# *Developing* the writing skills of ESL students through the collaborative learning strategy

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# Table of Contents

## Abstract

The purpose of this study was to investigate the effectiveness of using collaborative learning to improve the writing skills of students of English as a second language. The aim was to determine whether students who were involved in collaborative leaning produced better written texts in terms of organization, development, coherence, structure, vocabulary and mechanics than students who wrote individually, and whether engaging in collaborative learning had a positive effect on the attitudes and perceptions of learners. The subjects of the study were 48 male Saudi Arabian university students distributed randomly in two groups: 23 were assigned to the experimental group and were taught to write essays collaboratively, while the other 25 were assigned to the control group and taught to write essays individually. Both groups of students were asked to write an essay and complete questionnaires at the beginning and at the end of the study. Four students from the treatment group were selected at random for interview at the end of the study. The experiment consisted of a total of eleven weeks of teaching writing skills. The post-test scores and questionnaire responses of students in the treatment group were compared not only with those of students in the control group but also with their pre-test scores and responses. The study results indicated that collaborative writing benefitted the students a great deal in terms of the quality of their writing (development, cohesion and organization); however, it was also found that collaborative writing did not help them much in terms of the accuracy of their writing (mechanics and structure). The analysis of the data obtained from the questionnaires and interviews revealed that the attitudes of students in the experimental group had improved after their involvement in collaborative learning settings. The overall conclusions were therefore that not only did students who wrote their essays in collaboration with each other produce better written texts than those who wrote their essays by themselves, but also that involvement in collaborative learning had a positive effect on the students' attitudes towards writing in English

## LIST OF APPREVIATIONS

| | |
|---|---|
| L1 | First Language |
| L2 | Second Language |
| ESL | English as a Second Language |
| EFL | English as a Foreign Language |
| CL | Collaborative learning |
| CW | Collaborative writing |
| ELTD | English Language and Translation Department |
| QU | Al-Qassim University |
| ZPD | Zone of Proximal Development |

## LIST OF TABLES

## LIST OF Figures

# Chapter 1: Introduction

Collaborative learning has become not only an essential concept in the field of education (Kohonen, 1989; Kohonen, 1992; Gaillet, 1992; McWham et al., 2003, Nunan, 1992) but also a well-known and widespread activity in most English as a Foreign Language (EFL) and English as a Second Language (ESL) writing classes. The term 'collaborative learning' as used in this thesis refers to students working together in small groups on specific activities, with everyone being required to participate actively (Cohen, 1994). According to Dillenbourg (1999), collaborative learning is 'a situation in which two or more people learn or attempt to learn something together' (p. 1). Collaborative learning (CL) emphasizes helping young learners to learn the skills necessary for learning successfully with one another (Schmuck, 1985). There are both theoretical and pedagogical bases for the widespread use of group and pair work in education. According to Vygotsky (1978), the development of human beings takes place in social situations. From a theoretical point of view, using collaborative group interaction has become a topic of research in aspects of both education and social psychology. From a pedagogical perspective, the use of small groups is based on using the communicative approach to L2 instruction that focuses on helping learners to use L2 (Storch, 2005).

Collaborative learning refers to 'a small group of learners working together as a team to solve problems, complete a task, or accomplish a common goal' (Graham, 2005, p.11). Collaborative or cooperative learning differs from traditional learning because it provides structural opportunities for individuals, who are given specific roles within their groups, to work together to reach common goals. It is usually contrasted with traditional or competitive classroom environments (Kessler, 2003). When students learn separately, their individual performances do not necessarily affect one another either positively or negatively. Competitive

learning, on the other hand, means putting them in direct competition with each other, with the idea that this will have an effect on individual performances.

Many benefits have been claimed for collaborative learning. For example, it may help weak students to learn more effectively when they work with strong partners (Gabriele, 2007; Winskel, 2008). It enables students to acquire and develop various skills such as leadership, thinking, building self-esteem, motivating and encouraging low-motivated students (D. Johnson & Ahlgren, 1976; Garibaldi, 1979; Gunderson & D. Johnson, 1980; Hill & Hill, 1990).

