test of the EC and the CC	Overall oral proficiency Grammar and vocabulary Pronunciation Discourse management Interactive communication
2. The oral pre-test and post-test of the two EC groups and two CC groups	Interactional strategies
3. The pre-task and post-task of the two EC groups and two CC groups	
4. NCEEE and FTEE scores of the EC and the CC	General proficiency

3.7.1 The Oral Pre-test and Post-test

The oral pre-test and post-test were conducted to determine whether there was any difference in oral proficiency between the EC and the CC after 15 weeks of College English learning. For the sake of comparison, the same speaking test was employed in the pre-test and post-test. The pre-test was administered to all the participants at the

beginning of the semester prior to the treatment. It was regarded as a measurement of the students' oral proficiency and as a criterion against which to measure their future progress. At the end of the experiment, all the participants took the post-test, which aimed to measure whether CL had had positive effects on their oral performance after 15-week English study. As the pre-test and post-test were taking place with such a long interval between them, the students were unlikely to remember what they had expressed in the pre-test, which it might help avoid a possible testing threat, such as improvement of scores through familiarization with the test content.

3.7.1.1 The Speaking Test

(1) A Proficiency Test

The coursebook adopted in the university was *New College English* introduced in 3.5 above. The integrated skills course covered all the aspects of the language, such as text study, vocabulary and grammar study, reading, listening, writing and translation. As speaking was included in the textbook as communicative practice and no explicit instruction was given in oral skills, the speaking test employed in this study for the pre-test and post-test was regarded as a proficiency test. As there were no authorized national speaking tests available for testing the college English term level, a mock PETS-3 (The Public English Test System Level 3) was developed for this study. PETS is an education cooperative project of Sino-British Cultural Exchange and gained the technical support from Cambridge ESOL. It has been developed by the Testing Centre of the Ministry of Education in China. According to *the Handbook for PETS-3 Interlocutors and Assessors* (2003:1), PETS-3 is the mid-level of the total 5 levels in this English testing system and aims at the general students in college. Those who pass this test can claim to have met the basic requirements of English language study of a non-English major college graduate. As I could not have access to PETS, the Mock PETS-3 was employed as the pre-test and post-test in the study to measure the students' oral skills. How this speaking test was developed will be discussed below after a brief introduction to PETS-3.

(2) An Introduction to PETS-3

In speaking assessments, the key construct refers to the particular kind of speaking that is assessed in the test (Luoma, 2004). According to Bachman (1990), there are two approaches to defining language proficiency. One is called the 'the interactional/ability

approach where language proficiency is defined in terms of its component abilities (Bachman, 1990). The other approach is the ‘real-life’ approach. That is, language proficiency itself is not defined, but a domain of actual or ‘real-life’ language use is identified that is considered to be characteristic of the performance of competent language users (Bachman, 1990). The ACTFL Oral Proficiency Interview (American Council on the Teaching of Foreign Languages) is an example of the second approach.

The construct of the PETS-3 is also an example of the second approach. It is defined in *the Handbook for PETS-3 Assessors and Interlocutors* (2003:1) as follows.

The candidate should be able to conduct dialogues in most contexts, not only asking for factual information, but also asking for abstract information. S/he is able to provide or ask for clearer statements, and to express personal opinions and attitudes. Besides, s/he is able to describe an event or make a short speech on a general topic. The candidate should be able to:

- 1) conduct a fairly long discussion and statement basically coherently;*
- 2) keep the language smooth;*
- 3) communicate actively and use appropriate repairs to solve communication difficulties.*

(3) The Paper Format of PETS-3

In PETS-3, candidates are examined in pairs. There is about 10 minutes per pair of candidates. The paper contains three parts as shown in the Table 3.5 from *the Handbook for PETS Interlocutors and Assessors* (2003:42).

Table 3.5 The paper format of PETS-3

Part	Timing	Task Type and Format	Task Focus	Information provided by the candidate
1	3 minutes	Each candidate interacts with the interlocutor. The interlocutor asks the candidates questions in turn.	Answering questions; Providing personal information	Providing personal information, and talking about past experiences, present circumstances and future plans
2	3 minutes	Candidates interact with each other. Visual stimulus is given to the candidates to aid the discussion task.	Communicating with others; Discussing a general topic	Exchanging information; Expressing opinions; Putting forward suggestions
3	3 minutes	A picture is given to each candidate in turn and they are asked to talk about it for 1.5 minutes.	Describing things; Stating opinions	Description of things; Opinion statement

Part One

The candidates are asked questions in turn by the interlocutor. They do not need to talk to each other in this part. The time is about 3 minutes. This part is to assess the candidate's ability to provide personal details and to answer questions about his/her daily routines, hometown, family and study. Also, as they are talking about themselves using familiar language, this part helps the candidates to overcome their initial nervousness.

Part Two

This part of the test is to assess the candidate's ability to discuss the related issues according to the prompt card. The interlocutor sets up the task, giving the instructions while the candidates look at the prompt material, which is designed to generate ideas and provide the basis for the discussion. The candidates speak to each other and the interlocutor then takes no further part in the interaction. The candidates are expected to engage with the task independently, exchanging information, expressing opinions and putting forward suggestions. The time for discussion is about 3 minutes.

Part Three

This part of the test is to examine the candidate's ability to talk on a topic continuously. One candidate is given a picture by the interlocutor and is asked to let the other candidate have a look at the picture. The first candidate is asked to give a simple description of what s/he can see in the picture and to express her/his opinions for 1.5 minutes about the related topic displayed by the picture. After the first candidate finishes her/his speech, the second candidate expresses her/his opinions on the same topic. Then vice versa.

(4) Description of the Ratings

During the test, candidates are assessed on their language skills, and they are assessed on their own individual performance and not in relation to each other. The assessor gives marks according to four analytical criteria: grammar and vocabulary, discourse management, pronunciation and interactive communication. Each criterion is 5 points, and the full mark is 20 points. These criteria are presented below from *the Handbook for PETS Interlocutors and Assessors* (2003: 20), and the different grades in each criterion are in Appendix A.

Grammar and vocabulary

It refers to the fairly accurate use of grammatical forms and fairly rich vocabulary. It is allowed to make some errors in grammar and vocabulary.

Discourse Management

It is required that the candidate should have a quite good language performance, and be able to convey information and state opinions coherently.

Pronunciation

It refers to the ability to produce intelligible utterances to fulfil the task requirements. This includes stress, rhythm, intonation as well as individual sounds and linking. It is allowed to have a first-language accent if it doesn't interfere with comprehension.

Interactive Communication

It is required that the candidate should be able to respond appropriately without any assistance or prompts, including using functional language and ways to maintain or repair communication, and being able to initiate utterances. It is allowed to have some hesitations when organizing ideas and language.

(5) Developing the Speaking Test

The speaking test (Appendix B) was developed for this study based on the mock speaking tests (Jia, 2007; Xie et al, 2005). Two very experienced PETS interlocutors and assessors in the English department in my university were consulted about its task difficulty and familiarity. They both indicated that the tasks suggested were suitable for PETS-3 and were close to the students' real life, which would give them the opportunity to produce communicative exchanges and encourage the promotion of their individual expression. As the tasks were familiar to the students, even the low achiever could have something to say while the average and high achievers would have the opportunity to display a wide range of language.

3.7.1.2 Pilot Study of the Speaking Test

(1) The Aim of the Pilot Study

High School English Curriculum Criteria had been applied in high school in China three years before the experiment was conducted. The criteria aimed to develop students' general English proficiency. On the whole, high school graduates' overall English proficiency had improved. However, as speaking was not generally assessed in the National College Entrance Exams, speaking was still the poorest among the four skills. Little was known about the freshmen's English oral skills. Because of this, I was not sure how difficult the speaking test would be for the students employed in this study. The aim of the pilot study was thus to examine the suitability of the speaking test by testing the students' oral skills. It was assumed that high school graduates who would be admitted to university had similar oral skills as the subjects in the main study, so the pilot study was conducted with high school graduates.

(2) The Participants

In China high school students are required to take the National College Entrance Exams. Only when reaching the required scores are they admitted to university. There are two basic bands of scores: one is for leading universities, the other lower band, named 2A is for ordinary universities. The required scores for ordinary universities are lower than those for leading universities. The university where the study was carried out is an ordinary university.

I had some personal contact with 4 high school English teachers. The participants were chosen purposely with the help of these teachers. On July 30, August 2, 8 and 14, 2007, 16 students who had achieved 2A from 4 senior high schools in different regions (city, town and countryside) with 4 students of different English level in each school, were chosen to take part in the pilot study. 9 students were female, and the other 7 were male. In order to assess the oral ability of these students and to make sure a range of abilities was represented, I examined their College Entrance English Exam scores and information about their oral skills from their English teachers. On this basis the 4 students in each school were divided into different achievers: 1 high achiever, 2 average achievers and 1 low achiever. I explained my research objectives and the aim of the pilot study to the students. They all agreed to take part in it and signed an informed consent form. There was one copy for each student to keep and one for me.

(3) The Administration of the Pilot Speaking Test

I conducted the speaking test with the students in a quiet classroom in each school according to the procedure of PETS-3. The students were examined pair by pair. Their speech was recorded on an MP3 recorder.

(4) The Assessment of the Pilot Speaking Test

The two very experienced PETS assessors mentioned above reviewed the recording and assessed the students' oral skills using an analytic scoring procedure. Each student was scored respectively on the four categories of the assessment scale. The average of the scores given by the two assessors was the final mark. Their marks are reported below.

(5) The Result of the Pilot Speaking Test

Table 3.6 The result of the pilot speaking test

Students No.	Grammar and vocabulary	Pronunciation	Discourse management	Interactive communication	Overall mark
6	1.25	1	2.25	1.5	6
8	1	1.25	2.25	1.5	6
7	2	2	3	2.5	9.5
11	2.25	2.25	3	2.25	9.75
15	2.25	2.5	2.5	2.5	9.75
16	2.25	2.75	2.5	2.5	10
12	2.5	2.5	3	2.25	10.25
13	2.75	2.5	2.75	2.5	10.5
10	2.5	2.75	3	2.5	10.75
5	2.75	2.5	2.75	3	11
4	2.75	2.75	3	3	11.5
9	2.75	2.75	3	3	11.5
14	3	3	3	3	12
1	3	3	3.5	3	12.5
2	3	3.25	3.5	3	12.75
3	3.5	3.75	3.5	3.75	14.5
Average	2.47	2.53	2.91	2.61	10.52

The result of the pilot study is presented in Table 3.6 above. As the full mark was 20, 12 was regarded as the cut-off point for passing. The mean mark was 10.52. That is to say, on average, the participants' oral proficiency did not reach a pass level. Looking at the components of the oral proficiency, the mean mark in discourse management was the highest, and the mean marks in grammar and vocabulary, pronunciation and interactive communication were close to one another. Of all the marks, the highest mark was 14.5 while the lowest mark was 6. Four students got 12 or above.

It can be seen that a few students were able to carry out the tasks at a basic level. They were able to make themselves understood with some grammatical and lexical errors. Their pronunciation was good, and they had fairly clear articulation and intonation although there were some occasional unintelligible words and utterances. These students could engage in the construction of the discussion, and describe things and state their own opinions coherently. Also, they could interact with their partner, but not adequately.

However, the other students failed to fulfil the requirements of the tasks. While performing the tasks, their speech did not flow smoothly, and they had great difficulties expressing what they wanted to say. There were frequent hesitations on words, phrases or structures. When they lacked linguistic resources, there were frequent communication breakdowns. They interacted poorly, in particular, the two students with the lowest marks, who did not show any willingness to invite their partners to speak, to respond and to initiate discussion. It seemed very difficult for them to organize a large unit of discourse, let alone the coherent flow of language and rich vocabulary.

It was obvious that there was a lot for the students to improve in their oral proficiency displayed by the speaking test. After the recording was assessed, the experienced PETS assessors mentioned above were consulted again. They expressed their agreement on the suitability of the speaking test for the main study. Therefore, the speaking test was used in this study to measure the students' initial achievement in oral skills and their future progress after the intervention.

3.7.1.3 The Administration of the Oral Pre-test and Post-test

After the students registered in the university, they began a one-week orientation program and then two-week military training. Weir (1990: 78) notes that 'candidates should be free to choose their partners so that they are interacting with somebody they know and feel happy communicating with'. After the students had thus got to know each other, I asked them to pair themselves on their own. In order to compare the pre-test and post-test speech of the two EC groups and two CC groups (see 3.7.2), and on the assumption that if they talked with the same partners in both tests, it would be easy to see whether they had made some progress in oral proficiency, all the students were required to have the same partners in these two speaking tests.

The oral pre-test and post-test were conducted in three quiet test classrooms in the university at the beginning and at the end of the treatment. The researcher and her husband were the organizers of the speaking tests. Three trained and qualified assessors of PETS were invited to be the interlocutors in the tests. Three senior university students were invited to take charge of the recording in each classroom. The students were examined pair by pair. Their performance was recorded with a tape-recorder and an MP3 recorder. For each pair a different tape was used with their names written on it. The EC and CC students were waiting for their turns in another two classrooms. I was in charge of two test classrooms and my husband was in charge of the other one, calling on the students to enter the three test classrooms in turn. In order not to let the students in the waiting-rooms know the detail of the speaking test, when those students finished their tests, they were not allowed to go back to their waiting-rooms and were required to leave directly. The students who were waiting were not allowed to leave the waiting-rooms. As the weather was still hot in September and dry in December, the students were supplied with mineral water.

3.7.1.4 The Assessment of the Oral Pre-test and Post-test

The two experienced assessors, who assessed the oral skills of the pilot study, were again invited to review the recording and assess the students' oral skills in the main study using the same analytic scoring process. The assessors were not told about the subject experimental and control conditions so as to avoid their bias in assessing the students' performance. Each student was scored respectively on the four categories of the assessment scale in order to get a clearer analysis of their performance. The average of the scores given by the two assessors was the final mark. To ensure reliable results, estimates of interrater reliability were calculated in the oral tests by using Pearson's correlation coefficient. For the oral proficiency pre-test, interrater reliability on the 20-point scale was .838; on the post-test, interrater reliability was also .838. Liu (2005) argues that interrater reliability of .7 is considered satisfactory for oral rating scales. Therefore, the coefficients of interrater reliability in the pre-test and post-test were high.

3.7.2 The Instruments for Conversation Analysis Data Collection

3.7.2.1 The Oral Pre-test and Post-test

In the CL context, small-group interaction is intended to provide opportunities for the students to negotiate for meaning and keep the flow of the conversation. This might

help develop interactional strategies in communication settings. In this study, the students' interactional data were collected for conversation analysis (which will be discussed in 3.8.2). Because of the limited research time, two groups consisting of 4 students each were randomly chosen respectively from the EC and the CC (grouping students has been discussed in 3.6) for an in-depth conversation analysis. The ESs and the CSs are used to refer to these two EC groups and two CC groups in this study. As shown in Table 3.7 below, the transcripts of the students' pre-test and post-test performance were analyzed to detect any gain in interactional strategy use.

Table 3.7 Instruments used to collect data for conversation analysis

Class	Group	Student	Instrument	
EC	ESs	8	Pre-test and post-test	Pre-task and post-task
CC	CSs	8	Pre-test and post-test	Pre-task and post-task

At the meantime, ethnographic data was collected by recording the spontaneous talks of the ESs and the CSs while they carried out the pre-task and post-task in the classroom. The talks in the CL context could provide information about the students' interactional features that the speaking test might not capture. The information on what actually occurred in the classroom was vital for validating the research results. The pre-task and post-task are discussed below.

3.7.2.2 The Pre-task and Post-task

Communication tasks can be picture description tasks, opinion-exchange tasks and decision-making tasks. Pica et al (1989:72) note that 'there is a great deal of consensus regarding the value of these tasks in providing data on interaction in general and negotiated interaction in particular'. As opinion-exchange tasks were used prevalently in the coursebook, to elicit some data on interaction, two opinion-exchange tasks were developed for this study, the pre-task (Appendix C) from Unit 1 of the coursebook and the post-task (Appendix C) from Unit 7. They were part of the lesson plans in these two units. The theme of Unit 1 is about personal relationship. In line with this theme, the pre-task was about the students' opinions on what made an ideal roommate. The theme of Unit 7 is about choices in life. The post-task was about the students' opinions on the important choices besides their major study at college. These two tasks were done at the beginning and at the end of the intervention. All the students in each class did these tasks.

The students in the EC and the CC were given a sheet on which the topic and discussion suggestions were printed. The suggestions were only optional guidelines and the students could decide whether to use them or not. In the EC, the students carried out the two tasks in groups as usual, and the different roles, monitor, secretary, checker and timekeeper were performed in the group. In the CC, the previously-formed groups were asked to designate a member as monitor on the spot to organize the group activity, and no other specified roles were performed in these groups.

Earlier studies (e.g. Gass & Varonis, 1985, 1986; Pica & Long, 1986; Varonis & Gass, 1985) selected speech samples ranging between 5 and 10 minutes. As was the practice in the EC, the students in both classes were asked to engage in exchange of ideas in groups for about 8 minutes and finally report their group summary to the class. Therefore, the resulting recordings were around 6-9 minutes.

The two EC groups and two CC groups chosen at random in each class had been told in advance that they would be digitally recorded, but they were assured that they would not be tested. When they were doing these two tasks, the talks of these groups were recorded by an MP3 placed on the desk in the middle of the group. It was believed that the students would interact and negotiate with each other to contribute to the group tasks, and the recordings to a large degree would mirror their major interactional features during the group work.

3.7.3 NCEEE and FTEE

Before the experiment started, the students' NCEEE scores were regarded as a measurement of their initial general proficiency. At the end of the term, the students took FTEE, which was used to measure whether CL had contributed to their general proficiency as well as their oral proficiency after 15 weeks of English study.

The National College Entrance Exams are the only criteria for assessing and selecting university student candidates in China. English is a compulsory subject in these exams. This English exam is developed and administered by the NCEEE testing centre of the Education Department of Guangdong Province, which is authorized by the Chinese Ministry of Education. It has fairly high validity and reliability. It is regarded as a national English test to assess the comprehensive English level of senior high school

graduates. It offers the universities a reasonable, fair and just standard for selecting prospective students. The English exam that the participants in this study took consisted of listening, linguistic knowledge and application (vocabulary and grammar), reading comprehension and writing. It did not contain a speaking component.

FTEE also called a comprehensive English test, consists of listening comprehension, reading comprehension, vocabulary and structure, translation and writing. This test (available on request) had been adapted by the College English department of the university from the term test papers for the coursebook *New College English* (Book One), which were developed by Foreign Language Teaching and Research Press. It was a domain-referenced test that covered the learning outcomes of the term. Its content was comparable to those covered and practised in class. According to the usual procedure, the content validity of the test was judged and established by two professors in the department.

The responses to the test items were computed by the College English department except for the translation task and the writing task. To ensure a reliable result, these two tasks in the exam were marked by two independent raters. They were experienced teachers who had taught College English for 12 and 17 years respectively. The rating scales (Appendix D) were established by the department. Before rating began, they had moderation training on sample translation and writing. Each of the raters came up with a global mark for the performance of each student in the translation task and the writing task. Then an average mark was obtained as their final mark for translation and writing from the two marks given by the two raters. The interrater reliability in these two tasks was computed on the original marks given by the two raters using 15.0 Version of SPSS. They were estimated by Pearson's correlation coefficient, and were .944 in the translation task and .848 in the writing task, i.e. high degrees of efficiency.

3.8 Data Analysis

3.8.1 Quantitative Data Analysis

Table 3.8 below illustrates how the test scores were analyzed in order to answer the relevant research questions posed in Chapter One and to test the hypotheses.

Table 3.8 Statistical techniques used to process the score data

Research Question/ Hypothesis	Class	Score	Dependent Variable	Statistical technique
Sub-question 1 of Research Question 1 and the hypothesis	EC & CC	1) Oral pre-test 2) Oral post-test	1) Overall oral proficiency 2) Grammar and vocabulary 3) Pronunciation 4) Discourse management 5) Interactive communication	Mixed between-within ANOVA & Independent Sample T-test
Research Question 2 and the null hypothesis	EC & CC	1) NCEEE 2) FTEE	General proficiency	Independent Sample T-test

Following the statistical guidelines and procedures proposed by Pallant (2005), a mixed between-within subjects analysis of variance (mixed between-within ANOVA) in SPSS (15.0) was used to process all the oral scores (available on request) collected in this study. The findings and results with regard to the first sub-question of Research Question One and the hypothesis were presented using descriptive analysis as well as inferential analysis. So as to assess whether the EC made greater improvement in overall oral proficiency as a result of CL than the CC, the mixed between-within ANOVA was run by using the pre-test and post-test scores of these two classes. In this analysis, their overall proficiency levels before and after the intervention functioned as the dependent variables in this analysis, while the CL approach was the independent variable. The key aspects of the statistical output: the mean, standard deviation (SD), F and P values, and partial eta squared (effect size), were presented and interpreted. To obtain a general picture of their improvement in the components of the oral proficiency level, the same statistical procedure was also applied to compare the scores on grammar and vocabulary, pronunciation, discourse management and interactive communication. In addition, in order to gain further insight into these oral scores, following the statistical guidelines and procedures proposed by Pallant (2005), an independent sample T-test was also run to compute the oral pre-test and post-test scores.

To answer Research Question Two and test the null hypothesis, an independent sample T-test was run to compute NCEEE and FTEE scores. The findings and results were presented using descriptive analysis as well as inferential analysis. The key aspects of the statistical output: the mean, standard deviation (SD), T and P values, were presented and interpreted.

3.8.2 Conversation Analysis

To gain an in-depth understanding, the oral pre-test and post-test speech data of the ESs and the CSs, and their classroom pre-task and post-task data were subjected to conversation analysis as shown in Table 3.9.

Table 3.9 Conversation analysis data

Class	Group	Student	Data	
EC	ESs	8	Pre-test and post-test	Pre-task and post-task
CC	CSs	8	Pre-test and post-test	Pre-task and post-task

It should be pointed out that in the speaking test only the second part, pair discussion, was analyzed in terms of the interactional features displayed in the conversation. In the pre-task and post-task, the students were given 8 minutes to do the tasks. Although each group's real total speech time was different in the pre-task and post-task or different from the other groups' speech time in these two tasks, the recorded discourse for each task was regarded as their overall participation and contribution to the task, and was used to analyze their interactional strategies. In addition, because the data were in the form of audio recordings, analysis of the nonverbal features of interaction is beyond the scope of this study.

In discussion, information exchange is optional, and outcomes are potentially divergent (Pica et al, 1993). Individual learner variables have an effect. Although the general oral proficiency level of the ESs and the CSs was similar before the intervention, individual learners displayed different characteristics in the oral pre-test and in the pre-task. For example, in the oral pre-test one learner may do better in pronunciation than in other aspects while another may do better in interaction. The same was true with the pre-task. Therefore, it was not likely that the ESs and the CSs had comparable interactional characteristics to start with. This made the between-group comparison of their speech data very difficult. In spite of this, I attempted to find out a general picture of their interactional features through comparisons.

Specifically, the interactional strategies used by the ESs in the oral pre-test and post-test were analyzed to assess if there was a change in their performance after intervention and compared to the performance of the CSs. Similarly, the interactional strategies used by the ESs and the CSs in the pre-task and post-task were analyzed and compared. After the number of each interactional strategy the students employed was

presented, an interpretative discussion was provided along with some illustrative excerpts.

The audio recordings were transcribed verbatim so they could be read and revisited when needed. The following conventions, mainly based on those developed by Atkinson & Heritage (1984), were used for transcribing the data.

1) Pauses

To indicate very short un-timed pauses: (.)

To indicate silences roughly of 1 second and above: (0.0)

2) Unintelligible, unclear word or words: ()

3) Overlapped talk: [

4) Latched talk: =

5) Lengthening of the preceding sound: *wi:ll*

6) Non-English words are italicized and followed by an English translation in double parentheses: 不是 ((tr: no))

7) In the case of inaccurate pronunciation of an English word, an approximation of the sound is given in square brackets:
campus [kæmp]

8) Repetitions

Repetitions are transcribed without inserting any punctuation.

E.g. *What's you what's you?*

I hope my roommate I hope my roommate is a friend, kind, honest and enthusiastic girl.

As for repeated syllables, a hyphen has been inserted between the syllables repeated.

E.g. *ve-ve-very*

The complete recordings and the transcriptions of the speaking tests and the tasks can be provided on request. Names that identify individuals have not been used to ensure anonymity. In the transcriptions ES1-ES8 and CS1-CS8 are used to replace the student names. The lines of the transcriptions are numbered, and accordingly the line numbers of the excerpts used in this study are those of the transcriptions.

The main characteristic of real-time conversation is interaction. Speakers are not expected to deliver independent or disconnected monologues. In order to achieve interactive participation, it is by no means enough to know linguistic rules only. To maintain interaction and cooperation in conversation, speakers use a variety of strategies and skills. Appealer is a turn-final ‘serving as an explicit signal to the listener that some kind of feedback would be appropriate’ (Stenström, 1994: 78). Speakers employ appropriate ways of using appealers and uptakes (see its definition in the section *Achievement Strategies* below) for yielding turns and taking the floor, negotiating meaning and using different strategies for commenting on and referring to other contributions, for seeking information and for solving communication difficulties, etc. They have to be aware of certain tactics which are useful both in successful and problematic oral communication.

Interactional strategies in this study referred to the strategies that the students employed to manage communication, not only in keeping the exchange flowing, but also in negotiating meaning so as to avoid breakdowns during an interaction. I familiarized myself with the data by reading through the transcriptions and reviewing the recordings repeatedly. Based mainly on the frameworks of interactional strategies proposed by North (1997) and Riegenbach (1998) (reviewed in 2.4), an analytical framework for the categorization of interactional strategies in this study was created to identify the students’ typical interactional features in the current transcription data. There were two main categories. As in the categories of communication strategies, achievement and reduction strategies in a previous study by Nakatani (2005), the interactional strategies in my study were classified as achievement and reduction strategies. The former represents students’ active behaviour in keeping the conversation going while the latter represents students’ negative behaviour when they could not repair and maintain interaction, thus causing communication breakdown. The achievement strategies were *uptakes*, *asking follow-up questions* and *elaborating*. The reduction strategies were *message abandonment* and *switch to Chinese*. Overall participation will be now discussed, followed by the two strategy categories with examples from the data.

(1) Overall Participation

Some previous studies (e.g. Bejarano et al, 1997; Naughton, 2006) measured overall participation by calculating the number of turns to find out learners' general interaction patterns. Before a detailed explanation is given of the interactional strategies with examples from the present study, I will discuss overall interaction patterns. In order to have a picture of whether there was a change in their general interaction patterns, the number of turns in the tests and tasks was calculated. The approach to measuring the number of turns was adopted from Naughton's study (2006). Chaudron (1988:45, cited in Naughton, 2006) defines a turn as 'any speaker's sequence of utterances bounded by any other speaker's speech'. When the student stopped speaking and another student started speaking, the first speaker's on-going turn was considered to be over and a new turn started. When there was an overlap between two speakers, if the first speaker continued talking during, and possibly after the intervention of the other speaker, it was counted as only one turn. The intervention of the other speaker was counted as a turn as well. It should be pointed out that if a turn was taken completely in Chinese, it was not included in the calculation. This way of calculating turns was to examine the students' gains in English interaction patterns.

Backchannels are feedback to the speaker signaling the listener's attention and interest. Although there is no consensus in literature as to the status of backchannels in conversation, they were considered as turns in this study. As Biber et al (1999) argue, 'given the interactive nature of conversation, backchannels are important in indicating that speaker and hearer are keeping in touch with one another, and that the communication is still in progress' (p.1091). Backchannels can be *yes, yeah, mhm, really, right, I see, oh/ah* (Stenström, 1994) functioning as a feedback signal and comprising an entire short utterance.

The study of the relationship between turn length and English proficiency is beyond the scope of this study. The length of turns can be interpreted differently. For example, long turns can either be interpreted as relatively elaborated and thus more advanced; or relatively monologic and thus uninteractive. The purpose of measuring overall participation in this study was only to examine the students' interactive features regardless of turn length.

(2) Achievement Strategies

1) Uptakes. In an ongoing conversation speakers frequently use some interactive discourse items to enhance the smooth flow of the interaction, especially to manage the shift of the speaker. An *uptake* serves as an acknowledgement of what the previous speaker has said and prefaces a speaker's move (Stenström, 1994). The discourse items for uptakes can be *well, I think, oh, ok, yeah, yes, so, but, I agree with you* (Stenström, 1994; Liu, 2009; Zhen 2006). It should be pointed out that *uptakes* do not always occur when a speaker claims a turn. This strategy is exemplified by the following student utterances. The utterances in italics and bold are considered *uptakes*. Other strategies are also italicized and in bold in the remainder of this chapter.

Excerpt (1)

- 11 ES3: In my opinion I think only we have a good body that we can study more
12 well. I think do some sports sports is very important.
13 ES4: ***Yes, I agree.*** Er because I think we can't do anything without a health
14 body. Health is the base for everything.
15 ES3: ***Mm yes.*** And I think when we do sports, we can make close with our
16 friends. It's a good way for build up a friendship.
(ECpost-task)

2) Asking follow-up questions. *Asking questions* is considered as a natural part of conversation. It plays an important role in developing continued interaction, pushing the output of other speakers and ensuring attentive listening (e.g. Bejarano et al, 1997; Bygate, 1987, cited in Naughton, 2006). The use of follow-up questions is 'a core function of spoken English' (McCarthy, 1998:54). In this study it meant that in light of what other speakers had said, the student formed a related question to elicit information and encourage continuation of the conversation. This strategy is exemplified by Excerpt (2).

Excerpt (2)

- 32 ES1: Yes, I agree with you. Because we do a part-time job use only a little
33 time, and do a part-time job we can make a lot of money to and use use
34 some use er ().
35 ES2: Oh oh, I think so. Do you agree with ES1, ES3?
36 ES3: Yes, I agree with him. ***If you earn the money, how (0.3) how will you***
37 ***spend it?***
38 ES1: About about to use the money, I think I can use the money to do some to
39 do something. For example, er to take bus or er or er and (.) go to some

40 place go to some place.
(ECpost-task)

3) Elaborating. *Elaborating* is considered as one of the interactional strategies for maintaining the flow of a cohesive and coherent group discussion in which students relate to what other members have said (Bejarano et al, 1997). In this study it meant that students built on a previous comment on a specific topic during their conversation and enlarged on it by constructing arguments in favour of or in opposition to their partners' views, thus expanding the discourse unit. The sentences containing key points in a turn were considered as one elaboration. This strategy is exemplified by the following excerpts about 'building up friendship' and 'doing sports'.

Excerpt (3)

10 CS4: But in my view I think that to build up a friend build up friendship is
11 more important because we can share happiness and sadness with them
12 with them. And we will be more happy in my life.
13 CS2: I am agree with you. ***But I think to do a part-time can make friends as***
14 ***well.*** Er in the society er you can make friends which is er in work, not
15 study. Er it's another style with your friend.
(CCpost-task)

Excerpt (4)

11 ES3: In my opinion I think only we have a good body that we can study more
12 well. I think do some sports sports is very important.
13 ES4: Yes, I agree. Er because I think we can't do anything without a health
14 body. ***Health is the base for everything.***
15 ES3: Mm yes. And I think when we do sports, we can make close with our
16 friends. ***It's a good way for build up a friendship.***
(ECpost-task)

(3) Reduction Strategies

1) Message Abandonment. Tarone et al (1983:11) define *message abandonment* as a strategy in which a learner initiates communication on a topic but then cuts it short because s/he lacks linguistic resources. When s/he has language difficulties, the learner leaves a message unfinished (Dörnyei, 1995). In this study message abandonments were calculated when the student left a sentence unfinished without expressing her or his intended meaning. The student ES3 in Excerpt (5) below stopped when trying to give a

reason and left it unfinished, failing to fully achieve his communicative purpose.

Excerpt (5)

- 6 ES7: Why why not you live in live with your parents?
7 ES3: That's because I think I (0.2) I think I (.) I should make a lot of friends
8 *because I was (.) mm* (0.5)
9 ES7: I will I will live in the campus the campus because in the campus I can
10 there there more time. I can do a lot of thing.
(ECpre-test)

2) Switch to Chinese. The learner sometimes transports a native word or expression, untranslated, into the interlanguage utterance (Tarone et al, 1983:11). Bolander's empirical study (2008) suggested that code switching occurred typically when the EFL learners encountered unfamiliar words. When they lack linguistic sources, learners do not make an attempt to negotiate for linguistic items to help them solve their communication difficulties. The students in this study occasionally used Chinese in the conversation, which can be seen in Excerpt (6). The number of switches to Chinese was calculated.

Excerpt (6)

- 48 ES1: I think my roommate is also ok.
49 ES4: And you?
50 ES3: I think my roommate are very nice, but (.) they will (.) (laughs) ‘好晚睡’
51 *怎样讲?* ((tr: How to say ‘go to bed late’ in English?)) Sleep too late.
52 (.)
53 ES2: ES1, you ask you you ask not clear. I don't (.) I don't (.) I don't (.)
54 ES1: *什么什么?* ((tr:What what?))
55 ES2: *我听不懂, 我没有听清楚。* ((tr: I did not hear clearly.)) Please ask again.
56 ES1: I think I think as a roommate should have a good habit and study hard.
(ECpre-task)

3.9 Ethical Issues

It is important to consider ethical issues in both pure scientific experiments and social science investigations. The research ethics stem from the fact that in their pursuit of truth and for the welfare and development of humanity, scientists have to employ means of investigation that might have a negative effect on the participants' own lives (Cohen & Manion, 1994). Ethics is defined by Neuman (2006) as ‘what is or is not legitimate to do, or what ‘moral’ research procedure involves’ (p.129). Pring (2000)

describes ‘the underlying ethical principles as respect for the dignity and privacy of those people who are the subjects of research’ (p.143). Cohen et al (2000) state that they are the pursuit of truth--the right to try to find out as carefully and accurately as possible, but also the right of society to know. Many ethical issues involve a balance between two values: the pursuit of scientific knowledge and the rights of those being studied or of others in society (Neuman, 2006:129). It is very important for the researcher to balance his right to find the truth and the participants’ right to privacy and dignity, and to carry out his research with sound ethical practice. As far as this study was concerned, the following ethical concerns were taken into consideration.

3.9.1 Permission to Conduct the Empirical Study

About 6 months before the quasi-experiment started, I applied to the School of Literature and Art in my University for permission to conduct the experiment with my supervisor’s reference letter. In the application letter, I explained the objectives of the research project and provided the details of what it involved. I personally assured the School that the project would not affect the accomplishment of the normal teaching tasks. The deputy director of the School and the dean of the College English Department both indicated their agreement and granted me permission to conduct the experiment.

3.9.2 Prior Informed Consent

As stated in 3.6, the students were informed of the research objectives before the intervention. Their experimental and control conditions were not indicated to them. I did not believe that either group would be disadvantaged. This was shown to be correct by the very similar post intervention results on their overall oral proficiency. The students were also informed that all of the information they provided would remain confidential and anonymous. In my research report, their names were not used to ensure anonymity. They all willingly agreed to take part in it and signed the Chinese informed consent form (Appendix E). There was one copy for each student to keep and one for me.

3.10 Chapter Summary

This chapter has discussed the methodological issues involved in the study. In nature, this study was based on a quasi-experimental, quantitative approach to look at cause and effect, exploring the impact of CL on Chinese students’ oral proficiency.

Additionally, conversation analysis was employed to evaluate possible changes in their interactional skills resulting from CL activities after the intervention. This chapter has also justified and described the research design, the research setting, the subjects, the instruments and the data analysis process. It has discussed the categories of interactional strategies and how the pre-test and post-test, the pre-task and post-task were used in relation to conversation analysis to investigate the students' interactional features in depth. The next two chapters will present the findings with regard to the impact of CL on the students' oral proficiency, their general proficiency and their interactional strategy use.

Chapter Four Quantitative Analysis

4.1 Introduction

As stated in Chapter One, the purpose of this experimental study was to examine the effects of a CL approach on Chinese students' oral proficiency in the integrated skills course, and to investigate whether CL contributed to the development of their general proficiency as well. This chapter aims to find out whether there were significant differences in oral proficiency and general proficiency between the EC (the experimental class) and the CC (the control class) after the treatment. The outputs generated by the Independent Samples Test and the mixed between-within subjects analysis of variance (mixed between-within ANOVA) are presented below, followed by output interpretations by using descriptive analysis as well as inferential analysis. The group effect is not reported because it is the interaction effect that is appropriate for investigating the differential impact of the treatment on the performance of the two groups. It should be noted that the general proficiency is reported on first as background information to the other findings in this chapter.

The 95% confidence level ($p < .05$) was used as the criterion level for determining statistical significance. As five Independent Samples Tests were used respectively to process the oral pre-test and post-test scores in overall oral proficiency and in its components: vocabulary and grammar, pronunciation, discourse management and interactive communication, in order to make the t-tests acceptable, a Bonferroni adjustment (the adjusted alpha level .01) was applied to determine statistical significance of the five t-tests results on the pre-test and the post-test. An effect size was used to indicate the relative magnitude of the differences between the means of the two classes. This gives an indication of practical rather than statistical significance. Cohen (1988, cited in Pallant, 2005) proposed the following guidelines for effect size applied in this study: .01=small effect, .06=moderate effect, .14=large effect.

4.2 Effects of CL on General proficiency

4.2.1 The National College Entrance English Exam (NCEEE)

NCEEE was employed to find out whether there was a significant difference in comprehensive English proficiency between the EC and the CC prior to the treatment. An Independent Samples Test was run to process the scores, and the output generated from this procedure is shown in Table 4.1 below.

Table 4.1 Results obtained from the Independent Samples Test for NCEEE

Means										
		Groups		N		Mean		Std. Deviation		Std. Error Mean
NCEEE		CC		36		97.75		8.51		1.42
		EC		37		97.70		12.28		2.02
Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
NCEEE	Equal variances assumed	5.778	.019	.019	71	.985	.047	2.48	-4.90	4.99
	Equal variances not assumed			.019	64.21	.985	.047	2.47	-4.88	4.97

As shown at the top of Table 4.1, the mean scores of the EC and the CC were quite close (the full mark was 150). The significance level (.019) of Levene's test is less than .05, meaning the variances for the two classes were not the same, so the information in the second line of the t-test table is used: $t=.019$ and $p=.99$. On the premises that $p > 0.05$ and that 0 is included in the 95% confidence interval of the difference, it can be concluded that there was no significant difference between the two classes in the NCEEE. That means that the EC was similar to the CC on their initial achievement in general proficiency before the experiment began.

4.2.2 The Final Term English Exam (FTEE)

As the EC and the CC had comparable initial achievement in general proficiency prior to the treatment, the independent samples test was run on their FTEE scores to find out whether CL had had positive effects on the general proficiency of the EC. The output generated from this procedure is presented in Table 4.2 below.

Table 4.2 Results obtained from the Independent Samples Test for FTEE

Means										
		Groups	N		Mean		Std. Deviation		Std. Error Mean	
FTEE		CC	36		71.24		6.27		1.04	
		EC	37		71.28		7.86		1.29	
Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
FTEE	Equal variances assumed	3.402	.069	-.029	71	.977	-.048	1.67	-3.37	3.28
	Equal variances not assumed			-.029	68.37	.977	-.048	1.66	-3.36	3.27

As presented at the top of Table 4.2, the mean score of both classes were very close (the full mark was 100). The significance level (.069) of Levene's test is larger than .05, meaning the variances for the two classes were not significantly different. The t value is $-.029$ and the corresponding p value is .98. On the premises that $p > 0.05$ and 0 is included in the 95% confidence interval of the difference, the null hypothesis cannot be rejected that there would be no difference between the general proficiency of the students participating in CL and that of their counterparts in the CC. It can be concluded that the difference of general proficiency between the two classes was not statistically significant.

4.3 Effects of CL on Overall Oral Proficiency

A mixed between-within ANOVA was conducted to assess whether there was an improvement in the students' overall oral proficiency from time 1 (pre-intervention: pre-test) to time 2 (post-intervention: post-test). The key aspects of the output obtained from this procedure are presented in Table 4.3 and 4.4 below, followed by the output interpretations after each table (all the outputs generated by the mixed between-within ANOVAs in this study are available on request).

Table 4.3 Levene's and Box's tests for homogeneity of variance on overall oral proficiency

Levene's Test of Equality of Error Variances(a)				
	F	df1	df2	Sig.
Pre-test	2.042	1	71	.157
Post-test	1.416	1	71	.238
Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a. Design: Intercept+Group Within Subjects Design: Time				
Box's Test of Equality of Covariance Matrices(a)				
Box's M		3.467		
F		1.120		
df1		3		
df2		930523.05		
Sig.		.339		
Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. a. Design: Intercept+Group Within Subjects Design: Time				

As shown in Table 4.3, the value for the error variance was greater than .05, and the value for the observed covariance matrices was greater than .001. That means that neither Levene's tests nor Box's for homogeneity of variance were significant. This shows that the two classes could be validly compared.

Table 4.4 Results obtained from mixed between-within ANOVA for overall oral proficiency

Means							
	Type of Class	Mean	Std. Deviation	N			
Pre-test	EC	10.61	1.56	37			
	CC	10.11	1.18	36			
	Total	10.36	1.40	73			
Post-test	EC	13.42	1.42	37			
	CC	12.66	1.14	36			
	Total	13.05	1.34	73			
Multivariate Tests(b)							
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Wilks' Lambda	.163	364.79(a)	1.000	71.000	.000	.84
Time*Group	Wilks' Lambda	.99	.87(a)	1.000	71.000	.356	.01
a. Exact statistic							
b. Design: Intercept+Group							
Within Subjects Design: Time							

As shown in Table 4.4, there was a significant increase in the means of the two classes (the full mark was 20). The mean scores of the EC increased from 10.61 ($SD=1.56$) to 13.42 ($SD=1.42$). The mean scores of the CC increased from 10.11 ($SD=1.18$) to 12.66 ($SD=1.14$). There was a substantial main effect for time: Wilks Lambda=.16, $F(1, 71) = 364.79$, $p=.000$, the partial eta squared =.84, with both classes showing a significant improvement in oral proficiency scores over time. There was no significant interaction between instruction type and time: Wilks Lambda=.99, $F(1, 71) = .87$, $p=.40$, the partial eta squared =.01, implying that the degree of change between time 1 and time 2 is not significantly different across the two types of instruction: CL and the conventional whole-class instruction. In other words, the experimental condition did not make a difference in overall oral proficiency, and it does not support the hypothesis that the university students who participated in CL would make more progress in their overall oral proficiency than their counterparts in the CC.

4.4 Effects of CL on the Components of Oral Proficiency

To gain further insight into these scores, the mixed between-within ANOVA was conducted to explore the impact of CL on the components of their oral proficiency (the full mark of each component was 5). The key aspects of the outputs generated from this procedure are shown below, followed by the interpretations after each table.

4.4.1 Effects of CL on Grammar and Vocabulary (GV)

Table 4.5 Levene's and Box's tests for homogeneity of variance on GV

Levene's Test of Equality of Error Variances(a)				
	F	df1	df2	Sig.
Pre-test	3.333	1	71	.072
Post-test	2.918	1	71	.092
Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a. Design: Intercept+Group Within Subjects Design: Time				
Box's Test of Equality of Covariance Matrices(a)				
Box's M		4.439		
F		1.435		
df1		3		
df2		930523.052		
Sig.		.230		

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.
a. Design: Intercept+Group
Within Subjects Design: Time

As shown in Table 4.5, the value for the error variance was greater than .05, and the value for the observed covariance matrices was greater than .001. In other words, both Levene's tests and Box's for homogeneity of variance were non-significant. This means that the two classes' grammar and vocabulary scores could be validly compared.

Table 4.6 Results obtained from mixed between-within ANOVA for GV

Means							
		Type of Class	Mean	Std. Deviation	N		
Pre-test		EC	2.57	.42	37		
		CC	2.42	.32	36		
		Total	2.50	.38	73		
Post-test		EC	3.32	.40	37		
		CC	3.13	.30	36		
		Total	3.23	.36	73		
Multivariate Tests(b)							
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Wilks' Lambda	.190	303.360(a)	1.000	71.000	.000	.810
Time*Group	Wilks' Lambda	.998	.175(a)	1.000	71.000	.677	.002
a. Exact statistic							
b. Design: Intercept+Group							
Within Subjects Design: Time							

As presented in Table 4.6, there was a significant increase in the means of the two classes. The mean scores of the EC increased from 2.57 ($SD=.42$) to 3.32 ($SD=.40$). The mean scores of the CC increased from 2.42 ($SD=.32$) to 3.13 ($SD=.30$). There was a substantial main effect for time: Wilks Lambda=.19, $F(1, 71) = 303.36$, $p=.000$, the partial eta squared =.81, with both classes showing a significant improvement in grammar and vocabulary scores over time. There was no significant interaction between instruction type and time: Wilks Lambda=.998, $F(1, 71) = .18$, $p=.68$, the partial eta squared =.002. This implies that the degree of change between time 1 and time 2 is not significantly different in grammar and vocabulary across the two types of instruction.

4.4.2 Effects of CL on Pronunciation

Table 4.7 Levene's and Box's tests for homogeneity of variance on pronunciation

Levene's Test of Equality of Error Variances(a)				
	F	df1	df2	Sig.
Pre-test	2.385	1	71	.127
Post-test	11.493	1	71	.001
Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a. Design: Intercept+Group Within Subjects Design: Time				
Box's Test of Equality of Covariance Matrices(a)				
Box's M		8.251		
F		2.666		
df1		3		
df2		930523.052		
Sig.		.046		
Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. a. Design: Intercept+Group Within Subjects Design: Time				

As presented in Table 4.7, the value for the error variance was bigger than .05, and the value for the observed covariance matrices was bigger than .001. This suggests that neither Levene's tests nor Box's for homogeneity of variance reached a significant level, so the two classes' pronunciation scores could be validly compared.

Table 4.8 Results obtained from mixed between-within ANOVA for pronunciation

Means							
	Type of Class	Mean	Std. Deviation	N			
Pre-test	EC	2.78	.40	37			
	CC	2.65	.32	36			
	Total	2.72	.37	73			
Post-test	EC	3.30	.35	37			
	CC	3.17	.22	36			
	Total	3.24	.30	73			
Multivariate Tests(b)							
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Wilks' Lambda	.292	172.077(a)	1.000	71.000	.000	.708
Time*Group	Wilks' Lambda	1.000	.009(a)	1.000	71.000	.925	.000
a. Exact statistic							
b. Design: Intercept+Group							
Within Subjects Design: Time							

As presented in Table 4.8, there was a significant increase in the means of the two classes. The mean scores of the EC increased from 2.78 ($SD=.40$) to 3.30 ($SD=.35$). The mean scores of the CC increased from 2.65 ($SD=.32$) to 3.17 ($SD=.22$). There was a substantial main effect for time: Wilks Lambda=.30, $F(1, 71) = .172.08$, $p=.000$, the partial eta squared =.71, with both classes showing a significant improvement in pronunciation scores over time. There was no significant interaction between instruction type and time: Wilks Lambda=1.00, $F(1, 71) = .01$, $p=.93$, the partial eta squared =.000. This suggests that both classes were affected the same by time in pronunciation regardless of treatment.