Collaborative learning in the context of collaborative writing means two or more people working together to produce and complete a text, through practising stages and activities such as collecting, planning and organizing ideas, drafting, revising and editing (Rice & Huguley, 1994). Storch (2002) claims that collaborative learning in the form of collaborative writing in EFL classes might help students to act socially and cognitively, and suggests that teachers should encourage learners to become involved in social activities that promote interaction and the co-construction of knowledge. Graham (2005) found that collaborative learning of writing skills helped students to find new ideas together and exposed them to various opinions, encouraged them to discuss, debate, disagree and teach one another as well as helping them to practise aspects of the process approach to writing such as generating ideas.

## 1.1 Statement of the Problem

Having taught writing skills for many years at a variety of Saudi universities and colleges, such as in the English Language and Translation Department (ELTD) at Al-Qassim University, the present researcher noticed that ESL students were not reaching the intended writing assessment goals by the end of the course. Students at all levels in the ELTD are required

to write essays and compositions both in class and in final exams, and these are normally marked and judged by their teachers on the basis of their proficiency, accuracy and quality.

Many studies have shown how using collaborative learning in the form of collaborative writing in classrooms has a positive effect on students' social activities and writing strategies (Elbow, 1975; Storch, 1999, 2002, 2005, 2007; Williams, 2003; Noël & Robert, 2003; Graham, 2005). It seemed therefore that a collaborative learning strategy might be an effective way of teaching writing to ESL students in Saudi Arabia and thus may be a possible way to raise their achievement levels. Al-Ahmad (2003), who studied the impact of collaborative learning on L1 and L2 students' apprehension about and attitudes toward writing, claimed that the collaborative learning strategy has enormous advantages over more traditional instruction techniques such as the teacher-centred approach. He found that students in traditional writing classrooms communicate solely with the teacher about their writing, and that individual and competitive learning are the main focus in this approach. Bruffee (1986) mentions that collaborative learning has a positive impact on writing skills when writers are involved in group work and conferences. One of the reasons for believing that CL can improve ESL writing skills is that collaborative learning is not only a way to improve aspects of writing accuracy such as grammar, vocabulary and punctuation, but that it also helps to establish a social atmosphere conducive to meaningful learning and to solving students' problems.

## 1.2 The context of the study

Before talking about the study context, it is important to indicate that the teaching of writing is not paid much attention in the Saudi context compared to the teaching of other skills

such as vocabulary and grammar (Aljamhoor, 1996; Alnofal, 2003; Al Haysony, 2008). According to Aljamhoor (1996),

> 'Teaching English writing in Saudi schools is based on the belief that the students who learn more vocabulary will be good writers. Therefore, students are required to memorize a great deal of vocabulary in order to speak, read, listen, and write in English, but little emphasis is placed on other important writing techniques, such as planning, organization' (p. 16).

When Saudi students write essays, they are generally concerned with surface aspects such as spelling, choosing vocabulary and correcting any grammatical mistakes (Alnofal, 2003).

The context of the present study concerns EFL students in the English Language and Translation Department (ELTD) at Al-Qassim University. The department was established in 1993 as one of the main departments of the Social Science College. It aims to produce qualified teachers who are able to teach English to young students at the primary, elementary and secondary stages. By 2010, more than 800 students had graduated and acquired a Bachelor degree in English Language and Translation. The ELTD is considered the only resource responsible for teaching and developing the English language proficiency necessary for all students at Al-Qassim University (QU). One of the main conditions for a new student to be admitted to the department is that he should have successfully completed a course of approximately 400 hours of English at the ELTD. This course is called an Intensive English Programme (IEP), during which students have to study English for three months. After successfully completing the course, they then transfer to the bachelor programme, which normally includes four years' study of a variety of courses and skills such as writing, speaking, reading, listening, linguistics, translation and literature. Writing is one of the essential skills that students must develop during their four years of study.

## 1.3 Purpose of the study

The aim of this study is to investigate the effects of collaborative learning on the process approach to teaching writing (pre-writing, drafting, revising and editing) and on the attitudes of ESL students. In other words, it seeks to determine whether using the collaborative learning approach would be more effective than using traditional approaches such as individual learning. Collaborative learning might encourage ESL students to write and express their ideas in proficient and effective ways.