4.4.3 Effects of CL on Discourse Management (DM)

Table 4.9 Levene's and Box's tests for homogeneity of variance on DM

Levene's Test of Equality of Error Variances(a)				
	F	df1	df2	Sig.
Pre-test	2.416	1	71	.125
Post-test	.231	1	71	.633
Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a. Design: Intercept+Group Within Subjects Design: Time				
Box's Test of Equality of Covariance Matrices(a)				
Box's M		3.282		
F		1.061		
df1		3		
df2		930523.052		
Sig.		.364		
Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. a. Design: Intercept+Group Within Subjects Design: Time				

As shown in Table 4.9, the value for the error variance and that for the observed covariance matrices were respectively greater than .05 and .001. This suggests that neither Levene's tests nor Box's for homogeneity of variance were significant and thus the two classes' discourse management scores could be validly compared.

Table 4.10 Results obtained from mixed between-within ANOVA for DM

Means							
Type of Class		Mean	Std. Deviation	N			
Pre-test	EC	2.61	.45	37			
	CC	2.58	.33	36			
	Total	2.60	.39	73			
Post-test	EC	3.41	.40	37			
	CC	3.24	.36	36			
	Total	3.33	.39	73			
Multivariate Tests(b)							
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Wilks' Lambda	.220	251.636(a)	1.000	71.000	.000	.780
Time*Group	Wilks' Lambda	.963	2.713(a)	1.000	71.000	.104	.037
a. Exact statistic							
b. Design: Intercept+Group							
Within Subjects Design: Time							

As presented in Table 4.10, there was a significant increase in the means of the two classes. The mean scores of the EC increased from 2.61 ($SD=.45$) to 3.41($SD=.40$). The mean scores of the CC increased from 2.58 ($SD=.33$) to 3.24 ($SD=.36$). There was a substantial main effect for time: Wilks Lambda=.22, $F(1, 71) = 251.64$, $p=.000$, the partial eta squared =.78, with both classes showing a significant improvement in discourse management scores over time. There was no significant interaction between instruction type and time: Wilks Lambda=.96, $F(1, 71) = 2.71$, $p=.10$, the partial eta squared =.04, suggesting no significant difference in the effectiveness of the two teaching approaches on discourse management.

4.4.4 Effects of CL on Interactive Communication (IC)

Table 4.11 Levene's and Box's tests for homogeneity of variance on IC

Levene's Test of Equality of Error Variances(a)				
	F	df1	df2	Sig.
Pre-test	.024	1	71	.878
Post-test	.002	1	71	.961
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.				
a. Design: Intercept+Group				
Within Subjects Design: Time				
Box's Test of Equality of Covariance Matrices(a)				
Box's M			.922	
F			.298	
df1			3	

df2	930523.052
Sig.	.827
Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. a. Design: Intercept+Group Within Subjects Design: Time	

As Table 4.11 shows, the value for the error variance was greater than .05, and the value for the observed covariance matrices was greater than .001. This is to say, neither Levene's tests nor Box's for homogeneity of variance obtained a significant value. Therefore, the two classes' interactive communication scores could be validly compared.

Table 4.12 Results obtained from mixed between-within ANOVA for IC

Means							
	Type of Class	Mean	Std. Deviation	N			
Pre-test	EC	2.65	.45	37			
	CC	2.46	.40	36			
	Total	2.55	.44	73			
Post-test	EC	3.37	.37	37			
	CC	3.12	.36	36			
	Total	3.25	.38	73			
Multivariate Tests(b)							
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Wilks' Lambda	.233	233.286(a)	1.000	71.000	.000	.767
Time*Group	Wilks' Lambda	.993	.488(a)	1.000	71.000	.487	.007
a. Exact statistic							
b. Design: Intercept+Group							
Within Subjects Design: Time							

As presented in Table 4.12, there was a significant increase in the means of the two classes. The mean scores of the EC increased from 2.65 ($SD=0.45$) to 3.37 ($SD=.37$). The mean scores of the CC increased from 2.46 ($SD=.40$) to 3.12 ($SD=.36$). There was a substantial main effect for time: Wilks Lambda=.23, $F(1, 71) = 233.29$, $p=.000$, the partial eta squared =.77, with both classes showing a significant improvement in interactive communication scores over time. There was no significant interaction between instruction type and time: Wilks Lambda=.99, $F(1, 71) = .49$, $p=.49$, the partial eta squared =.01, suggesting no significant difference in the effectiveness of the two teaching approaches on interactive communication.

4.5 The Outputs of the Post-test Obtained from the Independent Samples Test

The Independent Samples Test was also carried out to examine these data (all the outputs are available on request). The t-test was run on their pre-test scores showing that the EC and the CC had comparable initial achievement in overall oral proficiency prior to the treatment ($t=1.62$, $p=.11$). This was also true for its components: grammar and vocabulary ($t=1.72$, $p=.09$), pronunciation ($t=1.62$, $p=.11$), discourse management ($t=.27$, $p=.79$) and interactive communication ($t=1.9$, $p=.06$).

The t-test was also run on their post-test scores and the adjusted alpha level .01 was applied. The t-test results showed no statistical significance between the two classes in overall oral proficiency ($t=2.53$, $p=.014$), grammar and vocabulary ($t=2.24$, $p=.028$), pronunciation ($t=1.89$, $p=.063$) and discourse management ($t=1.97$, $p=.053$), but there was a statistical significance in interactive communication. The output for interactive communication generated from this procedure is presented in Table 4.13.

Table 4.13 Results obtained from the Independent Samples Test for IC in the post-test

Means																					
		Groups		N		Mean		Std. Deviation		Std. Error Mean											
IC		CC		36		3.37		.37		.060											
		EC		37		3.12		.36		.059											
Independent Samples Test																					
		Levene's Test for Equality of Variances		t-test for Equality of Means																	
		F		Sig.		t		df		Sig. (2-tailed)		Mean Difference		Std. Error Difference		95% Confidence Interval of the Difference					
																Lower		Upper			
IC		Equal variances assumed		.002		.96		2.999		71		.004		.25		.085		.085		.42	
		Equal variances not assumed						3.000		71		.004		.25		.085		.085		.42	

As shown in Table 4.13, $t=2.999$, $p=.004$ ($<.01$), and 0 is not included in the 95% confidence interval of the difference. This shows that the difference in interactive communication on the post-test between the EC and the CC was statistically significant. Also, the eta squared statistic (.11) is a medium effect size, indicating that there was a meaningful difference in interactive communication between the EC and the CC after the intervention. This suggests that there was gain in interactive communication to the

advantage of CL. As there was a lack of significant interaction effect obtained from the ANOVA, the gain in interactive communication from the t-test should be viewed with caution.

There are two reasons why the comparison generates a significant difference. One is because the gap (.25 out of 5; 5 out of 100) between the two classes was importantly different. The other can be due to the following fact. As shown in Table 4.13 above, the standard deviation of the EC in the post-test was .37 and that of the CC was .36. According to the normal curve, if a set of data is normally distributed, 68.2% of the examples will lie within \pm one standard deviation. Observation of the scores shows that about 75.7% of the EC scores fell within \pm one standard deviation (3.74-3.00) from their mean while only about 47.2% of the CC scores fell within \pm one standard deviation (3.48-2.76) from their mean.

4.6 Chapter Summary

This chapter has presented the quantitative results of the students' general proficiency and oral proficiency. As was expected, the comparison of FTEE between these two classes showed that the students in the EC did not make greater gains in general proficiency than their counterparts in the CC. Unexpectedly, the ANOVA analyses showed a null experimental effect on overall oral proficiency and on its components: vocabulary and grammar, pronunciation, discourse management and interactive communication. However, the t-test suggested that the students in the EC made more gains in interactive communication than those in the CC. That is to say, the results about the CL effect on interactive communication were inconclusive. The next chapter will present the results of the conversation analysis, and all the findings will be brought together and discussed in Chapter Six.

Chapter Five Conversation Analysis

5.1 Introduction

This chapter attempts to address the issue of the students' progress in interactional strategy use after the 15-week experiment. To thoroughly examine the students' performance in this regard, the interactional data of the pre-test and post-test, and of the pre-task and post-task in the classroom were collected for analysis. The interactional strategies used in the pre-test and post-test are analyzed and the ESs compared with the CSs to see whether there was a change in their performance after the intervention. Similarly, the interactional strategies in the pre-task and post-task are also analyzed and the ESs compared with the CSs. After the number of each interactional strategy the students used is presented, an interpretative discussion is provided with related excerpts. Based on the comparisons of the pre-test and post-test, and of the pre-task and post-task, this chapter ends with a summary of the findings.

The main focus of the analysis is on the expression of personal meaning rather than on linguistic forms. It should be noted that as the sample size was very small, an attempt has been made to establish the patterns in the data and to interpret them instead of subjecting them to statistical analysis. To ensure reliability, a colleague was invited to read the analysis and give feedback on it, and the differences were discussed and reconciled. In the extracts below, utterances realizing interactional strategies are italicized and in bold.

5.2 The Interactional Strategies used by the ESs in the Pre-test and Post-test in Comparison to the CSs

This section focuses on the comparisons of the interactional strategies used by the ESs and the CSs in the pre-test and post-test. The numbers of turns were compared, followed by the comparisons of the achievement strategies: *uptakes*, *asking follow-up questions* and *elaborating*, and the comparisons of the reduction strategies: *message abandonment* and *switch to Chinese*. Finally, based on the detailed analysis, main findings are summarized.

5.2.1 Overall Participation in the Tests

As stated in 3.8.2, this study was only to examine the students' interactive features regardless of turn length. The number of turns in the pre-test and post-test was calculated and is shown in Table 5.1 below.

Table 5.1 Turns taken by the ESs and the CSs in the tests

Student	Pre-test	Post-test	Student	Pre-test	Post-test
ES1	2	8	CS1	2	3
ES5	3	9	CS5	2	3
ES2	2	7	CS2	2	1
ES6	2	7	CS6	1	1
ES3	4	5	CS3	2	4
ES7	5	4	CS7	2	3
ES4	4	9	CS4	2	5
ES8	4	9	CS8	2	5
Total	26	58	Total	15	25
Average	3.3	7.3	Average	1.9	3.1
Increased percentage	123%		Increased percentage	67%	

As shown in Table 5.1, both groups increased their turn-taking in the post-test, but the ESs' turns increased nearly twice as much as the CSs. The number of turns used by the ESs increased 123% compared to the pre-test. This indicates a great change in interaction patterns. Apart from ES3 & ES7, the rest of the pairs took turns more frequently in the post-test than in the pre-test.

The turns used by the CSs went up 67% in the post-test. There was more interactivity in this group as well. However, a closer look at the figures shows that the pair, CS2 & CS6 only produced 1 turn each in the post-test, appearing to deliver their own independent short speeches as shown in Excerpt (7).

Excerpt (7)

- 1 CS6: I think living in the school (.) is the best because live in the school you
- 2 can learn (.) how to take good care by yourself. Mm you should wash
- 3 your clothes. Sometimes you may go something to live. And live in the
- 4 school, you can have more time to make friends with the classmate and
- 5 (.) the school student. You can get on well with them and (.) you may
- 6 have more time to study. And (.) if you live in the home, sometimes you
- 7 may feel lonely and you don't (.) you don't need to do everything. You
- 8 just play (0.4) and (0.4). That's all.
- 9 CS2: I agree with you. But er the first time when I lived in the dormitory, I
- 10 think live in school is 不是 ((tr: no)) live in home with my family is

11 better. Because I think live with my parents, I can I can I can study hard
 12 because my mother can help me to wash my clothes and cook cook to
 13 me, so I can't I can't do the trouble thing. But through the three months'
 14 live in the dormitory in the college, I think er live in the school is better
 15 because I think I can learn how to take care of myself...

The within-group comparisons indicate that the ESs appeared to have made a greater gain in interactivity than the CSs after the intervention. Given the small sample size, it would be interesting to see if this trend was confirmed in a larger sample.

5.2.2 Achievement strategies in the Tests

5.2.1.1 Uptakes

Turn transition is the basic form of conversational organization. Taking over a turn is often initiated by some 'uptakes' which are *per se* responses to what has been said by the preceding speaker. The uptakes in this study are categorized by key words. The uptakes used by the ESs in the pre-test and post-test are presented in Table 5.2.

Table 5.2 Uptakes used by the ESs in the tests

Uptakes		Increased percentage
Pre-test (7)	Post-test (29)	314%
1. AGREE <i>I agree with ... (1)</i> 2. DISAGREE <i>Mm I don't agree. (1)</i> 3. THINK <i>But I think... (1)</i> <i>I think... (2)</i> 4. YES <i>Yes. (1)</i> 5. OPINION <i>In my opinion... (1)</i>	1. AGREE <i>I also agree with you. (2)</i> <i>Yes, I agree with you. (2)</i> <i>I can't agree more. (1)</i> <i>I agree... (1)</i> 2. THINK <i>I think so. (1)</i> <i>I think... (7)</i> 3. YES <i>Yes. (8)</i> 4. NO <i>Er no. (1)</i> 5. BUT <i>But... (2)</i> 6. UNCERTAINTY <i>I'm not sure. (1)</i> 7. OH <i>Oh. (2)</i> 8. SO <i>So... (1)</i>	

Table 5.2 above exhibits a marked increase in the number of uptakes from 7 in the pre-test to 29 in the post-test. The ESs seemed to be better at maintaining the smooth flow and coherence of the interaction by delivering short statements as responses to

previous utterances when they claimed their turns in the post-test. The increased use of uptakes is partly linked to a greater ability to make elaborations on the topics being discussed, as will be reported in 5.2.2.3.

The uptakes used by the CSs in the pre-test and post-test are presented in Table 5.3.

Table 5.3 Uptakes used by the CSs in the tests

	Uptakes		Increased Percentage
	Pre-test (8)	Post-test (15)	
	1. AGREE <i>I agree with you. (1)</i> 2. DISAGREE <i>I don't don't agree with you (1)</i> 3. THINK <i>I think... (3)</i> <i>And I think...(1)</i> 4. BUT <i>But...(1)</i> 5. WELL <i>Well,...(1)</i>	1. AGREE <i>Yes, I can't agree more. (1)</i> <i>I agree with you. (1)</i> <i>I agree with you very much.(1)</i> 2. DISAGREE <i>No, I don't agree with you. (1)</i> 3. THINK <i>I think so. (1) / I think... (2)</i> 4. YES <i>Yes. (6)</i> 5. NO <i>No no no. (1)</i> 6. UNCERTAINTY <i>Maybe you are true. (1)</i>	88%

As shown in Table 5.3, compared with the pre-test, the number of uptakes employed by the CSs went up 88% in the post-test. With more uptakes, the turn transitions appeared to be smoother and more coherent than in the pre-test.

In the pre-test, the ESs and the CSs employed a similar number of uptakes when claiming turns, whereas in the post-test after the intervention, as shown in Tables 5.2 and 5.3, the ESs' uptakes quadrupled while those of the CSs did not even double.

5.2.1.2 Asking Follow-up Questions

Table 5.4 Follow-up Questions asked by the ESs and the CSs in the tests

	Pre-test	Post-test
ESs	4	5
CSs	0	1

As shown in Table 5.4, in the 3-minute discussion, the use of follow-up questions was rare in both groups, especially the CSs group. The ESs asked 4 follow-up questions in the pre-test as shown in Excerpt (8) below and 5 in the post-test as shown in Excerpt (9) below.

Excerpt (8)

- 1 ES7: What life what life style do you like?
2 ES3: I think I will (.) live with my friends.
3 ES7: *Why?*
4 ES3: That's because I think when I live with my friends, we can talk together
5 play together and so on.
6 ES7: *Why why not you live in live with your parents?*
7 ES3: That's because I think I (0.2) I think I (.) I should make a lot of friends
8 because I was (.) mm (0.5)

Excerpt (9)

- 5 ES8: I like I like live by myself. I like live alone because I think it's
6 convenient. I like to do something by myself. I think live with other
7 people, they can () me.
8 ES4: *If you live yourself, when you have difficult, how do you deal with the*
9 *difficult?* There is no friends or parents with you.
10 ES8: I think I have a mobile phone. I can call them call them for help. And
11 sometimes I I have I have call some I have bring some friends to my to
12 my house to play play and do some and have some parties in my room
13 and so on. When I (.) experience, I can can study. I like study (.) study
14 by myself alone.

In regard to Grice's maxim of relevance (1975), the CSs did not engage in the use of the strategy in the pre-test, and they asked one follow-up question in the post-test as shown in Excerpt (10).

Excerpt (10)

- 2 CS7: I think live in the school is very good because er living in school is very
3 convenient. On the other hand, on the other hand, living in the out of the
4 school is very dangerous. Do you do you think so?
5 CS3: No, I don't agree with you. I think living out of the school is very good.
6 CS7: *Why?*
7 CS3: Because I think live outside we can provide our ability well. We can use
8 our we can use our friendship to solve something.

Compared with the pre-test, both groups seemed to be slightly better at asking relevant questions to keep the conversation going in the post-test. However, as the number of instances was very small, it is difficult to compare their gains in the post-test.

5.2.1.3 Elaborating

Table 5.5 Elaborations made by the ESs and the CSs in the tests

	Pre-test	Post-test	Increased Percentage
ESs	2	14	600%
CSs	4	4	0

During a discussion, speakers generally react to each other, relating to what other members in the group have said. As shown in Table 5.5, for the ESs, there was a great change in elaborating behaviour in the post-test, while this was not the case for the CSs. The ESs had become better at giving further opinions on the topics they were discussing. In the pre-test, when the ESs made elaborations as in Excerpt (11) below, there was one turn used to respond to the topic ‘living on campus’.

Excerpt (11)

- 10 ES5: But I think er when we become a college student, we must change. Mm
11 because in the past we often we usually lived with our parents, but now
12 we must change because live in the campus can (0.3) can make us know
13 many other fresh things and we can learn a lot from other students.
14 ES1: I agree with living in campus. *I know we can make many friends and*
15 *know some knowledge which I can't I don't know.* Mm (.) besides
16 living in the campus, I can also make good with other friends and (.)
17 more happy.
18 ES5: Living with our parents, we can they often protect us from other (.) er
19 from other danger or (0.5)

In contrast, there was a great increase in elaborating behaviour in the post-test. The ESs were able to elaborate on a specific topic with one to three turns. The following excerpt provides examples of this.

Excerpt (12)

- 1 ES5: Er what's your opinion about living in campus living in campus?
2 ES1: I agree with living in campus [kæmp] because living in campus [kæmp]
3 we can have a good study environment and make something depend on
4 ourselves.
5 ES5: I also agree with you. Also, *I think living in campus can (.) can practice*
6 *us and improve our independence skills.*
7 ES1: Yes. It can improve our ability to depend on ourselves and *it can also*
8 *improve our ability to make friends and how to care with friends.*
9 ES5: Yes, I think so. And =

- 10 ES1: = and what about do you think living in campus is good for you? Living
 11 with parents is good for you?
- 12 ES5: I think in our college life we'd better to live in school. Also, living with
 13 our parents is also good and because when we have when we have any
 14 other when we have some trouble, we can ask them for help, and also we
 15 can feel the (.) feel the family happiness.
- 16 ES1: Mm renting renting a room with friends or your mm classmates in
 17 outside school you think is better to you is better for you?
- 18 ES5: I think not better, er not good.
- 19 ES1: I also agree with you. ***Because renting a house outside the school it***
 20 ***can't er help each other ().*** In our such school we can know take care of
 21 ourselves.
- 22 ES5: Yes. ***I also I think er renting er renting a room with our friends and***
 23 ***classmates outside the school is a little dangerous.***
- 24 ES1: Yes, it is concludes danger. ***It also needs a lot of money.***
- 25 ES5: Yes, I think so.
- 26 ES1: Mm what about do you think living alone renting renting a room is good
 27 for you?
- 28 ES5: Er no, I think it's more dangerous. And if I live if I renting if I rent a
 29 room outside the school, I think I will feel lonely and=
- 30 ES1: =yes, living by yourself by yourself with (.) you fear you fear no friend
 31 share with you. ***You can't learn some knowledge about your friends or***
 32 ***connection with your friends.***
- 33 ES5: Yes.

In Excerpt (12) above, after ES1 expressed his opinion on 'living on campus', ES5 and ES1 expanded on this topic by giving further opinions on 'the advantages of living on campus'. Similarly, after ES5 expressed her disagreement on 'renting a room with classmates or friends', ES1 and ES5 took turns to talk about 'its disadvantages'. At the end of the discussion, ES5 expressed her opinion on 'living alone', which ES1 built on by talking about 'its disadvantages'. It seems that in the post-test the ESs were more able to engage constructively with each other's opinions by incorporating, extending or agreeing with the preceding utterance.

As shown in Table 5.5 above, for the CSs, there was the same number of elaborations in the pre-test and post-test. In the pre-test, only one turn was taken to respond to the preceding utterance as in Excerpt (13).

Excerpt (13)

- 1 CS1: I think I think live in in school is more more good is more because we
2 can (.) get up get up and know more friends, and can learn many many
3 thing and ability. And I'm and so so we can (.) we can (.) learn a lot of
4 thing. What about you?
- 5 CS5: Mm I agree with this. *Because living in school, I can make more friends*
6 *and do own things by myself.* I can learn a lot of things, mm but if live
7 live at home more things need my mother to to help to help, so I (.)
8 I think living in campus is most. How about live out of the school?

Similar to the pre-test, in the post-test one turn was taken to respond to the preceding utterance as shown by Excerpt (14). Only in Excerpt (15) were two turns taken to express disagreement and agreement to CS3's idea about 'renting a room with friends'.

Excerpt (14)

- 1 CS1: How kind of life do you live?
- 2 CS5: Mm I only live at school. What about you?
- 3 CS1: Mm me, too. I think live in school in school have many advantages.
4 Because live in school is is er (.) is er that you can get in touch with our
5 roommate that it will improve our friendship. And what about you?
- 6 CS5: I think so. *I think live in school can learn a lot of things, mm er but but*
7 *but I think (.) but I think we have some problems live at school.* For
8 example, er have have something (.) er (.) er not very convenient
9 because (.) er not very convenient. Do you think so?

Excerpt (15)

- 5 CS3: ...I think living out of the school is very good.
- 6 CS7: Why?
- 7 CS3: Because I think live outside we can provide our ability well. We can use
8 our we can use our friendship to solve something.
- 9 CS7: Maybe you are true. *But I think living in the school you can*
10 *communicate with the other roommates, so you can learn how to*
11 *communicate with others.* And I think it's very important for us to learn.
12 *If you live in the out of the school, you are very lonely and (.) it's also*
13 *dangerous.*
- 14 CS3: No no no, I don't think so. *We can live outside with our friends or our*
15 *our dormitory dormitory friends, so we can we can live together to*

In the pair discussion of the speaking test, the students were required to argue with each other in order to clarify points. The main purpose of elaborating was to show enthusiastic listenership, understanding and collaboration, making the discussion more coherent and cohesive. Overall, the CSs did not seem to make progress in engaging constructively with each other's opinions by extending, agreeing or disagreeing with what had been said.

To sum up, the ESs' elaborating behaviour was 6 times more frequent in the post-test than in the pre-test, but the CSs did not appear to make progress in the use of this strategy in the post-test.

5.2.3 Reduction Strategies in the Tests

5.2.3.1 Message Abandonment

Table 5.6 The ESs' and the CSs' message abandonments in the tests

	Pre-test	Post-test
ESs	3	0
CSs	0	2

Overall, message abandonment was rare in both groups. As shown in Table 5.6, the ESs abandoned messages 3 times in the pre-test as in Excerpt (16) below, in which ES3 did not complete his utterance and made a long pause. In the post-test message abandonment did not occur at all.