Previous work in this field indicates some promising lines of investigation. Grami, for instance, looked at evaluating the effectiveness of integrating peer feedback into ESL writing classes in terms of developing writing and social skills, and found students improved their skills effectively (see Appendix K for more details). Similarly, some other studies, such as Storch (1999, 2005); Storch & Wigglesworth (2007, 2009), studied the quality of written texts produced by students in cooperation with their peers compared with that of texts produced individually, in terms of accuracy (grammar) and fluency, and found CL helped students to write better essays in terms of grammar. The present work differs from the work of Grami and others in crucial aspects, such as the study sample, and the placing of an expert student in each group, with this student playing an essential role during the writing process. This will be discussed further in the account of the background to the research from page 22 onwards.

## 1.4 Research Questions

The aim of this investigation was to answer the following main research question:

> Does collaborative writing benefit students? In other words, will the writing ability of students improve if teachers encourage them to use a collaborative learning strategy?

Particularly, do ESL learners in the English language department at Al-Qassim University write better after collaborating with others than after working individually?

The main research question gave rise to two sub-questions:

1- Would students who are involved in collaborative writing settings produce better written and better organized essays than students working individually?
2- Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings?

## 1.5 Significance of the study

This research investigates the effectiveness of collaborative learning in helping ESL students develop their English writing skills. The study is thus significant because it is designed to explore in depth whether students produce better writing when working in small groups than when working individually. The use of the collaborative writing strategy provides an opportunity for them to express their ideas in small groups instead of individually. Since this is the first study designed specifically to explore in detail the effectiveness of the collaborative learning strategy for Saudi universities, the findings will pave the way for further studies to be carried out globally as well as in other Saudi Arabian universities.

## 1.6 Definitions of Terms

Some terms that are crucial to this study need to be clarified in advance. This section provides brief explanations and discussion of some of these:

**The process approach to writing**

This is an approach that is concerned with linguistic writing skills, namely planning, revising, drafting and editing, rather than linguistic writing knowledge, namely structure and mechanics (Badger & White, 2000). It concentrates on teaching writing through the process and stages of writing (Belinda, 2006). In Chapter 2, this approach is compared with two other approaches that are used in writing and teaching writing: the product and genre approaches.

**Collaborative learning (CL)**

As discussed earlier, collaborative learning refers to learners working in small groups to solve problems or complete particular tasks (Artz & Newman, 1990; Graham, 2005). In other words, it means an active give-and-take of ideas between more than one person in order to discover solutions and create knowledge together (Damon, 1984). According to Storch (2002), the use of small groups is based on the communicative language teaching approach that is concerned with encouraging students to use L2 actively in the classroom. Group behaviour in collaborative learning (CL) differs from that of groups in communicative language teaching (CLT), however, in its involvement of the expert and the application of elements such as positive interdependence, individual accountability, face-to-face interaction, social skills and group processing. One of the crucial aspects of the collaborative learning strategy applied in this study, as mentioned above, was the placing of an expert student in each group, a student who played an essential role during the learning process. Collaborative learning in the form of collaborative writing refers to a group of writers working in small groups as a team to produce and complete a shared piece of writing. It can be accomplished by more one than one person and includes activities such as collecting ideas, brainstorming, planning, making an outline, revising and editing (Rice & Huguley, 1994).

**Zone of Proximal Development (ZPD)**

The concept of the Zone of Proximal Development was defined by Vygotsky as follows: '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' (Vygotsky, 1978, p. 86). This concept forms the basis of the notion of expert as used in this research.

**Positive interdependence**

Positive interdependence refers to an entire group working together effectively and successfully (Kagan, 1994). It establishes mutual benefits for learners and a sense of joint responsibility that make their social environment more supportive, motivated, confident and excellent in academic achievement (Nunan, 1992, and Kohonen, 1992). Positive interdependence is an essential part of the concept of CL. It is considered to be both the basis and the heart of CL (Graham, 2005; Kagan, 1994).

## 1.7 Organization of the Thesis

This thesis is organized into the following five chapters:

**Chapter One: Introduction**

This is the current chapter that contains an introduction to the research, describes the purpose of the research, introduces the research questions and points out the significance of the study.

**Chapter Two: Literature Review**

The purpose of this chapter is to review various issues related to the topic of the study. It contains an overview of ESL writing skills, including an examination of various approaches to writing such as the product, genre and process approaches. It also contains a detailed discussion

of collaborative learning (CL) through an examination of various points such as the theoretical framework of the collaborative learning strategy, the benefits of CL for language education, elements of CL, collaborative writing in ESL classes, and some previous studies of CL.