Excerpt (16)

- 6 ES7: Why why not you live in live with your parents?
 7 ES3: That's because I think I (0.2) I think I (.) I should make a lot of friends
 8 *because I was (.) mm* (0.5)
 9 ES7: I will I will live in the campus the campus because in the campus I can
 10 there there more time. I can do a lot of thing.
 11 ES3: How do you think live alone?
 12 ES7: No, I I don't like live alone because we live alone, I will feel lonely.

As shown in Table 5.6, the CSs did not abandon any message in the pre-test, whereas in the post-test there were 2 message abandonments. This is exemplified by Excerpt (17).

Excerpt (17)

- 1 CS6: I think living in the school (.) is the best because live in the school you
2 can learn (.) how to take good care by yourself. Mm you should wash
3 your clothes. Sometimes you may go something to live. And live in the
4 school, you can have more time to make friends with the classmate and
5 (.) the school student. You can get on well with them and (.) you may
6 have more time to study. And (.) if you live in the home, sometimes you
7 may feel lonely and you don't (.) you don't need to do everything. *You*
8 *just play (0.4) and (0.4)*. That's all.
- 9 CS2: I agree with you. But er the first time when I lived in the dormitory, I
10 think live in school is 不是 ((tr: no)) live in home with my family is
11 better...

5.2.3.2 Switch to Chinese

Table 5.7 Switches to Chinese used by the ESs and the CSs in the tests

	Pre-test	Post-test
ESs	2	0
CSs	1	2

Table 5.7 presents the very small number of switches to Chinese used by the ESs and the CSs in the pre-test and the post-test. In the tests, this feature took the same form; when the students realized that they had not expressed what they meant, they did not paraphrase or ask for help, but made use of a Chinese lexical item ‘不是’ ((tr: no)) to signal the source of their trouble. In the pre-test, the ESs switched to Chinese twice as shown in Excerpt (18), but this did not occur at all in the post-test.

Excerpt (18)

- 10 ES2: ...Why don't you why don't you like live with your parents?
- 11 ES6: Mm because if I live in my house, mm parents will help me do many
12 things, which I can't (.) learn 不是 ((tr: no)) which make me (0.3) which
13 make me can't do many things on my own. And I like living with my
14 friends and because I can talk with my friends when (.) at night...

As for the CSs, in the pre-test they switched to Chinese once as in Excerpt (19) below. CS8 may have wanted to say that ‘if he lives with his parents, he may not worry about the meal, the money and the house’, but he failed to say so. In the post-test, the CSs relied on Chinese 不是 ((tr: no)) twice to signal the source of their problem and then

changed the utterance to convey their intended meaning as in Excerpt (20).

Excerpt (19)

- 1 CS8: Mm I like to live live with my parents because with my parent I can I
 2 can er live very happy. Live with live with parent, you may you may ~~不~~
 3 ~~是~~ ((tr: no)) you may worry you may worry the meal, the money and
 4 the house you live. The parents can give me some money to (.) to go
 5 happy with my friend, and (.) parent and parent can tell me something
 6 something good for my life. What about you?
 7 CS4: I like to live with my my classmates because because through this way I
 8 can know I can learn how to get on well with others...

Excerpt (20)

- 1 CS6: I think living in the school (.) is the best because live in the school you
 2 can learn (.) how to take good care by yourself.
 6 ... And (.) if you live in the home, sometimes you
 7 may feel lonely and you don't (.) you don't need to do everything. You
 8 just play (0.4) and (0.4). That's all.
 9 CS2: I agree with you. But er the first time when I lived in the dormitory, I
 10 think live in school is ~~不是~~ ((tr:no)) live in home with my family is
 11 better. Because I think live with my parents, I can I can I can study hard
 12 because my mother can help me to wash my clothes and cook cook to
 13 me, so I can't I can't do the trouble thing. But through the three months'
 14 live in the dormitory in the college, I think er live in the school is better
 15 because I think I can learn how to take care of myself...

5.2.4 Main Findings Obtained from the Pre-test and Post-test

The turns and interactional strategies used by the ESs and the CSs in the pre-test and post-test are summarized in Table 5.8.

Table 5.8 Turns and interactional strategies used by the ESs and the CSs in the tests

	ESs Pre-test	ESs Post-test	ESs Increased percentage	CSs Pre-test	CSs Post-test	CSs Increased percentage
Turn	26	58	123%	15	25	67%
Uptake	7	29	314%	8	15	88%
Asking follow-up questions	4	5	/	0	1	/
Elaborating	2	14	600%	4	4	0
Message Abandonment	3	0	/	0	2	/
Switch to Chinese	2	0	/	1	2	/

Based on the detailed analysis in the pre-test and post-test, the main findings are as follows. Firstly, in the comparison of the pre-test and post-test, the ESs made greater gains in interactivity than the CSs. Secondly, for the interactional strategies, the ESs improved more than the CSs in uptakes and elaborating. The numbers in asking follow-up questions, message abandonment and switch to Chinese were too small for any conclusion to be drawn. On the whole, the ESs appeared to have outperformed the CSs in interactional strategy use from the pre-test to the post-test. The following section provides an analysis of the pre-task and post-task interaction and goes through the different interactional features in the same order as above.

5.3 The Interactional Strategies Used by the ESs in the Pre-task and Post-task in Comparison to the CSs

Compared with the interactional strategies used by the CSs, those used by the ESs in the pre-task and post-task are analyzed in this section. The comparisons are conducted in the following aspects: 1) turns; 2) achievement strategies: *uptakes*, *asking follow-up questions* and *elaborating*; and 3) the reduction strategies: *message abandonment* and *switch to Chinese*. Finally, main findings from the pre-task and post-task are summarized.

5.3.1 Overall Participation in the Tasks

The data for overall participation in the pre-task and post-task are presented in Table 5.9.

Table 5.9 Turns taken by the ESs and the CSs in the tasks

Student	Pre-task	Post-task	Student	Pre-task	Post-task
ES1	5	14	CS1	1	2
ES2	9	24	CS2	4	33
ES3	4	9	CS3	1	16
ES4	5	15	CS4	2	24
ES5	3	19	CS5	1	16
ES6	5	11	CS6	4	21
ES7	5	13	CS7	3	25
ES8	5	11	CS8	6	11
Total	41	116	Total	22	150
Average	5.1	14.8	Average	2.8	18.8
Increased percentage	183%		Increased percentage	582%	

As shown in Table 5.9, there was a great improvement in overall participation for both groups in the post-task. Starting with an analysis of the ESs' performance, the

average number of turns increased from 5 turns in the pre-task to nearly 15 turns in the post-task. Each student seemed to get more involved in the post-task, resulting in more interactive participation. In the post-task, the group monitors, ES2 & ES5, took more turns than their peers, and ES3, ES6 and ES8 took fewest turns, but all increased their turn-taking.

For the CSs, however, each student produced fewer than 3 turns in the pre-task on average and about 19 in the post-task. The turn-taking exchange was much more frequent among the group members in the post-task. A closer look at the data shows that the number of turns taken was not evenly distributed among all group members in the post-task. In these two CC groups, CS2 and CS5 were the group monitors. CS2, in the first group, spoke the most frequently, but CS5 was not the most frequent turn-taker in their group. CS1 and CS8 produced fewer turns than other group members. CS1 only produced 2 short turns during the discussion. The following excerpt is an example showing that CS1 remained quiet all the time when they talked about ‘having a girl-friend or boy-friend’, and he only produced 1 turn ‘Me too’.

Excerpt (21)

- 20 CS2: Do you think do you think er to have a girlfriend is necessary?
21 CS4: 问这么深入的问题。 ((tr: You asked such a deep question.))
22 CS3: No.
23 CS2: And you?
24 CS1: Me too.
25 CS4: Why don't you 不是 ((tr: no)) why do think that is not necessary ['nesi]
26 not important in your college life?

This exchange continued for another 19 turns, during which CS1 did not contribute at all.

The increased percentage in Table 5.9 shows that the CSs produced more turns than the ESs, and increased their turn-taking considerably more than the ESs from the pre-task to the post-task. The above analysis reveals, however, that there was great individual variability in turn-taking behaviour, especially in the CSs group. That means that the CSs' participation was more uneven than the ESs'.

5.3.2 Achievement strategies in the Tasks

5.3.2.1 Uptakes

Table 5.10 Uptakes used by the ESs in the tasks

Pre-task (8)	Post-task (47)	Increased percentage
1. THINK <i>I think... (4)</i> 2. OPINION <i>In my opinion...(3)</i> 3. BUT <i>But...(1)</i>	1. AGREE <i>Yes, I agree. (2) / Yes, I agree with you. (6)</i> <i>I agree monitor's er idea. (1)</i> 2. THINK <i>Yes, I think...(1)</i> <i>I think...(5) / Oh oh, I think so. (2)</i> 3. OPINION <i>In my opinion...(1)</i> <i>Ok, let me tell you my opinion. (1)</i> 4. YES <i>Oh yes.(3) / Er yes. (1) / Yes yes. (1)</i> <i>Yes. (10) / Yes, sure. (1)</i> 5. NO <i>No no. (1) / No. (1)</i> 6. BUT <i>But...(1) / Oh but...(1)</i> 7. OH <i>Oh,...(7)</i> 8. SO <i>So...(1)</i>	488%

Table 5.10 presents the uptakes used by the ESs in the pre-task and post-task. In comparison to the pre-task, in the post-task the ESs responded with a wider range of uptakes. The low frequency of turns in the pre-task meant that only a few uptakes were employed. As shown in Excerpt (22) below, following the general questions ‘what is your opinion?’ and ‘what’s about you?’, and beginning with ‘in my opinion’, ES4 and ES1 stated their own ideas respectively. The ESs seemed to deliver their independent or unrelated short speeches.

Excerpt (22)

- 1 ES2: What is your opinion?
- 2 ES4: Er personally personally er (.) personally, er I I as as my dream
- 3 roommate (.) ah I hope she is very friendly and honest. I think this is the
- 4 most important. And (.) and then I hope er I hope she can she is
- 5 outgoing, so she can get well with me. And speaking and talk with me in
- 6 at free time, mm so we can make friends very quickly. Mm and then she
- 7 is better. And then she is (.) she can study well, so if I have if I meet
- 8 difficult, she can teach us. She can teach me. And what’s about you,
- 9 ES1?
- 10 ES1: *In my opinion*, I think as my roommate his study habits and life style is

11 very important. Why? Because as you know, that why study habit is
 12 very an effect on why study. If his study habit is not good, I think the he
 13 and me can't study together. And life style is also very important. Life
 14 style is has an effect on our everyone's life. Although life style is good to
 15 me and him, so I think life style and study habit is very important.
 16 Besides, the interest his interest is also very important. If his interest
 17 and me is the same, I think I can he can hear me and have a good life.
 18 What's your name? What's your opinion?

With a greater frequency of turns and many more uptakes in the post-task, the ESs appeared to be better at manipulating the contextual information to give responses to express agreement and disagreement, attention and interest to facilitate the flow of the conversation. Excerpt (23) is an example of this.

Excerpt (23)

26 ES1: I think er has a girlfriend in Grade One is not good because there are a
 27 lot of study to us. We must (.) must use the time to study, and I think to
 28 to do a part-time job is very important to us.
 29 ES4: **But** I think to do a part-time job is waste time.
 30 ES2: **No no**. For my opinion, I think do a part-time can improve your ability.
 31 It's very important.
 32 ES1: **Yes, I agree with you**. Because we do a part-time job use only a little
 33 time, and do a part-time job we can make a lot of money to and use use
 34 some use er ().
 35 ES2: **Oh oh, I think so**. Do you agree with ES1, ES3?
 36 ES3: **Yes, I agree with him**. But I want to know if you earn the money, how
 37 (0.3) how will you spend it?
 38 ES1: About about to use the money, I think I can use the money to do some to
 39 do something. For example, er to take bus or er or er and (.) go to some
 40 place go to some place.

The uptakes employed by the CSs in the pre-task and post-task are displayed in Table 5.11.

Table 5.11 Uptakes used by the CSs in the tasks

Pre-task (7)	Post-task (35)	Increased percentage
1. THINK <i>I think...(3)</i> <i>Also I think...(1)</i> 2. OPINION <i>In my opinion ...(1)</i>	1. AGREE <i>I am agree with you. (1)</i> 2. THINK <i>I think...(4) / Mm I think...(1)</i> <i>Yes, I think...(1) / I think so. (2)</i>	400%

3. YES <i>Yes, ... (1)</i> 4. OH <i>Oh...(1)</i>	<i>Yes yes, I think so. (1)</i> 3. OPINION <i>In my opinion...(1) / But in my view...(1)</i> 4. YES <i>Oh yes. (2) / Yes. (7) /Yes, you are right. (1)</i> 5. NO <i>No no. (4)</i> 6. BUT <i>But...(3)</i> 7. UNCERTAINTY <i>Maybe you are right. (1)</i> 8. MEAN <i>I mean ...(1)</i> 9. OH <i>Oh. (3)</i> 10. SO <i>So...(1)</i>	
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The CSs used fewer uptakes than the ESs in both the pre-task and post-task (7 compared to 8; 35 to 47 respectively). The CSs also increased their uptakes less than the ESs (400% against 488%). In the pre-task the CSs stated their own ideas respectively by ending their speech with ‘that’s all’ as shown in Excerpt (24).

Excerpt (24)

- 4 CS8: What are you think the wonderful roommate?
- 5 CS6: My name is CS6. I hope my roommate was friend and outgoing boy (.)
- 6 Er because I like make friends with others. If he is shy (.) that I can’t
- 7 make friends with him. I hope my roommate like playing football and
- 8 playing computer game so that he can play football with me. Um (.) I
- 9 also want he study well because (.)不是 ((tr: no)) so that I can (laughs)
- 10 ask ask him a question. (.) That’s all.
- 11 CS8: What do you think, CS5? 自我介绍。 ((tr: Introduce yourself.))
- 12 CS5: My name is CS5. I would like my I would like my roommate is a kind,
- 13 honest and optimistic people. Ah ah I would like he I would like he or
- 14 she is kind to everyone, ah then ah only to to me. If I don’t I don’t
- 15 know in something, then he can tell me, and I will I I will (.) um I will
- 16 to ah do more do better. Ah if optimistic mm must optimistic because (.)
- 17 er optimistic people (.) can can bring very ah more happiness to
- 18 everyone. That’s all. Thank you.

In contrast, in the post-task the CSs employed many more uptakes to claim turns to talk during the discussion as they were much more interactive as reported in 5.3.1. On the whole, the CSs seemed to maintain the conversation more naturally by responding to what the previous speaker had said in the post-task. This is exemplified by Excerpt

(25) about ‘passing CET-4’.

Excerpt (25)

- 67 CS7: And (.) do you want to pass your English (.) the: =
68 CS5: =Band 4.
69 CS7: Er Band 4.
70 CS6: I want, but I think I can't.
71 CS5/CS7: Why?
72 CS7: Nothing nothing is impossible.
73 CS5: Yes, I think so.
74 CS6: *Yes*. I never read the English and (.) er I don't listen the English in class,
75 so I think I'll fail the Band 4.
76 CS7: *But* from now you can study, you can study hard. And and one years
77 later you will pass the pass Band 4. Do=
78 CS6: =*Maybe you are right*. But I don't like English. I think it's er difficult
79 and (.) some (.) oh, yes.
80 CS7: *But* experience is important for us.
81 CS8: You can see more American film. (laughs)
82 CS6: *Yes, I think it is*. But you er want to pass Band 4, not only watch the
83 American film, you also have to er remember the words and read more
84 English.

As shown in Tables 5.10 and 5.11 above, compared with the pre-task, both the ESs and the CSs had increased the number of uptakes considerably in the post-task. Although the CSs produced more turns than the ESs in the post-task, the ESs used more uptakes for turn transition. As a result, the ESs increased their uptakes more from the pre-task to the post-task than the CSs.

5.3.2.2 Asking Follow-up Questions

Table 5.12 Follow-up Questions asked by the ESs and the CSs in the tasks

	Pre-task	Post-task
ESs	0	14
CSs	0	15

As shown in Table 5.12, the increase in both groups from no use of this strategy at all in the pre-task to 14 and 15 respectively in the post-task was great. The ESs' and the CSs' use of this strategy can be illustrated by Excerpt (26) and (27).

Excerpt (26)

- 4 ES6: Ok, let me tell you my opinion. Mm I think to build up friendship is
5 important in my college college life beside my major study.
10 ...Mm if I can build up my friendship well, I think my college life
11 will more colorful and enjoyable. And maybe (.) have a lot of friend will
12 make me find a job after graduate easily. And what's your opinion?
13 ES7: Oh (.). Oh you you only only want to make friend with in the college.
14 ***You don't you don't need study?***
15 ES6: Beside er study. Oh, that's beside my major study. Also I: I: (laughs)
...
25 ES7: If you want good (.) good work good job, you must know the English.
26 ES8: Yes.
27 ES6: Maybe.
28 ES7: So I think study is important, but in the study we must have a sport.
29 ES5: ***Why?***
30 ES7: Because we must have a stronger body.
31 ES5: Yeah, yeah.

Excerpt (27)

- 20 CS2: Do you think do you think er to have a girlfriend is necessary?
21 CS4: 问这么深入的问题。 ((tr: You asked such a deep question.))
22 CS3: No.
23 CS2: And you?
24 CS1: Me too.
25 CS4: Why don't you 不是 ((tr: no)) ***why do think that is not necessary***
26 ***['nesi] not important in your college life?***
27 CS3: As we know, we we have friends. Our relationship we can share our feel
28 with them, not our girlfriend.
29 CS4: Girlfriend can help you.
30 CS3: ***Help you what?***
31 CS4: Help you 什么? ((tr: what)) (laughs)
32 CS2: I think the girlfriend or boyfriend know you er deeply.

Although some questions contained interlanguage features as seen above, both groups were better at manipulating the contextual cues to elicit information from their group members during the conversation. They appeared to ask relevant questions, i.e. questions conforming to Grice's maxim of relevance (1975), to push each other to

develop the conversation, thus making the conversation more lively and intimate. As the numbers of instances in both groups were close, the ESs' gain was roughly equal to that of the CSs in the post-task.

5.3.2.3 Elaborating

Table 5.13 Elaborations made by the ESs and the CSs in the tasks

	Pre-task	Post-task	Increased percentage
ESs	4	13	225%
CSs	0	13	[+13]

(A gain from zero is indicated by an absolute figure rather than a percentage.)

As shown in Table 5.13, for both groups, there was a great change in elaborating in the post-task. Beginning with an analysis of the ESs' performance, there were 4 elaborations in the pre-task while there were 13 in the post-task. As shown in Excerpt (28) below, the four group members constructed arguments for and against the topic 'a roommate should have a good habit and study hard'. Apart from this in the pre-task, the ESs did not attempt to respond to each other's opinions in order to construct the conversation.

Excerpt (28)

- 56 ES1: I think I think as a roommate should have a good habit and study hard.
 57 ES2: Why study hard? *I think in the college people don't study hard.* He will
 58 make the friend all the don't don't don't play the ().
 59 *ES1: I think study is the first. Make friends is also important.*
 60 *ES2: But I think make friend is the first, study is the is the second.*
 61 ES4: I agree with ES2.
 62 ES2: You you ES3?
 63 *ES3: In my opinion, I think we must try our best to improve our ability (.) all*
 64 *kinds.*

In contrast, in the post-task the ESs appeared to be better at building on what had been said and providing further opinions on different topics, which is exemplified with Excerpts (29) and (30). In these two excerpts they discussed 'to do a part-time job' and 'to do some sports'.

Excerpt (29)

- 59 ES6: And do you want er you want have more (.) experience in the part-time
 60 job?

- 61 ES5: Yes, I want to I want to have some more social experience (.) er during
 62 during the part-time job.
 63 ES8: There is still two minutes to go.
 64 ES5: Let's go on.
 65 ES8: I agree monitor's er idea. ***I think do some part-time job can part-time job***
 66 ***and could improve our social experience.*** Ah studying in college is most
 67 important for to us. Ah I think it's very good to take some part-time job.
 68 Er maybe in in high school we have there are no time there are no time
 69 to take some society social activities. Do you think it's monitor?
 70 ES5: Yes, I think. And do you have a part-time job this term?
 71 ES8: Oh, it's it's a pity I have no...

In Excerpt (29) above, ES8 kept the conversation going by responding to ES5's utterance about 'to do a part-time job'. Both Excerpts (29) and (30) indicate that the ESs were able to respond to their partner's idea with one to three turns.

Excerpt (30)

- 8 ES2: Oh. What do you think is important in your college life beside your
 9 major ['meiə] study [sta:]? Why? ES3, can you tell me what's your
 10 opinion?
 11 ES3: In my opinion I think only we have a good body that we can study more
 12 well. I think do some sports sports is very important.
 13 ES4: Yes, I agree. Er because I think we can't do anything without a health
 14 body. ***Health is the base for everything.***
 15 ES3: Mm yes. And I think when we do sports, we can make close with our
 16 friends. ***It's a good way for build up a friendship.***
 ...
 26 ES1: I think er has a girlfriend in Grade One is not good because there are a
 27 lot of study to us. We must (.) must use the time to study, and I think to
 28 to do a part-time job is very important to us.
 29 ES4: ***But I think to do a part-time job is waste time.***
 30 ES2: No no. ***For my opinion, I think do a part-time can improve your ability.***
 31 It's very important.
 32 ES1: Yes, I agree with you. ***Because we do a part-time job use only a little***
 33 ***time, and do a part-time job we can make a lot of money to and use***
 34 ***use some use er ().***
 35 ES2: Oh oh, I think so. Do you agree with ES1, ES3?
 36 ES3: Yes, I agree with him...

In Excerpt (30), in response to ES3's opinion on 'to do some sports', ES4 gave further information about its advantage 'keeping healthy'. Following this, ES3 provided another advantage 'making friends when doing sports'. In response to ES1's opinion on 'to do a part-time job is very important', ES4, ES2 and ES1 argued with each other by expressing their disagreement and agreement to it.

As presented in Table 5.13 above, the CSs did not engage in elaborating in the pre-task, but they made 13 elaborations in the post-task. This is illustrated by the following excerpts from the post-task.

Excerpt (31)

- 47 CS6: Do you think have a part-time job is important, CS7?
 48 CS7: Yes, but do a part-time job is very important for our college life because
 49 you you will enter the society 4 years later. You must prepare
 50 preparation for it. We can do some hard job to get some experience,
 51 experience for the job, such as the er ah ah ability of the manager.
 52 CS5: I think so. *Er I think no matter earn some money but also broaden our*
 53 *mind.*
 54 CS7: Yes.
 55 CS6: So do you have a part-time job?
 56 CS5: I don't have, but I want to have.

In Excerpt (31) above, responding to CS7, CS5 gave further opinions on 'to do a part-time job'. In Excerpt (32) below, CS2, CS3 and CS4 responded to each other's views about 'to have a girl-friend or a boy-friend'.

Excerpt (32)

- 32 CS2: I think the girlfriend or boyfriend know you er deeply.
 33 CS4: deeply.
 34 CS2: Deeply.
 35 CS3: No no. Do you know if you have a girlfriend, you have to (.) you have to (.)
 36 CS2: To what?
 37 CS3: Spend (.) spend time and money on her.
 38 CS4: *You want to you don't want to waste the money and time.*
 39 CS2: *But sometime I think er er staying with a boyfriend is sweet sweet.*
 40 CS4: Sweet.
 41 CS2: Er sweet.
 42 CS4: *And less freedom.*

- 43 CS2: *Sometimes but the less freedom is can make you happy in some way.*
 44 CS3: No no, but we are hard good students. *We haven't earned the money,*
 45 *you know.* We are money is from our our our our parent.
 46 CS2: But make a boyfriend and do the part-time job is not (.) er=
 47 CS4: =冲突。 ((tr: contradictory))
 48 CS2: 对, 冲突。 ((tr: Yes, it's contradictory.))
 49 (laugh)
 50 CS4: *To have a boy or girl friend is not mean to spend money and time.*

The CSs were able to build on the previous utterance with one to six turns. This indicates their greater ability in the post-task to take the floor to support or oppose the previous speaker's statements.

In the pre-task the ESs did better in elaborating than the CSs. Although in the post-task the ESs more than tripled their instances of elaboration, the increase in the CSs group from no elaborations at all to 13 instances was arguably a greater gain.

5.3.3 Reduction Strategies in the Tasks

5.3.3.1 Message Abandonment

Table 5.14 The ESs' and the CSs' message abandonments in the tasks

	Pre-task	Post-task
ESs	8	3
CSs	2	5

Table 5.14 presents the number of messages abandoned by the ESs and the CSs in the pre-task and post-task. The overall numbers were low, but the trend shown was a decrease in message abandonments by the ESs, while for the CSs there was an increase. In Excerpt (33) below from the ESs' pre-task, the message abandonments have been numbered in square brackets. The ESs occasionally stopped speaking in mid-sentence and left a message unfinished ([1], [2] and [4]), and turned to Chinese to indicate that they did not know how to say it in English ([3]). It seems that the ESs abandoned a message to avoid engaging in communication when facing problems in the target language.

Excerpt (33)

- 13 ES8: Er I think we have common language. For example, we we are (.) play
14 game together. Play (.) ball with classroom. 同学嘛。 ((tr: Classmates))
15 And so on. Classmates er I think (.) I think it's better have one boy can
16 sing good music (.) good song and (.) like now. (.) let you let you think
17 先 ((tr: first)).
- 18 ES6: Um I prefer my roommate is a outgoing and enthusiastic girl. *Mm er and*
19 *I don't like* (.) [1] If my roommate don't like talking with me, I will feel
20 boring *and I I* (.) (laughs). [2] Er er I like (.) my roommate have
21 different hobby (0.3) with me. And and we could share (.) share our
22 hobbies together.
- 23 ES7: 到我了。 ((tr: It's my turn.))
- 24 ES8: 到你了。 ((tr: It's your turn.))
- 25 (0.8)
- 26 ES7: I think my roommate is outgoing *because* (.) *my my* (.) [3]
27 怎样讲? ((tr: How to say?))
- 28 (0.4)
- 29 ES5: Characteristics.
- 30 ES6: 不要讲。 ((tr: Don't say it.)) (laughs)
- 31 ES7: Because I'm outgoing, I think er we are we have the same hobby and (.)
32 have the same interests. We can play well *and* (.) [4]
- 33 ES8: It's carefully (laughs). They should they must be honest (.) [honest
- 34 ES6: [Because
- 35 you don't honest?
- 36 ES8: And outgoing, I think (.) ah.

Although there were message abandonments in the post-task as in Excerpt (34) below, there were fewer in number compared to the pre-task (3 compared to 8).

Excerpt (34)

- 4 ES6: Ok, let me tell you my opinion. Mm I think to build up friendship is
5 important in my college college life beside my major study.
- 10 ...Mm if I can build up my friendship well, I think my college life
11 will more colorful and enjoyable. And maybe (.) have a lot of friend will
12 make me find a job after graduate easily. And what's your opinion?
- 13 ES7: Oh (.). Oh you you only only want to make friend with in the college.
14 You don't you don't need study?
- 15 ES6: Beside er study. Oh, that's beside my major study. *Also I: I:* (laughs)

16 ES7: I think I think that study is the more the most important.

As shown in Table 5.14 above, the CSs abandoned more messages in the post-task than in the pre-task (5 compared to 2). Excerpt (35) below shows the messages abandoned in the pre-task. In [1] of this excerpt, CS6 did not complete his utterance to express his intended idea. In [2], it seems that CS6 lacked the linguistic resources to express his further meaning.

Excerpt (35)

- 39 CS8: ...I think the wonderful
40 classmates er can be can be always go to shopping with together. Er
41 also he can invite the girl to the restaurant to eat and have supper. CS6,
42 到你讲些。 ((tr: CS6, it's your turn to say something.))
43 (.)
44 CS6: I hope my roommate ah don't get up so late 不是((tr: no)) so early
45 because I always get up so late. *If he ah* (.) [1] and I like him. *I* (.) [2]
46 CS8: 有没有补充? ((tr: Would you like to say something else?))
47 CS6: (laughs) I don't want him to destroy my sleeping. That's all.

In the post-task, there were also some unfinished utterances. The CSs just stopped speaking at the end of the sentence as shown in Excerpt (36) ([1] and [2]).

Excerpt (36)

- 74 CS6: Yes, I never read the English and (.) er I don't listen the English in class,
75 so I think I'll fail the Band 4.
76 CS7: But from now you can study, you can study hard. And and one years
77 later you will pass the pass Band 4. Do=
78 CS6: =Maybe you are right. But I don't like English. I think it's er difficult
79 *and* (.) *some* (.) oh, yes. [1]
80 CS7: But experience is important for us.
81 CS8: You can see more American film. (laughs)
...
90 CS7: What do you think you can't pass the English Band 4?
91 CS6: I said it (.) I don't want to say it again, *so we change another* (.)
92 *another* (.)[2]
93 CS8: I think pass Band 4 is very important. It can it can let me find a good job
94 and go and find a foreigner company job. What about you, CS7?
95 CS7: Yes, you are right. I I I want to go abroad er in future, so I think to pass
96 the Band 4 is very important for me.

In the pre-task the ESs abandoned more messages than the CSs, but in the post-task the former did better in avoiding using this strategy, thus making the conversation flow more smoothly. The overall frequency of message abandonments was, however, very low in both groups in the pre-task and post-task, so the results need to be treated with caution.

5.3.3.2 Switch to Chinese

Table 5.15 Switches to Chinese used by the ESs and the CSs in the tasks

	Pre-task	Post-task	Increased/Reduced percentage
ESs	18	1	-94%
CSs	20	26	30%

As shown in Table 5.15, there was a change in the number of switches to Chinese for both groups, though in opposite directions. The ESs switched 18 times in the pre-task and only 1 in the post-task, decreasing their reliance on switching substantially, while the CSs increased switching somewhat. The ESs' switches in the pre-task fell into six categories concerned with communicative functions: turn-management, asking for or giving clarification, self-repairing, asking for help and giving advice. There were also a few instances of mixing English with Chinese where the communicative function was not clear. These categories are exemplified with Excerpts (37) and (38) from the ESs' pre-task (The switches to Chinese have been numbered and categorized below.)

Excerpt (37)

- 1 ES8: 开始。 ((tr: Let's start.)) **[1. Turn-management]**
- 2 ES5: I hope my roommate I hope my roommate is a friend, kind, honest and
- 3 enthusiastic girl. And I hope we can have some common hobby so that
- 4 we can read or play together. And I (.) hope er I hope we can respect
- 5 each other. (laughs)
- 6 (0.12)
- 7 ES5: The one is studying, the other one should not make noise.
- 8 (0.14)
- 9 ES8: I have have four roommate.
- 10 ES6: 你理想的室友。 ((Tr: Talk about your ideal roommate))
- 11 ES6 & ES7: 你理想的室友。 ((Tr: Talk about your ideal roommate))
- 12 ES6: 你喜欢的室友怎样? ((Tr: How about the roommate you like?))

[2. Giving clarification]

- 13 ES8: Er I think we have common language. For example, we we are (.) play
 14 game together. Play (.) ball with classroom. 同学嘛。 ((tr: Classmates))
 15 [3. Self-repairing] And so on. Classmates er I think (.) I think it's better
 16 have one boy can sing good music (.) good song and (.) like now. (.) let
 17 you let you think 先 ((tr: first)). [4. Mixing English with Chinese]
- 18 ES6: Um I prefer my roommate is a outgoing and enthusiastic girl. Mm er and
 19 I don't like (.) If my roommate don't like talking with me, I will feel
 20 boring and I I (.) (laughs). Er er I like (.) my roommate have different
 21 hobby (0.3) with me. And and we could share (.) share our hobbies
 22 together.
- 23 ES7: 到我了。 ((tr: It's my turn.)) [5. Turn-management]
- 24 ES8: 到你了。 ((tr: It's your turn.)) [6. Turn-management]
- 25 (0.8)
- 26 ES7: I think my roommate is outgoing because (.) my my (.) 怎样讲? ((tr:
 27 How to say?)) [7. Asking for help]
- 28 (0.4)
- 29 ES5: Characteristics.
- 30 ES6: 不要讲。 ((tr: Don't say it.)) (laughs) [8. Giving advice]
- 31 ES7: Because I'm outgoing, I think er we are we have the same hobby and (.)
 32 have the same interests. We can play well and (.)

Excerpt (38)

- 44 ES4: Do you do you think your your roommate now are your dream
 45 roommate?
- 46 ES2: I think my roommate is ok.
- 47 ES4: What about you?
- 48 ES1: I think my roommate is also ok.
- 49 ES4: And you?
- 50 ES3: I think my roommate are very nice, but (.) they will (.) (laugh) '好晚睡'
 51 怎样讲? ((tr: How to say 'go to bed late' in English?)) Sleep too late.
 [9. Asking for help]
- 52 (.)
- 53 ES2: ES1, you ask you you ask not clear. I don't (.) I don't (.) I don't (.)
- 54 ES1: 什么什么? ((tr: What What?)) [10. Asking for clarification]
- 55 ES2: 我听不懂, 我没有听清楚。 ((tr: I did not hear clearly.)) Please ask again.
 [11. Giving clarification]
- 56 ES1: I think I think as a roommate should have a good habit and study hard.

As shown by Excerpts (37) and (38) above, in the pre-task the ESs occasionally monitored the conversation in Chinese ([1], [5] and [6]), gave or asked for clarification in Chinese ([2], [10] and [11]), explained their intended meaning in Chinese ([3]), asked for help in Chinese ([7] and [9]) and gave advice in Chinese ([8]). Moreover, they occasionally inserted Chinese in the sentence ([4]). It seems that in the pre-task the ESs did not make an attempt to negotiate for linguistic items to help them solve their communication difficulties. They also appeared to lack discussion skills such as encouraging peers to participate and managing turns in English. As they had to resort to code switching, the ESs seemed unable to hold a smooth conversation in the pre-task.

In contrast, in the post-task the ESs seemed to be much better at avoiding this reduction strategy. No Chinese was heard except in Excerpt (39) below. Less dependence on Chinese made the discussion smoother. This seems to show an improvement in linguistic and strategic competence.

Excerpt (39)

- 36 ES3: Yes, I agree with him. If you earn the money, how (0.3) how will you
37 spend it?
38 ES1: About about to use the money, I think I can use the money to do some to
39 do something. For example, er to take bus or er or er and (.) go to some
40 place go to some place.
41 ES4: Oh, but I suggest you must ah (.)=
42 ES3: =‘记住 怎样讲?’ ((tr: How to say ‘remember’ in English?))

[Asking for help]

- 43 ES4: Remember er er to do a part-time job is just a part-time, not the man not
44 the ma-major. Study is our duty.

As shown in Table 5.15 above, in stark contrast with the ESs, after a term’s study the CSs switched to Chinese more frequently with 20 switches in the pre-task and 26 in the post-task. Most of the categories below are similar to those of the ESs’ performance: gap-filling, turn-management, asking for or giving clarification, self-repairing, asking for or giving help, giving confirmation, making comments and mixing English with Chinese. This is exemplified by the following excerpts from the tasks.

Switches to Chinese by the CSs in the pre-task

Excerpt (40)

19 CS8: Yes, it's my time. I'm CS8. I think my wonderful I think the wonderful
20 roommate than no matter what how tall he is, how tall they are, how fat
21 they are, I think my wonderful roommate can play play cards, surf the
22 Internet, take care with me, go fishing, travelling and watching TV
23 program. And I think they must be enthusiastic and outgoing. Tony, and
24 I think er (0.3) 等我想一下。 ((tr: Let me think it over.)) [1. Gap-filling] I
25 think the wonderful classmates wonderful room-roommates er have
26 personality. Er I think no matter how late to ah get to their room, er (.)

27 CS6: 你在讲什么? ((tr: What are you talking about?))

[2. Asking for clarification]

28 (.)

29 CS8: Mm that's all. Yes.

30 (laugh)

31 CS7: My name is CS7. I think my roommate must be a outgoing outgoing
32 girl. And she must be lively and friendly because we are live are live
33 together for 4 years. And will we will study live together (.) 4 years is a
34 long time, so it must be it must be (0.6) friendly (laughs) friendly. Ah
35 (0.5) of course of course lovely is very important because ah 4 years we
36 must be live happily, so we if we lovely, we can happy we can go we
37 can live together happily. (.) That's all. Thank you. (laughs)

38 CS8: 补充补充。 ((tr: Please say more.)) [3. Turn-management] Mm I think
39 the wonderful roommate. 我是补充的。 ((tr: I've got another idea to
40 say.)) [4. Giving clarification] I think the wonderful classmates er can
41 be can be always go to shopping with together. Er also he can invite the
42 girl to the restaurant to eat and have supper. ES6, 到你讲些。 ((tr: ES6,
it's your turn to say something.))

[5. Turn-management]

43 (.)

44 CS6: I hope my roommate ah don't get up so late 不是 ((tr: no))[6. Self-repairing]
45 so early because I always get up so late. If he ah (.) and I like him. I (.)

Excerpt (41)

28 CS2: I think the important thing is the study hobby because we are students,
29 so study hobby is very important. And we can if we have a good study
30 hobby, er we can stay we can study together, and (.) and (.) and
31 prevent our study=

- 32 CS4: =‘水平’怎样讲? ((tr: How to say ‘level’ in English?))
 [7. Asking for help]
 33 CS2: level (laughs). And we can help each other and to (.) to improve for
 34 example, can improve our English (.) ‘口语’怎样讲? ((tr: How to say
 35 ‘spoken English’ in English?)) **[8. Asking for help]**
 36 CS4: Spoken English.

As shown in Excerpts (40) and (41) above, in the pre-task the CSs occasionally kept their turn with a Chinese filler ([1]), monitored the conversation in Chinese ([3] and [5]), asked for and gave clarification in Chinese ([2] and [4]), and depended on the Chinese lexical item ‘不是’ ((tr: no)) to signal the source of their trouble ([6]). In addition, they asked for help in Chinese ([7] and [8]). It seemed difficult for them to sustain the conversation in English in the pre-task.

Switches to Chinese by the CSs in the post-task

Excerpt (42)

- 21 CS6: Do you have other friend beside your roommate?
 22 CS8: Ah the classmates like the ES7 啊 ((Tr: modal particle in Chinese)), CS5
 23 啊 and so on. **[1. Mixing English with Chinese]**
 24 CS5: Do you have a girlfriend? (laughs) Don’t ‘欺骗’怎样讲? ((tr: How to
 25 say ‘cheat’ in English?)) **[2. Asking for help]**
 26 CS7: Cheat. Don’t cheat.
 27 CS5: Don’t cheat with us.
 28 CS7: Don’t cheat us. Tell me the truth.
 29 CS6: Tell the truth. Go on.
 30 CS7: Tell the truth.
 31 CS8: Now have one. (laughs)
 32 CS7: Now have one.
 33 CS8: Now have one 啊。 ((Tr: Chinese particle)) Now have one. 不是, 现在
 34 没有。 ((tr: No, I haven’t now.) (laughs)
 [3. Self-repairing]
 35 CS6: I can’t believe him.
 36 CS5: I can’t believe him.
 37 CS6: Yes, yes. I think we have one.
 38 CS8: 啊? ((tr: What?)) **[4. Asking for clarification]**
 39 CS7: To make a girl friend is very important in your college life.

40 CS8: I think so. I think so. I don't think so. Why don't you have a good
 41 friend?
 42 CS5/CS7: Yeah, yeah.
 43 CS8: good friend, good friend, not girlfriend.
 44 CS5: Girlfriend, girlfriend, not good friend.
 45 CS8: 问你们了, 问你们了。 ((tr: It's your turn to ask questions. It's your turn
 46 to ask questions.)) [5. Turn-management]

Excerpt (43)

20 CS2: Do you think do you think er to have a girlfriend is necessary?
 21 CS4: 问这么深入的问题。 ((tr: You asked such a deep question.))
 [6. Making a comment]
 22 CS3: No.
 23 CS2: And you?
 24 CS1: Me too.
 25 CS4: Why don't you 不是 ((tr: no)) why do think that is not necessary ['nesi]
 26 not important in your college life? [7. Self-repairing]
 27 CS3: As we know, we we have friends. Our relationship we can share our feel
 28 with them, not our girlfriend.
 29 CS4: Girlfriend can help you.
 30 CS3: Help you what?
 31 CS4: Help you 什么? ((tr: what)) (laughs)

[8. Mixing English with Chinese]

32 CS2: I think the girlfriend or boyfriend know you er deeply.
 33 CS4: deeply.
 34 CS2: Deeply.
 35 CS3: No no. Do you know if you have a girlfriend, you have to (.) you have to (.)
 36 CS2: To what?
 37 CS3: Spend (.) spend time and money on her.
 38 CS4: You want to you don't want to waste the money and time.
 39 CS2: But sometime I think er er staying with a boyfriend is sweet sweet.
 40 CS4: Sweet.
 41 CS2: Er sweet.
 42 CS4: And less freedom.
 43 CS2: Sometimes but the less freedom is can make you happy in some way.
 44 CS3: No no, but we are hard good students. We haven't earned the money, you
 45 know. We are money is from our our our our parent.

- 46 CS2: But make a boyfriend and do the part-time job is not (.) er=
 47 CS4: =冲突。 ((tr: contradictory)) [9. Giving help]
 48 CS2: 对, 冲突。 ((tr: Yes, it's contradictory.)) [10. giving confirmation]
 49 (laugh)
 50 CS4: To have a boy or girl friend is not mean to spend money and time.

As shown in Excerpts (42) and (43) above, in the post-task as in the pre-task the CSs occasionally monitored the conversation in Chinese ([5]), asked for clarification in Chinese ([4]) and repaired their meaning in Chinese ([3]). They also depended on the Chinese lexical item ‘不是’ ((tr: no)) to signal the source of their trouble ([7]), asked for or offered help in Chinese ([2] and [9]), gave confirmation of what had been said in Chinese ([10]), and made a comment on the question in Chinese ([6]). In addition, they occasionally inserted Chinese in the sentence ([1] and [8]).

It is clear that switching to Chinese was more frequent in the post-task than in the pre-task. The learners engaged in a type of EFL interaction mixed with their mother tongue, which was comprehensible to them. Communication problems in this EFL context can be resolved most quickly and easily through reverting to their mother tongue. The CSs did not seem to attempt to solve the communication problems in English in order to improve their oral proficiency.

5.3.4 Main Findings Obtained from the Pre-task and Post-task

The turns and interactional strategies used by the ESs and the CSs in the pre-task and post-task are summarized in Table 5.16.

Table 5.16 Turns and interactional strategies used by the ESs and the CSs in the tasks

	ESs Pre-task	ESs Post-task	ESs Increased/reduced percentage	CSs Pre-task	CSs Post-task	CSs Increased percentage
Turn	41	116	183%	22	150	582%
Uptake	8	47	488%	7	35	400%
Asking follow-up questions	0	14	[+14]	0	15	[+15]
Elaborating	4	13	225%	0	13	[+13]
Message Abandonment	8	3	/	2	5	/
Switch to Chinese	18	1	-94%	20	26	30%

The main findings obtained from the pre-task and post-task are as follows. Firstly, there was a greater improvement in overall participation for the CSs group in the post-task, but they displayed more uneven participation in the discussion. Secondly, for

the interactional strategies, the ESs' gain in the use of follow-up questions was roughly equal to that of the CSs. The CSs improved more in elaborating than the ESs. The ESs improved more than the CSs in uptakes, switch to Chinese and possibly message abandonment though there were a few instances. Although the CSs increased their turn-taking considerably more than the ESs from the pre-task to the post-task, they displayed more deficiencies such as using more Chinese in formulating messages and responding to their peers, thus there were more conversation gaps in their post-task. On the whole, the ESs appeared to make a little more gain in interactional strategy use than the CSs in the post-task after the intervention.

5.4 Chapter Summary

This chapter has presented and compared the performance of the ESs and the CSs in order to see whether CL was more conducive to increasing the students' interactional skills than conventional whole-class instruction. After the cross-group comparisons, the ESs' and the CSs' better performance in the post-test and the post-task is summarized in Table 5.17 below.

Table 5.17 Summary of the ESs' and the CSs' better performance

	Post-test	Post-task
Areas where the ESs made more gains than the CSs	Turn Uptake Elaborating	Uptake Message Abandonment Switch to Chinese
Areas where the CSs made more gains than the ESs	None	Turn Elaborating

As for overall participation, the ESs were more interactive than the CSs in the post-test, but the reverse was the case in the post-task. In the CSs group, overall participation in the post-task was more uneven. As for the interactional strategies, the ESs made more elaborations in the post-test while the CSs made more in the post-task, so the trend in elaborating was mixed. The ESs made more gains in uptakes in both the post-test and the post-task, switch to Chinese and possibly message abandonment in the post-task. On the whole, the ESs appeared to do somewhat better in interactional strategy use than the CSs after the intervention, but the picture was varied and the sample was very small, so the results need to be treated with caution. The next chapter will provide possible explanations for the findings found in the study.

Chapter Six Discussion

6.1 Introduction

This study set out to investigate the impact of CL on Chinese students' oral proficiency. The quantitative results of the EC and the CC were reported on in Chapter Four in terms of overall oral proficiency; in terms of the components: pronunciation, grammar and vocabulary, discourse management and interactive communication; and in terms of general proficiency. In Chapter Five the results related to the comparison and evaluation of interactional strategy use were presented. Apart from a small gain in the students' interactional strategy use and a possible but inconclusive gain in their interactive communication, the expected impact of CL failed to materialize. There seems to be no reason to doubt the validity of the findings as the study design was theoretically and empirically sound and appropriate steps were taken by the researcher to conduct the experiment, and to collect and analyze the data. The findings will be interrogated below in terms of classroom complexity and language learning, input and output, negotiation of meaning, the assessment criteria, the time frame for the intervention and effects of CL on the students' interactional skills.

6.2 Classroom Complexity and Language Learning

The concepts and implications of Chaos and Complexity Science have been applied to the human disciplines such as anthropology (Abel, 1998) and economics (Anderson et al, 1989). Associating second language acquisition with Chaos and Complexity Science, Larsen-Freeman argues for complexity and language learning, and sees SLA process as a dynamic, complex and nonlinear one (1997:151). Van Lier (1996) views the educational context with the classroom at its centre as 'a complex system in which events do not occur in linear causal fashion, but in which a multitude of forces interact in complex, self-organizing ways, and create changes and patterns that are part predictable, part unpredictable'(p.148). The language classroom is 'far more complex than was originally thought' (Conveney & Highfield, 1995:129). This study was a quasi-experiment conducted in the real classroom setting. As the classroom is such a complex learning environment, small-scale classroom research always needs to be interpreted cautiously. It is necessary to explore some uncontrolled variables that may have occurred in the language teaching and learning process, which may help to understand and interpret the results of this study.