**Chapter Three: Methodology and Research Design**

The research questions and the methods used to answer them are presented in this chapter. The design of the study and the strategy and methodology used are also described here. The chapter also includes a description of the sample used for the study, of the data collection procedures and of the tasks and activities used during the data collection. Finally, information is provided concerning the statistical tests used to analyse the data.

**Chapter Four: Analysis and Findings**

In this research, both quantitative and qualitative methods of data collection were employed. The principal approach was quantitative, with data being collected from writing tests and questionnaires. These data were supplemented by qualitative data obtained from interviews with the students. In this chapter, all the collected data are presented and analysed.

**Chapter Five: Discussions, Implications, Recommendations for Future Research and Conclusion**

This chapter presents (a) a discussion of the findings of the study, relating them to those of previous studies, (b) implications and suggestions for both ESL teachers and learners, and (C) recommendations for future research and the conclusion.

# Chapter 2: Literature Review

## 2.1 Introduction

A review of the relevant literature was conducted in order to provide a theoretical framework for teaching writing skills through the collaborative learning strategy used in this research. The purpose of this chapter is to review the existing literature on the use of the collaborative learning strategy, to reflect on the opinions and perspectives of previous researchers, and to examine the results of a number of previous studies: in other words, to provide a proper foundation for this research. The chapter is divided into two main sections: 1) an overview of ESL writing skills; 2) a discussion of the collaborative learning strategy. The first section will focus on writing approaches, briefly highlighting both the product and genre approaches. The process approach to writing will be discussed in more detail since it is the approach used during the current investigation of the impact of collaborative learning on the development of ESL writing skills. In the second part of this chapter, several relevant issues and points related to collaborative learning are discussed: the theoretical framework of CL, distinguishing collaborative learning from other uses of group work, the benefits of CL for language education, elements of CL, collaborative writing in ESL classes and finally, previous studies of CL.

## 2.2 Writing approaches

According to Raimes (1993), there are three principal writing approaches: the product approach that is concerned with form, the process approach that concentrates on the writer, and

the genre approach that pays attention to the reader. All these approaches are described below. Since the aim of this research was to study the influence of collaborative learning in improving ESL writers, the main focus in this chapter is on the process approach to writing, which consists of the pre-writing, drafting, revising and editing stages and the activities associated with these stages. The product and genre approaches are therefore discussed only briefly here.

### 2.2.1 The product approach

Before the development of the process approach to writing, researchers saw writing as a product, and thought that the most important component of good writing was linguistic knowledge rather than linguistic skill. Young (1978) defined the product or traditional approach to writing as 'the emphasis on the composed product rather than the composing process; the analysis of discourse into words, sentences, and paragraphs; the strong concern with usage (syntax, spelling, punctuation) and with style (economy, clarity, emphasis); and so on' (cited in Matsuda, 2003, p.70). It is called the 'product' approach because its aim was to produce correct texts (Richards, 1990). According to Pincas (1982), it concentrates on the appropriate use of vocabulary, syntax and cohesive devices. Other researchers believe that the product approach to writing concentrates mainly on helping students to learn grammatical rules and how to avoid errors and mistakes. Badger and White (2000, p.154) mention that 'product-based approaches see writing as mainly concerned with knowledge about the structure of language'.

According to Pincas (1982) and Hyland (2003), four stages characterize the product approach: familiarized writing, controlled writing, guided writing and free writing. Familiarization means 'preparing students for actual writing by demonstrating one or other of the skills that are to be practised' (Pincas, 1982, p.78). One example of an effective familiarization technique is the provision of contrasting examples and having students write about the

differences between them: for example, hearing a spoken invitation and then reading a written invitation. Another method of familiarization is to give students confusing instructions and ask them to put them into the correct order and carry them out (Pincas, 1982). According to Hyland (2003), familiarization can be accomplished by teaching students specific grammar and vocabulary through the use of a specific context. While exercises at the familiarization stage are concerned with showing students the type of writing they will produce, at the controlled writing stage students are given permission to practise the exercises. The exercises in the controlled writing stage are divided into two types: combining exercises, such as joining words by matching or by re-ordering; and substituting exercises, which involve both imitating items produced by the teacher and following the teacher's guidance. For example, teachers may present a few paragraphs and then provide certain words or sentences that can be substituted for existing words (Pincas, 1982). ESL classes in this stage, according to Reid (1993), consist of structuring grammatical sentences and receiving instructions about or making discrete changes in a piece of discourse. Raimes (1983) thinks that controlled composition is a useful technique that provides students with both content and form.