6.2.1 The Learning Objectives and Student Expectations

Firstly, two completely different learning contexts need to be taken into consideration. As reported in 3.5, the students in this study were first-year undergraduates and the study was carried out in the first term immediately after they entered the university. In China, passing the National College Entrance Exams is generally regarded as a decisive step in one's life, so to meet certain standards or requirements in these exams, high school students are compelled to expend their utmost efforts to study their subjects. Generally they are only concerned about getting good grades or passing the exam. College life is totally different from that in high school, which is a new and fresh experience for first-year students. They have to adjust themselves to college life in many aspects such as study skills, ability development and social activities. Instead of regarding study as their only task, they divert their energy and time to the different aspects of college life. The same was true for the students in this study; they did not put much effort into their English learning at college. Also, the transition from high school to college may have been a big challenge for some students. As college lays more emphasis on autonomous learning, they may have been at a loss about how to study at college, which will be discussed in 6.2.2 below.

Another point is that speaking was not a component of the assessment of their English level in the final term exam. Li (2009) conducted a survey about the factors affecting the efficiency of group work in the tertiary-level EFL classroom. He reported that 82% of the teachers and 67% of the students in the survey thought that the current examination system was one of the reasons for low efficiency of group work. The motivation in language learning directly determines the learner's attitude toward it (Ellis, 1994:200). Because speaking was not assessed in the final term exam, it was difficult for some students to change their study focus on the written exam and they may have put their efforts in the knowledge and skills relevant to the exam. The students in this study would take the written CET4 in their fourth term. The spoken CET4 can be taken only after the written CET4 score exceeds 550 out of the maximum mark 710. This is a quite high requirement for the students in the university where the study was conducted and few of them take the spoken CET4. Taking the CET4 was not a matter of great urgency for the students, which probably did not motivate some of them to study English hard, let alone to improve their spoken English. Consequently, some of the students in this study probably were not very willing to speak English in the CL context.

6.2.2 The Classroom Culture

After a long exposure to the teacher-centred language learning environment, it may have taken time for the students to adjust themselves to such student-centred CL activities. As in some other Asian countries, Chinese teachers play an ‘authoritative role’ in the classroom. Cortazzi & Jin (1999) argue that teachers are generally regarded as knowledge providers in China and many students will learn by listening attentively. Under the baton of the National College Entrance Exams, this teaching approach seemed to be more often used in high school. In order to help students achieve good grades in NCEEE (speaking will be a small part of the exam in 2011), teachers tended to focus more on grammar and vocabulary instruction. Students were passive receivers and did an enormous number of exercise items so as to familiarize themselves with what had been taught and improve their ability to take the exam. Their oral communicative skills were generally neglected. College English teaching is different from that in high school. Xu & Wu (2003) argues that high school English teaching aims at helping students take exams whereas college English teaching aims at developing students’ communicative competence. The college English course is an integration of language knowledge, culture and communicative ability, and requires students to participate in speaking practice as indicated by *the College English Curriculum Teaching Requirement* stated in 1.3.

Given that in this study the students had been exposed to the teacher-centred approach, it is likely that many of them tended to depend on the teacher for knowledge. The CL activities required them to study cooperatively instead of individually so as to have more opportunities to listen to and produce language. These activities provided them with an opportunity, to some degree, to take charge of and be more autonomous in their own learning. In a survey on the college English learning conditions of non-English major freshmen, Xiang & Li (2009) found that on average it took the students 47 days to adjust themselves to college English teaching. It may have taken time for the students in this study to get used to such a student-centred format. Likewise, influenced by the teacher-centred instruction, only when the teacher gives instruction on vocabulary, grammar and difficult sentences do the students feel successful in class (Xu & Wu, 2003). Shi (2009) reported that about 60% of the first-year university students in her survey indicated their unwillingness to participate in communicative activities in the English class. Some students in this study may have thought that they did not learn any

new knowledge from the CL activities, thus not participating actively in them.

6.2.3 The Task Demands

It may have needed more time to get used to the task formats. In this study, all CL activities were structured and implemented on the basis of the CL principles reviewed in 2.2.3. Regarding the CL techniques used in this study such as Think-Pair-Share, Timed-Pair-Share and Three-Step Interview, it is argued that they promote positive interdependence and are beneficial to the pair (Jacobs et al, 2002). For example, in Think-Pair-Share, the individual student was supposed to help their partner to contribute good ideas and they shared them. The learning task could not be done without the help of the partner. Everyone was likely to be called on and needed to report not only on their own ideas, but also on the discussion that had occurred with their partner. To complete such a task, they were supposed to support each other personally and academically, encouraging their partner to make contributions to the task and provide necessary language assistance. Also, when the techniques Roundrobin, Group Discussion and Brainstorming tasks were carried out, the different roles, monitor, secretary, timekeeper and checker were assigned to every group member in order to promote positive interdependence. To promote speaking, it is suggested that less talkative members be given a role such as monitor that calls for talking, and more talkative members be given a role such as secretary that calls for listening (Jacobs et al, 2002). In this study all the group members were supposed to play the different roles in turns. The monitor and the secretary are considered as important roles in the group work. For example, the monitor should be good at organizing, coordinating and guiding the group work. Some students such as shy students or low achievers may have had difficulty being the monitor or secretary during the group work. To carry out the communicative activity in an orderly manner and to achieve their group objective, it was vital for each member to play their own roles. As these CL techniques were used on a rota basis, it may have taken more time for the students to get familiar with these techniques and enhance their group cooperation.

In 2.2.3, it is argued that the improvement of students' collaborative skills in classroom discussions may contribute to better cooperation with their group-mates, but also more successful interaction in the target language. In practice, due to the limited classroom time, apart from those to help them perform their roles in the group work as

mentioned in 2.2.3, corresponding language functions of the collaborative skills were rarely taught such as how to interrupt, refuse interruptions, accept and reject suggestions, and agree and disagree. Take 'how to express agreement and disagreement' as an example. After listening to a member, the student is supposed to give comments on his or her opinions. She or he may do it by saying in English 'That's a good point, and I'd like to say more.' or 'I see what you mean, but...' (Keller & Warner, 1988). If the students had been provided and trained with such collaborative skills, it could have helped them improve their oral interaction. In 6.4 below, I will discuss the students' infrequency of negotiation of meaning during the CL activities because they seemed to be lacking in the use of the interactional strategies associated with negotiation of meaning. These strategies are similar to the corresponding language functions of some collaborative skills.

The focus on expressing personal views was unfamiliar. As stated in 3.6, this was an integrated skills course including vocabulary study, detailed study of the text (culture and background information, its writing style, its organization and content, etc), translation and writing, and exercise guidance. As speaking was integrated into this course to provide the students with opportunities to use language to convey their ideas, no explicit instruction about oral skills was given. The group tasks were set up and the attention of the students was focused on fulfilling them. It was hoped that their speaking skills would develop incidentally. As stated above, influenced by the National College Entrance Exams, high school students were exposed to the teacher-centred instruction. As their oral skills were in general not assessed, teachers tended to focus on teaching language knowledge, but ignore the development of the students' oral skills. Shao (2006) conducted a survey on the college English teaching conditions of non-English major freshmen, and the results suggested that the first-year students who had just entered the university were generally not able to use English to express their ideas accurately. As presented in 4.3, the average scores of the oral pre-test of both classes were 10.6 and 10.1 out of a full mark of 20 (12 was the cut-off point for passing), indicating their poor oral skills before the intervention. Working in groups to exchange their ideas in English may have been a new exercise to some students. The CL tasks were not mechanical practice such as repetition and substitution drills designed to practise use of particular grammatical or other items. Instead they were communicative activities requiring the students to use the language to exchange information in groups. Littlewood (1981)

argues that language practice should go from pre-communicative activities (e.g. structural activities) to communicative activities (e.g. social interactional activities). Although the students had learnt some structural and functional aspects of the language through formal teacher-directed instruction in high school, there was a general lack of speaking practice, which may have led to their incompetence in getting their message across when carrying out the CL activity. Some students may have got stuck, failing to find suitable words to express themselves, which will be discussed in 6.3.

6.2.4 Mixed Ability

In a heterogeneous group there was a range of English proficiency. In the traditional competitive learning classroom, high achievers tend to receive more attention from the teacher than low achievers, and thus high achievers are more active learners and participate in more classroom activities in class. This competitive learning style may have remained in the CL activities. It is likely that some highly proficient English learners dominated the group work while some low proficient learners acted as audience. For example, when students were required to cooperatively complete a single group report, some low-proficiency learners may have been ignored by the group members or allowed to get by without making any contribution. Likewise, Jacobs (2006) argues that low achievers receive help and support from their peers while high achievers can benefit from providing elaborations, but he also points out, 'some researchers fear that high achievers when mixed with low achievers will end up feeling bored and the low achievers will feel intimidated' (p.33). This may have happened in this study with some students as the CL tasks were carried out orally. Some high achievers possibly got bored and impatient when listening to the poor and unintelligible utterances produced by the low achievers, whereas some low achievers probably did not have enough confidence to express themselves in English and felt frustrated. From my classroom observation, a couple of low achievers looked quite embarrassed during the CL activities. They had great difficulty producing a few broken utterances and making themselves understood. For the high achievers, the spirit was willing but the body weak.

Though the students were grouped on the basis of their oral pre-test results, their NCEEE results, gender, place of origin and whether they had studied subjects in Arts or Science in high school, I could not take their personal characters into consideration as they were new to me before the intervention. It is likely that there were more talkative

or shy students in one group than in another. In a study of the nature of dyadic interaction in an adult ESL classroom, Storch (2002) found that patterns of dyadic interaction remained stable over time and across tasks, and there were dominant/dominant or dominant/passive patterns in the dyadic interaction. These two types of interaction patterns are not collaborative. For example, when it is a dominant/passive pattern, one student dominates the interaction through the task and does not attempt to invite the other party's contribution. There may have been dominant/dominant or dominant/passive patterns in this study. Also, Paniz (2007) points out that some students are reluctant to take part in group interaction because they feel shy to speak in public despite encouragement from the monitor or the teacher. From my classroom observation, for example, two shy girl students were with two boys in a group. During the CL activities, they sat very quietly at all times, not attempting to make any contribution to their group task. The two boys had to do the task on their own.

6.2.5 Individual Learning Needs and Styles

It is likely that some students were reluctant to work in their groups because they have their own preferences and learning styles. A study by Ghaith (2002) suggests that the success of CL is related to the willingness of learners to help each other, to the degree of their caring about the learning of all learners and to their desire to study together. Due to the influence of the fierce competition and strict requirements of the National College Entrance Exams, some students may have preferred to study individually instead of cooperatively so as to surpass others and gain higher grades. Cortazzi & Jin (1996: 185) point out that being unwilling to work in groups is not seen as a problem of co-operation or information sharing but as a result of the students' desire to concentrate on learning tasks without the distraction of talking to their peers. Next, in the EFL context, owing to their limited English proficiency, some learners may have found it rather threatening to speak in the target language, thus showing anxiety for fear of losing face in using the target language. They were university students and had begun to have mature ideas, but limitations in English proficiency may have resulted in their unwillingness to express their opinions superficially. After the experiment, a student told the researcher that the CL communicative activities were not suitable for him and, as his English was poor, what he needed most was to improve his vocabulary and grammar so that he would be able to communicate his ideas clearly.

6.3 Input and Output

As reviewed in 2.3.2, the Input Hypothesis, the Output Hypothesis and other theories emphasize the role of input and output in SLA. Input is the language to which students are exposed such as teacher talk, listening activities and reading passages. Input gives learners the material they need to develop their ability to use the language on their own. Communicative output is to complete a task by using the language that the teacher has just presented, or drawing on any other lexical items, grammar and communication strategies they know (Keatley & Kennedy, 2007). Shi (2007:69) argues that oral proficiency is a productive skill, so to ensure the fluency and accuracy of utterances, adequate input is an essential condition.

There is a gap between the English course in high school and at university. Compared with the English course in high school, there is far more vocabulary and more difficult texts in each unit in the integrated skills course. Generally 6 hours are allocated for English lessons in a week in high school while 4 hours are offered at university, so the teaching pace at university is much faster than that in high school. In a survey on the college English learning inadaptability of first-year students, Xu & Wu (2003) found that first-year students had difficulty in adapting to fewer study periods, faster teaching pace, more new words and greater amount of reading. As reported in 4.2.1, the average score of NCEEE of both classes was about 98 out of a full mark of 150 (90 was the cut-off point for passing), indicating their poor English level. As reported in 3.7.1.2, in China the required admission scores for ordinary universities are lower than those for leading universities. The university where the study was carried out is an ordinary university and it adopts nationally uniform college English textbooks. In this study some students may have had difficulty in memorizing words and understanding longer texts. After some background information was introduced, the students were asked to read the text for some time and then discuss some comprehension questions in groups. As the reading passage was more complex than their current proficiency, within the designated time, some students may have had difficulty understanding the information available in the written text on their own, thus having no ideas to contribute for discussing the reading comprehension questions with their peers. As observed in this study, during these CL activities some of them kept reading for the answers, and some stayed silent. This may have led to the undesired results of the CL activity.

When the CL activities were about the students' personal experiences and their opinions on the college life and social issues, suggested ideas for discussion were provided. However, according to whether related vocabulary was offered or not, about 61% of these CL activities did not provide any vocabulary relevant to particular topics. According to Ellis (1984), there were two types of SLA environments: natural environment and classroom environment. The English study environment in China belongs to the latter and thus English learners are not exposed to much natural input. Some researchers (e.g. Sun & Wang, 2003) in China suggest using inauthentic input to improve teaching in the EFL classroom. In their view, inauthentic input is the input of words, phrases and sentence patterns, and students are asked to recite many comprehensible words, phrases and sentence patterns so as to improve their language ability. Sun & Wang (2003) conducted a study to examine the effect of input and output on Chinese students' oral proficiency. They found that input plays a primary role in oral proficiency development and the output without input only plays a limited role in it. Keatley & Kennedy (2007) suggest that before the communicative activity is carried out, students should be given input (both topical information and language forms) so that they will have something to say and the language with which to say it. It seems reasonable to say that in this study, the lack of adequate input of words, phrases and sentence patterns could not help improve the quality of their utterance production in the CL activities.

6.4 Negotiation of Meaning

As reviewed in 2.3.2.2, Long (1983, 1985, 1996) argues that when learners have the opportunity to negotiate meaning such as conversational adjustments, it would promote comprehensible input, thus contributing to language acquisition. Ways of negotiating meaning include asking for repetition or clarification, rephrasing an utterance, expressing lexical uncertainty, confirmation and comprehension checks. The features of students' interaction modified by negotiation consist of grammatical structures, lexical items, expressions and phonological aspects.

In the teacher-fronted activities, the communication interaction occurred only between a few class members and the teacher. There was considerably less direct interaction among individual classmates in their teacher's presence. When I exercised a significant amount of control over the interaction pattern, I normally provided

interactional adjustments to the students when they offered their responses. For example, when a student struggled to express himself, I asked questions which served to increase the comprehensibility of his utterances by requesting clarification, expansion and elaboration. When communication breakdowns occurred, my questions could operate as a repair tool.

In the CL context, the students were encouraged to exchange ideas and make contributions in groups. Because of limitations in their English proficiency, it is likely that the students did not have the linguistic resources necessary to interpret what their peers said, or did not have access to a certain linguistic form themselves and thus could not make themselves understood. During the interactional process, they were supposed to ask for clarification, to negotiate what they heard, to refine their meanings so as to manage the oral interaction. However, the conversation analysis data showed that the features of negotiation of meaning such as asking for and giving clarification, appealing for help and requesting repetition rarely appeared in the CL activity. In other words, there was an absence of these interactional strategies in the conversation analysis. In a study of the impact of the required information exchange task and the optional information exchange task on Chinese students' negotiation of meaning, Pang & Wu (2000) indicated that on the whole, there were few instances of negotiation of meaning in these group tasks. The infrequency of negotiation of meaning was partly due to the fact that as learners have the same L1 background, learner-learner discourse in the foreign language is rarely characterized by breakdowns in communication due to misunderstanding (Buckwalter, 2001). As they all spoke Chinese, the students may have understood what their peers said even when English linguistic forms used to convey their ideas did not match those of the target language. Moreover, it is said that Chinese people are generally afraid of losing face, so the students in this study may have feigned comprehension in order to save face. Additionally, in order not to undermine fluency, the students may have felt reluctant to engage in negotiation sequences.

Bejarano et al (1997) argue that interactional strategies associated with negotiation of meaning such as checking for comprehension and clarification, appealing for assistance and repairing can help students in the EFL classroom overcome linguistic stumbling blocks. In an empirical study on the impact of interaction on question formation in ESL, Mackey (1999) found that interaction without negotiation of meaning

had only limited impact on learners' language development. In a study of the role of group work in classroom SLA, Pica & Doughty (1985a) compared the discourse produced by low-intermediate ESL students in carrying out one-way tasks in both teacher-fronted and small group discussions. They found that the students used fewer interactional adjustments during group interaction with each other when compared with the teacher-fronted interaction. In terms of negotiation of meaning, small group oral interaction in this study did not seem to yield opportunities for language learning nor encouragement of the students' exploitation of the language. As the sample for the conversation analysis was very small in this study, in order to see whether my assumption of their infrequency of negotiation of meaning actually holds up, data from large samples would need to be collected and analyzed in depth.

6.5 The Assessment Criteria

According to PETS-3 reviewed in 3.7.1.1, marks are given based on the four analytical criteria: grammar and vocabulary, discourse management, pronunciation and interactive communication. Each criterion is 5 points, and the full mark is 20 points. In this study following the assessment criteria of the PETS-3, the assessors used the scale of 1-5 to assess each component of the oral skills and the only decimal 0.5 was used between two consecutive integers. Specifically, the scales were 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5 and 5, which accordingly are 20, 30, 40, 50, 60, 70, 80, 90 and 100 at a full mark of 100. The marks given on such scales were likely to be different from those given on a rating scale which can differentiate more such as 1-10 or 1-100. The assessment criteria may have affected the very precise measurement of the oral performance of the two classes.

6.6 The Time Frame for the Intervention

The experiment was only conducted for 15 weeks and there were only 30 minutes for CL in each session. In total, there was about 12 hours for the CL activities. As reviewed in 2.3.2.3, on the basis of a number of empirical studies, Muranoi (2007) argues that 'instructional treatments eliciting learner output in contextualized practice can develop L2 learners' productive proficiency'. The students in this study had acquired language competence to a certain degree as a result of many years of formal English instruction. They had some specific knowledge of lexical items and of rules of morphology, syntax, sentence-grammar semantics and phonology. They had learnt a

certain number of English words and phrases. CL activities provided more opportunities for interactive practice in the EC compared with the teacher-fronted activities in the CC. Interaction means practice opportunities and practice leads to fluency (Verplaetse, 2000). Unexpectedly, this study only found a small gain in interactional strategy use and possibly a gain in interactive communication. As Naughton (2006) argues, ‘not all communication among learners can be said to facilitate linguistic development because learning depends on the specific interaction patterns that arise in any given situation’ (p.170). He further argues that these patterns are influenced by such factors as pairing, proficiency, task type and other sociolinguistic factors. Likewise, Larsen-Freeman (reported in Yi, 2008) argues that as the complex system is nonlinear, the experiment has some weaknesses from the perspective of Chaos/Complex Theory, and it may take a certain amount of time to materialize its experimental effect. Learning a language takes time. Only through more frequent practice will some of their linguistic rules and lexical items become formalized and thus become procedures, leading to the internalization of the target language.

The study also examined whether CL contributed to the development of the university students’ general proficiency. The result did not significantly favour CL in comparison with conventional whole-class instruction and the null hypothesis was not rejected. The result indicated that the overall effect of CL was equal to that of conventional whole-class instruction. In other words, the use of CL activities did not result in a loss of general proficiency. The short period for CL activities can also account for this insignificant result. After finishing collecting data for the thesis in the first term, I carried on the CL activities in the second term. Though not part of the study, in the final term English exam the EC had made greater gains in general proficiency than the CC ($t=2.21, p=.03$). However, whether this trend can be confirmed would need further research in this EFL context.

6.7 Effects of CL on Interactional Skills

As mentioned in 6.4 above, there was considerably less interaction among individual students in the teacher-fronted activities. When the teacher exercises a significant amount of control over the interaction pattern, as Johnson (1995) suggests, this may result in students making one or two-word responses. Ellis (1994) also suggests that students in such a context are more likely to be restricted to a responding

role, and the opportunities to participate productively in the language classroom are constrained. In contrast, CL proponents (Kagan, 1992; Jacobs 1998; Crandall, 1999) have suggested that CL typically generates less anxiety and stress than other learning formats. This was probably also true in this study. Each group was small, and arguably became a community cooperating with each other in pursuit of their task objectives. The CL tasks created more opportunities for the students to participate in more spontaneous language use and more importantly, to engage in linguistic experimentation and to communicate with others. They had the opportunity to initiate, control the topic of discussion and self-select in order to participate in the interaction. The output the students produced in the CL context, as the scholars (Long & Porter, 1985; Ellis, 1984; Kagan, 1994; Maya & Cheng, 2003 reviewed in 2.3.2.3) suggest, may have been communicative and functional. As a result, the quantitative results suggested that CL may have had an effect on the students' interactive communication. In this study both interactional strategies and interactive communication meant the students' ability to maintain and repair interaction in an on-going conversation. This possible improvement in their interactive communication was supported by their small gain in interactional strategy use shown by the in-depth conversation analysis.

As summarized in 5.4, on the whole, the ESs appeared to do somewhat better in interactional strategy use than the CSs after the intervention. The ESs produced more uptakes than the CSs in both the post-test and the post-task. A discourse marker is a word or phrase that is used in conversation to make discourse more coherent and generally adds little to the meaning of an utterance. Examples of discourse markers are *oh, well, so, but, or, yes, then, you know* and *I mean*. Uptakes are discourse markers used for turn-claiming. In a study of the commonly-used discourse markers in spoken English, He & Xu (2003) reported that discourse markers are one of the most frequently-used words in daily communication in the native-speaking community. They also argued that fluent Chinese English learners use discourse markers more frequently than non-fluent ones, and thus discourse markers are one of the strategies promoting oral fluency. In a corpus-based study of Chinese EFL learners' oral communicative ability, Zhen (2006) found that the learners who employed more appealers and uptakes to yield and claim turns displayed higher strategic competence than those who employed fewer. In this study more uptakes produced by the ESs group seemed to suggest their smoother and more coherent interaction although their uptakes contained

interlanguage features. This probably resulted from more interactive practice in the CL group work.

Next, the ESs used much less Chinese in the post-task than the CSs. It is argued that students tend to use L1 during pair/group activities in the EFL context (e.g. Naughton, 2006). Wong-Fillmore (1985) developed the hypothesis that if students share a common L1, their interaction in pair/group work would be conducted in L1 rather than L2. This would lead to unintended results of group work. In this study CL was structured requiring that the different roles be performed in the CL task. This may have kept the students using English in their interaction most of the time. The fact that the number of switches to Chinese in the post-task decreased to a greater extent in the ESs group (see 5.3.3.2) seems to show that the effect Wong-Fillmore predicted can be ameliorated, and points to the efficiency of CL activities. The ESs appeared to get better at keeping conversational interaction going in English. In contrast, the CC worked on the same activities under the teacher-fronted format, but they had fewer opportunities to engage in language production and modify their interaction. Consequently, the CSs group used much more Chinese either deliberately or spontaneously in the post-task.

In the view of Richards et al (1985), fluency can be used to characterize a person's level of communication proficiency, and one of its abilities is to produce continuous speech without causing comprehension difficulties or communication breakdown. The ESs used much less Chinese and possibly fewer message abandonments in the post-task than the CSs. That is to say, the ESs reduced the number of conversation gaps in their discourse, showing the more natural quality of their speech. More communicative practice in the CL context seemed to help the students improve their ability to develop their discourse by avoiding using these reduction strategies. 'Unlike language knowledge, fluency is about automatizing the language knowledge' (Brown, 2003:14). Brown (1996) argues that one way of promoting fluency is to create many opportunities for students to practice. It seems that more opportunities for language use in the CL context could explain the positive trends seen in the development of the students' oral fluency.

It should be pointed out that the CSs made more gains in overall participation and elaborating in the post-task than the ESs. This was probably partly due to the general

informality of the classroom and the familiarity with their peers. When the pre-task was conducted, the students had only spent less than 3 hours of class time together, whereas the post-task was carried out at the end of the 45-hour English study time. Also, Bejarano et al (1997) pointed out that ‘social-interaction strategies are not unique to foreign language use but rather to overall communicative interaction’ (p.211). Elaborating is one of such social-interaction strategies and this behaviour is also present in L1 conversation. It might readily be transferred to the EFL context. However, as reported in 5.3.1, the CSs’ participation was more uneven than the ESs. One of the CSs only produced 2 short turns during the discussion. There has been little research on the comparison of the effects of asymmetrical and symmetrical group work on students’ language development. In 2.3.2.2 & 2.3.2.3, the review of the Interaction Hypothesis and the Output Hypothesis suggests that having opportunities for interactive output practice is likely to contribute to L2 learners’ productive proficiency. In the meantime, as discussed above, the CSs displayed more deficiencies in formulating messages and responding to their peers in their post-task.

6.8 Chapter Summary

It has been argued that there are great benefits for second language learning relevant to the use of CL in English lessons (Kagan & McGroarty, 1993; Jacobs, 1998; Crandall, 1999; McCafferty et al, 2006). This study only demonstrates a very limited gain in the students’ oral skills in the CL context. ‘The language classroom is not a mechanical system’ (Kindt et al, 2009:13). There are a number of interacting factors that determine the degree to which the SLA process will succeed such as the amount and type of input, the amount and type of interaction, motivation, attitude, personality factors and learning strategies (Larsen-Freeman, 1997). The factors that were likely to have impacted the findings have been explored. There seemed to be some problems with the students who had just started university in this study. If students who were not new to college life had been chosen to participate in the study, the findings might have been different. This would be a worthwhile focus for future research. The next chapter will provide a summary of the study.

Chapter Seven Implications and Conclusions

7.1 Introduction

This chapter provides a summary of the study. I will start off with the major findings and contributions of the study, and then draw pedagogical implications for the way CL is implemented in the EFL classroom. Finally, the limitations of the study will be discussed and suggestions for further research will be put forward.

7.2 Summary of the Findings

There is significant evidence to document the advantages of group interaction in learning a second or foreign language (e.g. Long & Porter, 1985; Jacobs, 1998; Crandall, 1999; Jacobs & McCafferty, 2006). Various types of CL in particular have been proven to be highly effective in improving language achievements of EFL learners (e.g. Ghaith & Yaghi, 1998; Ghaith, 2003; Yuan, 2003; Ghaith & EL-Malak, 2004; Chen, 2005; Yin, 2005; Han, 2006; Zhao, 2008; Deng, 2010; Jalilifar, 2010). Due to the scarcity of current research focusing on the efficacy of utilizing CL as an instructional approach to improve learners' oral proficiency in the EFL classroom, there was a need to investigate the impact CL would have in an EFL context. An important aspect of this study was that there was no explicit teaching of oral skills, so that any improvement could be assumed to be the effect of CL as such. Underpinned by the assumption that CL provides learners with output opportunities necessary for language development, the study aimed at finding out whether cooperative group work could be used to promote classroom communication, and thus to enhance learners' oral proficiency. It was designed to assess the effects of CL as an intervention on the oral proficiency of the students at a Chinese university. It also attempted to find out whether more interactive practice would contribute to the development of their strategic competence, in particular their interactional strategy use. Simultaneously, since the setting was an integrated skills course, it also explored the impact of CL on the general proficiency of Chinese learners in the EFL context. As a result of the intervention, the effects of CL on oral proficiency did not materialize as expected. The findings in this study can be summarized as follows:

- 1) Following the intervention, the quantitative analysis showed a null experimental effect on overall oral proficiency and on its components: vocabulary and grammar,

pronunciation and discourse management, but the effect on interactive communication was inconclusive.

- 2) On the whole, the ESs appeared to do somewhat better in interactional strategy use than the CSs after the intervention.
- 3) The EC and the CC improved equally in terms of general proficiency.

7.3 Contributions of this Study

A major contribution of this study shows the limitations of opportunities for meaningful, purposeful interaction in the EFL classroom in improving students' oral skills. As reviewed in Chapter Two, some research conducted in the language classroom (Deen, 1991; Pica & Doughty, 1985a, 1985b; Bejarano, 1987; Magee & Jacobs, 2001) has shown that there is more learner talk during group work. For example, in their study of teacher-fronted and group activities, Pica & Doughty (1985b) reported that more turns were taken by an individual student, more input was directed toward an individual student, and a greater quantity of language was produced by an individual student in the group than in the teacher-fronted communicative activities. According to the second language acquisition theory reviewed in Chapter Two, during interaction learners receive input, produce output and engage in the negotiation of meaning when the communication breaks down. The use of cooperative groups for communicative activities would provide more opportunities for learners to engage in linguistic experimentation and to interact with others. In this study the students were broken up into groups of mixed ability, with roughly comparable average English levels. Within the limited classroom time in the integrated skills course, the CL activities were structured to create opportunities for the students to communicate with each other. As a result of the meaning-focused interaction with their peers, a favourable impact of CL was not demonstrated on their overall oral proficiency. This shows the limitations of such CL activities in improving students' oral proficiency, and thus the study contributes importantly to CL research in helping to clarify the role CL might play in oral skills development, in combination with other measures such as explicit teaching (see discussion in 7.4.2 below).

This study has provided some insight into the issue of using CL to improve

university students' oral proficiency in China. As discussed in Chapter One, in order to cater for the great demand of competent users of English, in particular fluent speakers, developing students' oral ability has become an essential part of language teaching in China. Nevertheless, although reading and listening courses are currently offered in many universities, in practice students are given few opportunities to use the language for communication as described by Gao (2007). This is largely due to the traditional Chinese teaching methodology, the testing and evaluation system, large class size and limited classroom time. The study attempted to create opportunities for the students to interact with each other in the CL context, but the experimental condition did not make a difference in overall oral skills. In spite of this, as discussed in Chapter Six, the study has thrown light on the possible influential factors in using CL to improve students' oral proficiency in this specific EFL context. Given that the topic has not been widely researched, this study should be seen as an early attempt to investigate the CL effect on oral proficiency in the EFL context, offering a starting point for other researchers and scholars who are interested in learning about the CL effect on students' English achievement. Also, the students had experienced interactive practice in the CL context and this process could be beneficial to their further speaking practice. More importantly, the use of the CL activities did not result in a loss of general proficiency. Therefore, this study opens up the possibility for further trials using this approach.

In addition, in this study the application of the framework created for interactional strategies in the conversation analysis seems to have been successful and could be significant for future studies based on interactional data. For example, by analyzing the data on 'elaborating', we can examine the students' ability to engage constructively with each other's opinions in the conversation.

7.4 Pedagogical Implications for Language Teaching and Learning

Dörnyei & Malderez (1991) argue that 'the difficulty in understanding the exact nature of classroom events lies to a larger extent in the complexity of the classroom' (p.79). Despite a null experimental effect on overall oral proficiency, CL might improve learners' oral proficiency if we improve the way it is implemented. Mainly based on the possible influential factors discussed in Chapter Six, the implications for pedagogy with regard to the way CL is applied in the EFL classroom are drawn and presented below.

7.4.1 A ‘Training Period’ for a Shift to Learner-Centred CL from the Teacher-Fronted Approach

Working together has the potential to make the learning process more interesting and fun than in the wholly teacher-centred learning environment. Making themselves understood in English could give students pleasure and a sense of achievement. More importantly, CL provides them with an opportunity, to some degree, to take on a greater degree of responsibility for their own learning. However, Howatt (1984) and Holliday (1994) point out that the practice of pair and group work is not necessarily suitable in many foreign language contexts. In practice, as discussed in 6.2, owing to the classroom complexity in the research context, a ‘training period’ is necessary for a shift to learner-centred CL from the teacher-fronted approach. Firstly, it is vital for the teacher to explain to first-year students the objectives of college English learning and its characteristics, encouraging them to set up their short-term English study aims even if the final exam does not include a speaking component. It is also advisable to convince them that ‘language is for communicating with people and the more they engage in such face to face communication, the more their overall communicative competence will improve’ (Brown, 2001: 177).

To help students get used to the demands and expectations of CL as discussed in 6.2.3, teachers are recommended to give some training on how to play the different roles during the CL activity. Take the monitor as an example. The monitor moderates discussions, reinforces the members’ contribution and keeps everyone talking. To help them operate the group work better, the teacher may model how to organize, coordinate and give guidance during the CL activity. When the group processing is conducted, it is advisable to have some monitors to report back on the negative aspects of their group work as well as the positive aspects. This may give them an opportunity to exchange the experience in monitoring their group work and to learn from each other. Also, everyone is supposed to have an equal opportunity to take part in the CL activity. As the saying goes, ‘there are no low-achieving students but differences between students’. Lack of group dynamics will lead to the situation where only a few students benefit from CL activities. It is suggested that the teacher should lay emphasis on the group progress and encourage the group to form an atmosphere of helping low achievers on their own initiative. Low achievers should be encouraged to play their roles with confidence in each CL activity, while high achievers should be encouraged to provide language

guidance and assistance to low achievers, and be convinced of the benefits from doing so. As reported in 3.6, in the middle and at the end of the experiment, the students were asked to conduct a stage evaluation focusing on CL and spoken English performance, and were given a final mark to be encouraged to make further effort in their CL activities. It is recommended that this mark should be part of their final term English assessment so as to provide further motivation for them to work on their oral skills. It is also recommended that the university reform the present evaluation system and speaking become a component of the assessment of students' English level in the final term exam.

7.4.2 Explicit Teaching of Oral Skills

Explicit teaching is an approach in which students are provided guided instruction for understanding rules and given specific information about a language involving conscious operations as hypothesis formation and testing (Richards & Schmidt, 2002). It involves directing student attention toward specific linguistic features through demonstration, explanation and practice. To help students improve the quality of their spoken English, it is suggested that direct instruction be given in oral skills. First, students may benefit substantially from the input of lexical chunks. Lexical chunks include words, phrasal verbs, polywords, collocations, idioms and sentence frames. They can be easily recalled and used as learners do not need to compose them on the spot through word selection and sequencing grammar. As they are stored and retrieved comprehensively, and require less processing capacity, 'chunks can be a productive base on which general linguistic performance is built and boosted' (Zhou, 2005:80). Given that there exist such problems as inappropriate choice of words and disfluency in Chinese university students' oral proficiency, Shi (2007) argues that the input of lexical chunks would help to promote their oral proficiency in fluency and accuracy. Lewis (1993) argues that the Lexical Approach is not a break with the Communicative Approach, but a development of it. The result of Wang's (2009) experiment indicated that the input of lexical chunks produced a significant effect in improving the students' spoken English in fluency and accuracy. When setting up the CL activity, it is advisable to have students brainstorm as a class to preview what lexical chunks they might use in the activity, eliciting what they already know and supplementing what they are able to produce themselves. It is also recommended that students be provided with relevant lexical chunks for the CL activity and required to recite them before coming to class.

The provision of lexical chunks would allow students to have the language to draw upon to express their views, thus helping them develop communicative efficiency in speaking.

It is likely that a need for incidental focus on form would be helpful in the CL activities. CL has been embraced as a way of promoting communicative interaction in the classroom and is seen as an extension of the principles of communicative language teaching (Richards & Rodgers, 2001:193). In a communicative context, teachers are encouraged to leave more of the initiative to learners and involve them in the use of the target language through meaningful exchange of ideas and information. Hence, teachers are advised to step back, observe and intervene after setting up the CL activity. As in other task-oriented contexts, the learner does not attempt to correct another learner's linguistic forms (Paul, 1999). Muranoi (2007) also argues that 'accuracy is an aspect of L2 proficiency that is not easily affected through performing a communication task alone' (p.75). As a result, this might 'increase the availability to second language learners of non-native, potentially ungrammatical samples of target English as produced by their classmates' (Pica & Doughty, 1985b:132). It is implied that learners in the CL context may unconsciously get incorrect feedback from their peers. During the face-to-face communication, they may produce certain types of mistakes such as incorrect pronunciation, wrong choice of vocabulary and structural errors. As Long (1991) notes, '...focus on form...overtly draws students' attention to linguistic elements as they arise incidentally in lessons in which the overriding focus is on meaning or communication' (p.45-46). Incidental focus on form has many potential benefits for language development in meaning-focused instruction. For example, it can raise learners' awareness of target-like features and thus they notice a gap between these features and those in their own interlanguage. Learners in communicative language classes show considerable gains in accuracy if communication tasks are complemented by corrective feedback and other types of focus on form (Williams, 2001; Williams & Evans, 1998). Loewen's study (2005) on the effect of incidental focus on form in a meaning-focused context suggested that incidental focus on form helped to improve learners' linguistic accuracy. Keeping in mind that mistakes are inevitable and a natural part of the learning process, it is advisable for teachers to observe group members in order to see what typical language problems they are having in completing a task, and to provide them with language support in terms of useful vocabulary and structures

(Richards, 1995), or useful feedback so as to improve their comprehension of the message itself as well as accuracy of form. After completing a task, students might be asked to reflect on some of their linguistic characteristics of their performance. As Skehan (1996) suggests, it would be helpful 'to devise methods of focusing on form without losing the values of tasks as realistic communicative motivators, and as opportunities to trigger acquisition processes' (p.42). It should be pointed out that the large class size in the study was a big challenge for the language teacher.

It would be also worthwhile to teach cohesive devices in spoken English. In the speaking test, discourse management required the students to be able to convey information and state opinions coherently. In other words, it refers to the ability to link ideas and language together to form coherent and connected speech, and the utterances should be relevant to the tasks and to preceding utterances. The CL approach in this study involved tasks and activities in which participants were primarily concerned with message exchange without the discourse structure itself being the focus of attention. It is likely that as the students tried to express their intended meanings spontaneously, they were unable to direct their attention to the coherency of their utterances such as the use of cohesive devices within and between sentences. Moreover, as English discourses are different from their native ones, being able to convey information orally in a way that is coherent to the hearers requires some discourse knowledge, and is more challenging than in written texts. Textual cohesion can take the form of reference, substitution (e.g. *one, do* and *so*), ellipsis, conjunction (e.g. *and, but, yet, however, because, for this reason* and *after that*) and lexical ties (e.g. *repetition*) (Halliday & Hasan 1976). In the meaning-focused activities, it is advisable to give instruction in these cohesive elements, helping the students raise their awareness and improve their use of cohesive devices to make coherent and organized oral discourses.

In addition, it would be helpful to teach some interactional strategies to enhance group interaction. Research has shown that the training of interactional strategy use in the EFL classroom can help to improve students' communicative interaction in groups and their oral proficiency (e.g. Bejarano et al, 1997; Nakatani, 2005). For example, in a study on the impact of the oral communication strategy training on EFL learners' oral proficiency, Nakatani (2005) found that his participants in the strategy training group had made higher gains in oral proficiency than their counterparts in the control group at

the post-intervention stage. As the learners in my EFL context often experience communication difficulties, strategies such as appealing for help, asking for repetition, repairing, requesting and giving clarification may help them enhance cooperative group interaction and improve their oral communication ability as well. In particular, this could provide students with interactional strategies for negotiation of meaning when communication breaks down. As Naughton (2006) suggests, ‘the teacher should be responsible for modelling strategic interaction and for providing support to the students so that they can progress toward the autonomous use of such strategies (p.179)’. When they have control of the interactional strategies, they may gain confidence in their ability to manage various communication situations that they may encounter outside the classroom.

7.4.3 Providing Positive Affective Feedback

Ghaith’s study (2002) in an Asian EFL context suggests that CL is positively related to the degrees of academic and personal support provided by the teacher. Apart from academic help, teachers need to provide positive affective feedback to ensure continued communication and encourage student effort to interact in the target language. As some scholars (e.g. Slavin, 1990; Johnson & Johnson, 1994b) state, the CL classroom is a place where students support each other personally and academically to complete their tasks. In order to encourage students to do this and make speaking in the target language more effective, the way the teacher acknowledges their contributions by agreeing, disagreeing or challenging them is important. Group members who feel encouraged will proceed to discussing ideas that relate to the task. This involves perspective taking, agreeing to disagree, taking turns, listening with respect, playing their own roles and sharing responsibilities. As discussed in 6.2.4 and 6.2.5, in the EFL context, owing to their limited English proficiency, some learners may have found it rather threatening to speak in the target language. During the CL activity, the teacher should show more concern for these learners. When they have difficulty, the teacher should give them not only guidance on expressions, but also encouragement. Once they have made some progress in their oral skills, timely positive comments are very necessary. This would encourage them to take more risks when trying to use the language. High achievers should be encouraged to realize their potential and take a further step in their learning.

7.4.4 Task Difficulty and Task Planning

It is unlikely that simply engaging in more interaction will automatically lead to one's engaging better in interactions or improving one's communicative competence (Aston, 1986, cited in Rost & Ross, 1991). In other words, what contributes to development is the quality of exchanges. If CL activities do not encourage the use of the target language, they are unlikely to achieve desired results. Task complexity plays an important role in its implementation. Skehan & Foster (2001) argue that 'knowing what demands the task will make opens up the possibility of using task design to manipulate the learner's attention between form and meaning in ways that may help interlanguage development' (p.194). As Skehan & Foster (2001) suggest, for the task design, the following principal areas should be taken into consideration: language and cognition. The linguistic demands of the task such as vocabulary, grammatical structures and tenses should be suitable for learners' current level. Another consideration is the cognitive complexity of the task's content. Take reading comprehension questions as an example. The reading comprehension questions should be appropriately designed based on learners' level. This would enable learners to process not only the literal meaning of the text but also its inferential meaning within the designated time in class so that they can use it as a source to discuss the content, express their opinions or question the opinions of others.

Also, empirical studies have revealed the positive impact of planning time on learner performance. For example, Foster & Skehan (1996) conducted an empirical study to examine the effects of planning time on learner performance on communication tasks, and found that there were strong impacts of planning on fluency and complexity. It is suggested that learners should be given a certain amount of planning time and some guidance as to how to prepare for a particular CL task. The teacher may help them notice what language is required to do this task and provide necessary help. Given that the instruction time in the present EFL context is quite limited, it is recommended that learners prepare the task before they come to class. To improve learners' communicative efficiency in carrying out the CL activity, appropriate task design, a certain amount of planning time and guidance are necessary, and are likely to affect their performance.

7.4.5 Regrouping Students to Improve Interaction Patterns When Necessary

When we put emphasis on the cooperation to enhance group dynamics and

individual behaviour in the language classroom, it is necessary to take the nature of student interaction patterns into consideration. In a study of the nature of dyadic interaction in an adult ESL classroom, Storch (2002) argued that since ‘the patterns of dyadic interactions remain stable over time and across tasks, this suggests the need to allow or encourage learners to change partners when dominant/dominant or dominant/passive patterns are noted’(p.149). These interaction patterns are not collaborative and probably existed in this study although the groups were formed heterogeneously with different English levels. As discussed in 6.2.4, it is likely that some students dominated the group work and it was not a joint construction. Some students remained passive in group interaction because their English proficiency was limited or because they had their own preferences. As a result, they may have simply sat back and not actively participated in the learning process with their peers, nor provided support for their peers. Bygate (2001) notes that ‘different people will do tasks in different ways and a variety of partners could provide valuable learning opportunities’ (p.35). Since the groups in this study were required to stay unchanged for the whole period of the intervention, implied by Storch’s finding (2002) about the stable interaction patterns, it is suggested that groups be reformed after a certain number of weeks of study to improve interaction patterns between group members.

In this part, some suggestions on CL implementation in the EFL context have been made. Could some changes in CL implementation challenge students to take a further step to use language for communication? Could better cooperative interaction in the EFL classroom become a dynamic source of English development? In order to see whether changes in CL implementation could contribute to learners’ oral proficiency development, it is important to apply them to the EFL classroom, collect data and evaluate their outcomes. For example, what impact could CL with explicit teaching of oral skills have on learners’ oral proficiency in the EFL context? Future research will be recommended in 7.6 below.

7.5 Limitations of the Study

No research can be perfect. In common with much research into second language interaction, the study was conducted in a real classroom setting with a small sample, so it unavoidably had some limitations.

The quantitative findings revealed a null experimental effect except for a possible but inconclusive gain in the students' interactive communication. There was only about 12 hours for the CL activities in total, which is quite a short period of time to test the effectiveness of CL. Another limitation of the study was the small sample size. Therefore, the findings need to be treated with caution.

The oral post-test took place immediately after the intervention and may have measured only short-term CL effects on oral proficiency, which may not have been replicated in a delayed post-test. Given the time constraints of the research project, a delayed post-test measure could not be used in this study.

Another limitation of the current study concerns the problems involved in coding the interactional strategy data. Ideally, to ensure reliability, an independent trained observer should have checked the coding of the interactional strategies in the transcriptions. It is likely that the researcher's subjective judgement of the interactional features occasionally led to inconsistencies involved in this study.

In the quasi-experiment, there were many extraneous variables that the researcher could not control. Classroom-based studies such as this study, with the use of intact classes and a small sample size, may not be generalizable to a larger population of learners. However, studies using intact classes are 'more likely to have external validity because they are conducted under conditions closer to those normally found in educational contexts' (Seliger & Shohamy, 1989:149). Since this experiment was conducted only at a university, the results may only be generalized to similar universities in China, and may not be generalized to all the foreign language learners or institutions in China.

7.6 Directions for Future Research

The study was a preliminary exploration of the way to improve Chinese students' oral proficiency through a CL approach. It cannot, however, be considered as the end of the research journey. The following, therefore, provides some directions and recommendations for future studies.

Because there are a multitude of factors influencing language learning in the real

classroom, replicated research needs to be conducted in several institutions to see if results are comparable.

The study was conducted with the students studying Marketing as a major. Students studying different subjects have different English learning characteristics, so it is recommended that in further studies, students be selected from other subjects to observe the effectiveness of CL on oral proficiency.

The effects of CL on interactive communication were examined quantitatively with the speaking test scores, and the results suggested an inconclusive gain in it. To gain an in-depth understanding of their gain in interactional strategy use, the data from the speaking test and the classroom talks were examined, and the results revealed a small gain in this regard. Since there was an absence of a definite improvement in learners' interactional skills in the CL context, further research needs to be done as recommended below.

The long-term effects of the frequent interactive practice from CL activities, particularly when there is a shared L1 in the EFL context, are not known. Since the study was conducted for only 15 weeks, the results could differ from those of a long-term experiment. It is possible that a substantial conclusion about their interactional skills could be reached in a study with a larger sample over a longer period of time. Having better interactional skills, for example, might help learners keep conversations going in the group and could help keep everyone in the group involved. This in turn could mean more input and output opportunities. It would be worth investigating whether that would improve their overall oral proficiency in due course. Also, it is my observation--and the scholars (e.g. Van Lier, 1996) also point this out--that students who are actively involved in the learning process are much more likely to become interested in learning. Could CL activities encourage students to become more involved in what is learnt in class, leading to greater success in general proficiency? Therefore, it is recommended that a longitudinal study be carried out to see if these trends can be confirmed.

When the students were doing the CL tasks, their attention was on completing them and oral skills were not taught explicitly in between the tasks. The way CL was

implemented in this specific context did not result in improved overall oral skills. As suggested in 7.4.2 above, perhaps oral skills have to be taught explicitly and students' attention needs to be drawn to them. It has been argued that CL would provide students with more opportunities to interact with their peers than in conventional whole-class instruction. It is advisable to examine whether the provision of explicit teaching of oral skills would have an impact on learners' oral proficiency development in the CL context. For example, the effect of the input of lexical chunks in the CL context would be a worthwhile focus for future research.

There is no consensus in the literature regarding whether CL is beneficial to students of different prior achievement levels. Based on the findings of the experimental studies on the effect of CL on the academic achievement of high and low achievers, Slavin (1995) summarizes that 'some studies found better outcomes for high achievers than for low, a few found that low achievers gained the most, and most found equal benefits for high, average and low achievers in comparison to their counterparts in control groups' (p.5). It would be worthwhile to examine the impact of CL on the oral proficiency of low and high achievers in this EFL context.

In a small-scale study on Chinese student behaviour in groups in the EFL classroom, Chen & Hird (2006:102) indicate that 'what can work in a certain way for one group and even for some students within a group will not necessarily work in the same way for other groups or for other individuals within the same group'. To understand why CL works better for some students than for others, it is necessary to examine students' experiences in collaborative group (Webb & Palincsar, 1996: 852). There is still a lack of knowledge about Chinese learners' perceptions of the enjoyment of CL and its effectiveness on their oral proficiency. It is thus suggested that their perceptions in this regard should be explored.

7.7 Concluding Remarks

Hall (1995:38) notes that interactive practice activities play a very important role in the EFL classroom in that they are often the only communicative patterns to which the students are exposed. Similarly, as Johnson (1995) puts it, 'student-student interaction in second language classrooms will more than likely have a positive impact upon students' opportunities for both classroom learning and second language

acquisition (p.128)'. Tong-Fredericks suggests (1984) that pair/group work, if structured and managed properly, can facilitate language development. Given that there are a number of influential factors in language learning and such research on the effects of CL on learners' oral proficiency is still in its initial stage, further research needs to be done to add to the findings of the present study.

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Appendices

Appendix A

The Analytic Scoring Scales for Assessing the Speaking Test

1. Grammar and Vocabulary (5 points)

- 0: Impossible to understand or insufficient to assess.
- 1: Most grammar is incorrect, and lack of vocabulary and inappropriate use of words.
- 2: Some features of 1 and some of 3.
- 3: Grammar is basically correct. Despite some grammatical mistakes, words are appropriately used in most cases.
- 4: Some features of 3 and some of 5.
- 5: Most grammar is correct and there are few mistakes. Appropriate use of a wide range of vocabulary.

2. Discourse Management (5 points)

- 0: Impossible to understand or insufficient to assess.
- 1: The language knowledge used can't fulfil the required task. Very few utterances are produced, and lack of coherence.
- 2: Some features of 1 and some of 3.
- 3: Use of fairly rich language knowledge, but sometimes lack of coherence.
- 4: Some features of 3 and some of 5.
- 5: Use of rich language knowledge, and ability to express coherently and discuss when necessary.

3. Pronunciation (5 points)

- 0: Impossible to understand or insufficient to assess.
- 1: Inadequate knowledge of stress and intonation patterns, thus utterances are unintelligible in most cases. The accent of the mother tongue makes it difficult for the listener to understand.
- 2: Some features of 1 and some of 3.
- 3: Be able to pronounce sounds and use stress and intonation patterns fairly correctly so as to make himself understood. The accent of the mother tongue sometimes causes some understanding difficulties.

- 4: Some features of 3 and some of 5.
- 5: Be able to pronounce single sounds correctly and appropriately use rhythm features.
Have a clear accent of the mother tongue, but it does not cause any understanding difficulty.

4. Interactive Communication (5 points)

- 0: (Almost) no interaction with the interlocutor/partner.
- 1: Unable to communicate most of the time despite making an attempt. Inability to keep the language flowing fluently, and the pauses in the utterances need great patience of others. Prompts and help are needed. Answers are inappropriate and irrelevant.
- 2: Some features of 1 and some of 3.
- 3: Be able to display the communicative ability to fulfil the required task. Sometimes lack of sensitivity in communication but able to ask and answer and initiate a topic to keep the communication going. Sometimes there are pauses when organizing the language. Prompts and help are not needed.
- 4: Some features of 3 and some of 5.
- 5: Be able to display very good communicative ability. Be able to keep effective communication and there are occasional pauses in organizing ideas. Be aware of when to initiate or sustain utterances. No prompts are needed.

(From *the Handbook for PETS Interlocutors and Assessors*, 2003: 42)

Appendix B

The English Speaking Test Paper

(10 minutes)

Part One Each candidate interacts with the interlocutor. (3 minutes)

1. The interlocutor and the candidate introduce to each other (I: interlocutor).

I: I'm _____, the oral English test teacher.

I to A: What's your name?

A: _____.

I: Thank you.

I to B: And your name?

B: _____.

I: Thanks.

2. The interlocutor asks the candidates questions in turn about personal information, experiences, etc.

I: First of all, we'd like to know something about you, Candidate A, so I'm going to ask you some questions.

- 1) Do you often surf the internet?
- 2) What do you usually do on the internet?
- 3) Have you ever made any friends through the internet?
- 4) Can you tell me any advantages of the Internet?

I: Thank you. Now we'd like to know something about you, Candidate B, so I'm going to ask you some questions.

- 1) Do you have a lot of friends?
- 2) Are you good at making friends?
- 3) What can you learn from your friends?
- 4) What do you think are the advantages of making friends?

Part Two Two candidates interact with each other (3 minutes)

I: Now, I'd like you to talk about something for about 3 minutes. I am just going to listen. In the past, college students usually lived in the dormitories, but now things have changed.

(Place the picture sheet in front of the candidates.)

This is the picture for you two. The picture shows four living patterns: 1. living on campus; 2. renting a house with classmates or friends; 3. renting a house by yourself; 4. living with parents.



I'd like you to talk to each other about the living pattern you like best. It is not necessary for you to agree with each other. You have only about 3 minutes for this, so don't worry if I stop you. Please speak clearly so that we can hear you.

Candidates: **(Discuss the subject for about 3 minutes.)**

I: Thank you. **(Retrieve the picture)**

Part Three Each candidate expresses his/her own ideas (4 minutes)

Topic One

I: Now, I'd like each of you to talk on your own for about one and a half minutes. I'm going to give each of you a different picture and I'd like you to talk about it.

Candidate A, here is your card: A girl is studying English. Please let **Candidate B** have a look at it.

(Hand over the picture sheet to Candidate A.)



I: I'd like you to describe the picture and also tell us what you think of it. Remember you have only about one and a half minutes for this, so don't worry if I stop you.

Candidate A: (Discuss the subject for about 1.5 minutes)

I: Thank you. **(Retrieve the picture.)**

Candidate B, is there anything else you would like to say about the picture?

Candidate B: (Discuss the subject for about 30 seconds.)

Topic Two

I: **Candidate B**, here is your card: Three boys are in the dormitory. Please let **Candidate A** have a look at it.

(Hand over the picture to **Candidate B**)



Candidate B: I'd like you to describe the picture and tell us what you think about it. Remember you have only about one and a half minutes for this, so don't worry if I interrupt you.

Candidate B: (Discuss the subject for about 1.5 minutes)

I: (Retrieve the picture)

Candidate A, is there anything else you would like to say about the picture?

Candidate A: (Discuss the subject for about 30 seconds.)

I: Thank you. This is the end of the test.

Appendix C

The Pre-task and the Post-task

The Pre-task

Topic: What things do you think are important for an ideal roommate?

Talk about it with your group members. You can have your own idea, but there are some suggestions that you can talk about: personality, study habits, life style, interests and hobbies.

The Post-task

Topic: What do you think is important in your college life besides your major study?

Talk about it with your group members. You can have your own idea, but there are some suggestions that you can talk about: to improve English, to do a part-time job, to build up friendships and to do some sports.

Appendix D

The Rating Scales for the Writing and Translation Task

Key to Paper A of College English Final Exam, Term One of the 07-08 Academic Year

Translation (10%)

Marking principle: be loyal to the original with appropriate words and without grammatical mistakes.

86. I shouldn't have gone to bed so late last night

1 0.5 0.5

87. By the time the football match was going to start

0.5 0.5 1

88. Whoever is responsible

1 1

89. It was nothing more than a joke

0.5 1 0.5

90. but that's not the case

0.5 0.5 1

Writing (15%): Marking principles

- 1) The final exam of College English aims to check whether the students of Grade 07 have met the teaching requirements of the College English Syllabus, so the rating scale for the writing task should be based on the requirements.
- 2) To imitate the global marking of CET-4 writing. A holistic mark is given based on the whole impression, but no deductions should be made for the mistake number of language points.
- 3) To give a holistic evaluation about writing based on its content and language. Content and language are an entity, so writing should express the content that it requires, and the content should be expressed through language. To consider whether writing is pertinent to the given topic, whether it fully expresses, whether it expresses ideas clearly in English, and whether the language errors will cause barriers to understanding, the rating scales are as follows.

14 points: be close to the given topic, clear ideas, very coherent,

fluent and natural language without language errors.

11 points: be close to the given topic, clear ideas, very coherent, but a few language errors.

8 points: to meet the requirement of the given topic basically, fairly clear ideas, fairly coherent, but quite a few language errors and some of them are serious ones.

5 points: to meet the requirement of the given topic basically, but ideas are not clearly expressed, lack of coherence with many serious language errors.

2 points: unclear consecution, disorganized ideas, broken language, and many sentences contain errors and most of them are serious ones.

4) According to the rating scale of CET-4 writing, apart from the examination on its content and language use, there is a clear requirement for its word length as follows.

Word number between 90-99, deduct 1 point;

Word number between 80-89, deduct 2 points;

Word number between 70-79, deduct 3 points;

Word number between 60-69, deduct 4 points;

Word number between 50-59, deduct 5 points;

Word number below 50, a maximum of 5 points only.

Appendix E

The Informed Consent Form (in Chinese)

同意书

您将参与的这项实验研究主要是探讨中国学生英语口语水平的提高情况，在2007-2008 学年的第一学期进行。

您在这项研究中的角色是学习“大学英语”这门课程。将进行口语前、后测以了解你们的口语水平通过一个学期的学习是否有提高。实验前后您将被邀请参加口语测试。在课程学习中，您的部分课堂对话将录音。此外，您的高考英语成绩和期末英语考试成绩也将用于本项研究。

您提供的所有信息资料将会严格保密。在撰写研究报告中将不会出现您的名字。一旦本项研究完成，将给您一份简要的研究结果报告，并希望对您的英语学习有帮助。

如果您对本项实验研究有任何疑问，请向我提出。如果您同意参与本项研究，请在下面签名。

参与者签名：

日期：

研究人员签名：

日期：

The Informed Consent Form (in English)

The research project in which you will participate is to examine the development of Chinese students' oral proficiency. It will be conducted during the first term of the Academic Year 2007-2008.

Your role in this project is to carry out the instructions in the integrated skills course. The oral pre-test and post-test will be conducted to determine whether your speaking ability will improve over this term. You will be invited to take these tests before and after the experiment. During the course, some of your classroom talks will be recorded. In addition, your college entrance English exam and your final term English exam results will be used in the study.

All of the information that you provide will be kept completely confidential. When I write up my report, I will never use your own name. I shall give you a summary of my findings once the research is finished and hope that you find it helpful in your English study.

If you have any question about the research project, please feel free to ask me. If you agree to participate in it, please sign below.

Signed

Participant:

Date:

Signed

Researcher:

Date:

Appendix F

Samples of How Each CL Technique Was Implemented

(The first six samples are from Unit One and the last one is from Unit Two.)

1. Group Discussion (10 minutes)

Pre-Reading exercise on P3 in Unit One (see P181 below)

Topic: Would you give your time, your favourite books, your money or your blood to a friend/a stranger?

Structure: I would give _____ to _____. Why?

I would not give _____ to _____. Why?

Requirements:

- 1) Play the different roles (monitor, secretary, timekeeper and checker) in the group.
- 2) Make sure that everyone gets a chance to talk.
- 3) Talk to each other for 8 minutes.
- 4) Report your group summary to the class.

2. Think-Pair-Share (20 minutes)

1) Read the text *The Gift of Life* on P3-5 in Unit One (see P181-183 below) for 10 minutes and think of the following questions.

- a. *When did the story happen?*
- b. *What happened to the young girl?*
- c. *What did the doctor say she needed?*
- d. *What did Heng think he was doing?*

- 2) Pair up: ask and answer the questions with your partner for 5 minutes.
- 3) Share your answers with the class.

Part Two

READING-CENTERED ACTIVITIES

In-Class Reading

Pre-Reading

Directions: Work in groups to discuss whether you would give your time, your favorite (最喜欢的) books, your money, or your blood to

- 1) a friend;
- 2) a stranger.

Passage Reading

The Gift of Life

1 The bombs landed¹ in the small village. Nobody knows what these bombs were supposed to hit during the terrible Vietnam War, but they landed in a small orphanage run² by a missionary group.

2 The missionaries and one or two children were killed, and several children were wounded, including one young girl, about eight years old, who suffered 5 wounds to her legs.

3 A couple of hours later, medical help arrived. The medical help was a young American Navy doctor and an equally young Navy nurse. They quickly found the young girl to be very badly injured, and it was clear that without immediate action, she would die from loss of blood and shock³. 10

4 They saw that she had to have blood, but their limited supplies did not include plasma, so a matching blood type⁴ was required. A quick blood typing⁵ showed that neither American had the correct blood type; however, several of the uninjured orphans did⁶.

5 The doctor spoke a little Vietnamese, and the nurse spoke a little high- 15
school French. The children spoke no English but some French. Using what
little common language they could find, together with a lot of sign language⁷,
they tried to explain to the frightened children that unless they could give
some blood to their little friend she would certainly die. Then they asked if
anyone would be willing to give blood to help. 20

6 Their request was met⁸ with wide-eyed silence. Their little patient's life
hung in the balance. Yet they could only get the blood if one of the frightened
children would agree to give it. After several long moments, a little hand
slowly went up, dropped back down, and a moment later went up again.

7 "Oh, thank you," the nurse said in French. "What is your name?" 25

8 "Heng," came the reply.



9 Heng was quickly laid on a
bed, his arm cleaned with
alcohol, and the needle in-
serted into his arm. 30
Through all of this Heng
lay stiff and silent.

10 After a moment, he let
out a long sob, quickly cov-
ering his face with his free hand. 35

11 "Is it hurting, Heng?" the doctor asked.

12 Heng shook his head silently, but after a few moments another sob es-
caped⁹, and again he tried to cover up his crying. Again the doctor asked him
if the needle in his arm was hurting, and again Heng shook his head.

13 But now his occasional sob turned to a steady, silent crying, his eyes 40
held tightly shut, his fist in his mouth trying to stop his sobs.¹⁰

14 The medical team now was very worried because the needle should not
have been hurting their tiny patient.¹¹ Something was obviously very wrong.
At this point, a Vietnamese nurse arrived to help, and seeing the little one's
tears, she spoke rapidly in Vietnamese, listened to his reply, and quickly an- 45
swered him again. Moving over to pat his head as she talked, her voice was
gentle and kind.

15 After a moment, the little boy stopped crying, opened his eyes, and looked
questioningly at the Vietnamese nurse. When she nodded, a look of great
relief spread over his face. 50

16 Looking up, the Vietnamese nurse said quietly to the Americans, "He
thought he was dying. He misunderstood you. He thought you had asked him
to give all his blood so the little girl could live."

- 17 "But why would he be willing to do that?" asked the Navy nurse.
 18 The Vietnamese nurse repeated the question to the little boy, who answered simply, "She's my friend."
 19 Greater love has no man than this, that he lay down his life for a friend.¹²

(597 words)

Time taken: _____ minutes

● Proper Names

- Heng** /heŋ/ 兴 (文中为一个越南小男孩的名字)
Vietnamese /ˌvjetnə'mi:z/ *n.* 越南语 *adj.* 越南的
Vietnam /ˌvjet'næm/ **War** 越南战争 (1954~1975)

● New Words

action /'ækʃən/ *n.*

- 1) (the process of) doing something, typically to achieve an aim 行动, 行动过程

e.g. I) They met to discuss a plan of action.

- II) She was looking forward to putting her ideas into action.

- 2) something that someone does 所作所为, 行为

e.g. I) The chief of the police tried to justify (辩护) his actions.

- II) People were judged by their actions, not their thoughts.

alcohol /'ælkəhɒl/ *n.*

- 1) a colorless liquid that can make you drunk when it is part of a drink, and it is also used as a solvent (溶剂) 酒精

e.g. I) Alcohol burns easily and can be used as a fuel.

- II) Most wines contain between 10% and 15% alcohol.

- 2) drinks such as beer, wine, and whisky 酒

e.g. I) I never touch alcohol in any form.

- II) We are not allowed to serve alcohol to people under 18.

balance /'bæləns/ *n.* the state of being in a

steady position in which weight is evenly spread
 平衡, 均衡

e.g. I) You need a good sense of balance to ride a motor bike.

- II) She had to hold onto the railings (栏杆) to keep her balance.

bomb /bɒm/ *n.* an explosive device 炸弹

e.g. I) Several tons of bombs were dropped on the city.

- II) The terrorists had planted a bomb near the police station.

***including** /ɪn'kludɪŋ/ *prep.* having as a part 包括, 包含

e.g. I) The price is \$25.50, including postage and packing (邮资和包装).

- II) Including you and me, there'll be eighteen people at the party.

injure /'ɪndʒə(r)/ *v.* harm or hurt a person, animal or part of the body 伤害, 损伤, 损害

e.g. I) David was badly injured in the accident.

- II) Angus injured his leg playing football yesterday.

insert /ɪn'sɜ:t/ *v.* put something inside or into something else 插入, 嵌入

e.g. I) She inserted the letter into an envelope.

注: 根据《大学英语课程教学要求(试行)》参考词汇表, 无标记词为一般要求词汇; ★为较高要求词汇; ▲为更高要求词汇; #为大纲外词汇。

3. Roundrobin (15 minutes)

The students are asked to retell the story *The Gift of Life* in Unit One (see P181-183 above) in groups.

Requirements:

- 1) Take turns to say one sentence about the story.
- 2) The turn to speak passes around the group for as many rounds as possible.
- 3) Offer and ask for help when necessary.
- 4) The secretary takes down the number of the sentences the group can speak.

4. Timed-pair-share (15 minutes)

Exercise 4 on P29 in Unit One (see P185 below)

Topic: Talk about your personal experience that made you feel good or what you did to others that made them feel good.

Requirements:

- 1) Talk to your partner about your experience for 2 minutes.
- 2) Your partner should listen to you carefully.
- 3) If you have not used 2 minutes, your partner will have to ask questions to keep you talking.
- 4) Switch roles.
- 5) Share what your partner said with the class.

4 It Made Me Feel So Good

● STEP ONE

Read the following story Young had when she was in the US for the first time.

Many years ago, I went to the United States to study at the University of Utah. There had been Chinese students at U of U, but none of them were studying in the same department as I was. So I often felt very lonely, especially during the first few weeks of my stay there. I believe a lot of people have the same feeling when they are in a new country.

However, I'll never forget what happened to me during the first day of class.

After I got through all the formalities (办完各种手续) in the university as a student, I began to get things ready for the classes I was going to take, feeling nervous because of the new environment, new classes and unknown people I was going to deal with. Finally the time came when I had to go to class.

There weren't many students there when I entered the classroom. I chose a front seat, waiting. Then I felt someone was approaching me and then sat next to me and said, "Hi, I'm Rosemarie." "Hi, I'm Young Hong," I replied quickly. Then she tried several times to be able to say my name correctly. After that she gave me a note, "This is my phone number. Call me when you need my help." Oh, you can imagine how grateful I was to her at the time, and it made me feel so good.

● STEP TWO

Work in small groups to talk about your personal experience that made you feel good or what you did to others that made them feel good.

5 When Your Neighbor Is in Need of Help

● STEP ONE

Look at the following pictures carefully and then work in pairs to describe what has happened according to the pictures.

Words and Phrases You May Use:

mid-night 半夜 neighborhood 居住区
 police 警察 attack 袭击 terrified 惊恐万状
 scream 歇斯底里地叫喊 selfish 自私的
 be indifferent to 对……无动于衷
 revenge 报复 pretend 假装
 frighten somebody out of doing something 吓
 得某人不敢做某事
 cowardly 胆小的 helpless 无助的
 stab someone 用刀捅某人



● STEP TWO *Discuss in groups the following questions.*

- 1) Why do you think people did nothing to help the woman?
- 2) What would you do if you saw the woman being attacked?

5. Brainstorming (15 minutes)

Topic: How to Keep on Good Terms with Roommates

(This topic was given according to the theme of Unit One *Personal Relationship*.)

Requirements:

- 1) Play the different roles (monitor, secretary, timekeeper and checker) in the group.
- 2) Generate as many ideas as you can in the group.
- 3) Make sure everyone gets a chance to talk.
- 4) Talk to each other for about 8 minutes.
- 5) Report your group summary to the class.

6. Three-Step Interview (15 minutes)

Exercise 2 on P34-35 in Unit Two (see P187-188 below)

(The topic was designed based on *Step Three* so that everyone had something to share with their peers.)

Topic: Have you ever had any embarrassing/happy/exciting experience?

Questions: When/Where did it happen? What was it about?

Why did you feel embarrassed/happy/excited?

Requirements:

- 1) Interview your partner for 4 minutes.
- 2) Switch roles.
- 3) Share with the group what you have got from the interview.

Column A

- 1) Can you believe that Anne failed the exam? She studied really hard for it.
- 2) I was so embarrassed. I went up to her and shook her hand but she clearly didn't remember who I was.
- 3) Do you still remember where we first met each other?
- 4) I find physics so boring.

Column B

- a. That place in Paris. What's it called? It's on the tip of my tongue. Oh yes—La Geode.
- b. She told me that when she saw the paper her mind went blank.
- c. So do I. It just goes in one ear and out the other.
- d. She can never remember people's names —her head's like a sieve.

2 Do You Have a Good Memory?

STEP ONE

Tick the right items to complete the following quiz on memory.

I can remember

- | | |
|--|-------|
| my parent's birthday. | _____ |
| what I had for dinner last night. | _____ |
| what "hang in the balance" means. | _____ |
| the names of all the students in my group. | _____ |
| the year when World War II broke out. | _____ |
| the last conversation I had with my good friend. | _____ |
| when this term began. | _____ |
| the year the first man landed on the moon. | _____ |
| the face of my math teacher in high school. | _____ |
| where the 1996 Summer Olympics were held. | _____ |
| what I was wearing last Friday. | _____ |
| the name of my English teacher. | _____ |
| the smell of garlic (蒜). | _____ |
| at least 10 people's telephone numbers. | _____ |
| the population (人口) of China. | _____ |
| the way to the library. | _____ |
| when I last caught a cold. | _____ |
| the number of students in my class in high school. | _____ |
| the words of at least three songs. | _____ |
| who invented the telephone. | _____ |

● STEP TWO

Score one point for each tick and add up your score. If your score is above 15, you may have a good memory. Then refer back to the quiz and talk with your partner about the things you are good/bad at remembering: names and faces, phone numbers, birthdays, conversations you've had, facts and figures, messages, shopping lists, etc. Discuss with your partner the reasons why you are extremely good at remembering certain things, while poor at recalling other things.

● STEP THREE

Have you ever had any embarrassing experience because you forgot any of these things? If yes, share with your partner.

Words and Phrases You May Use:

be good at 擅长 have a poor memory 记忆力差 interest 兴趣 motivation 动机
direct one's attention 引导某人的注意力 recall facts 回忆事实 concentrate 集中(注意力)
effective 有效的 cover up one's embarrassment 掩饰某人的尴尬 turn out 关闭

3 How to Remember Clearly?

● STEP ONE

Look at the following pictures and discuss with your partner what method the man is using to recall his shopping list in each of the cases.