The guided writing stage is considered as a bridge between controlled and free writing. The exercises in this stage are divided into several types: a) completion exercises such as filling in the blanks or matching words with their pictures; b) reproduction exercises such as re-writing something from memory; c) comprehension exercises such as note-taking, and d) paraphrasing exercises concerned with changing a statement from the active voice (e.g., 'I accept your advice') into the passive (e.g., 'your advice was accepted') (Pincas, 1982). Guided writing gives the writer some freedom in writing, but this freedom is still limited to structuring sentences and exercises that focus on comprehending questions and building vocabulary (Reid, 1993). Free

writing is the last stage in the product approach in which students are given the opportunity to write freely without stopping (Elbow, 1973). This is sometimes called express writing (Elbow, 1973; Reid, 1993; Rohman, 1965) and depends on spontaneity and sincerity, when students discover themselves through language. Instead of focusing on the final product and correcting their mistakes, the students are concerned with self-discovery and pay no attention to grammatical, structural or critical comments. However, this stage does have some negative aspects: a) various errors are made in grammar, spelling and vocabulary; b) teachers are left with no opportunity to guide or give feedback to their students (Elbow, 1973; Pincas, 1982).
According to Elbow (1973), free writing encourages students to keep writing and not make any stops to check for errors so that they do not forget or miss important ideas or thoughts.

On the other hand, Silver and Leki (2004) claim that the product approach to writing does not pay attention to the reader or the purpose of writing. The reader in this approach is the teacher and the context is the classroom. According to Zamel (1983), the product approach helps students in the beginning stages to develop and improve their grammatical accuracy. However, it neglects writing processes such as planning and outlining a text, collecting ideas etc (Badger & White, 2000).

### 2.2.2 The genre approach

According to Swales (1990), the genre approach consists of 'a class of communicative events, the members of which share some set of communicative purposes' (p. 58). In addition, this approach is defined as a 'goal-oriented, staged social process' (Martin, 1992). People using this approach interact to achieve social processes and they have goals of achieving particular things (Hyland, 2003). Badger and White (2000) mention that the genre approach is considered a

newcomer to English language teaching; however, there are some similarities between this and the product approach. Although it is concerned with linguistic knowledge, the main focus in the genre approach is on writing about various social contexts. They add that there are three stages to teaching the genre approach: 1) introducing the text by the teacher; 2) constructing the text by the student with some help from the teacher; 3) producing the complete text by the student. According to Tribble (1996), Badger and White (2000) and Hyland (2003), this approach could be used in any social context (for example, medicine, economics or politics), to use writing in various situations: for instance, writing articles, receipts and reports. Hyland (2003) states that the central emphasis in this approach is not merely on writing but on writing something to achieve a specific purpose, as in telling a story or describing a technical process.

According to Silva and Colleen (2004), the genre approach examines various contexts and moves from writing general essays to more particular essays and from school-sponsored writing to the real world context. While the general essays involve writing in the classroom, in testing situations or in laboratories, the particular essays can include many genres: for instance, nursing notes, care plans, personal or business letters, research proposals, doctoral narratives, research article publications, textbooks and summaries.

Regarding the teacher's role in this approach, he or she needs to discuss the genre with the students at the beginning of the class, then the students can carry on and complete their work by themselves. According to Brindly (1994), the teacher should produce and supply information and input for the students at the beginning of the class.

The most useful feature of the genre approach to writing is that a great deal of emphasis is placed on the audience and the readers of the written texts (Kay & Dudley-Evans, 1998). According to Hyland (2003), teachers using the genre approach look beyond composing

processes, subject content or the forms of texts to see writing as a bridge of communication with readers. The writer employing this approach is thus able to build a good relationship with his or her readers by conveying specific information. In addition, it assimilates context with discourse, something which is usually neglected in both the product and process approaches to writing (Hyland, 2003).

However, some researchers have expressed a negative view of the genre approach. For example, Kay and Dudley-Evans (1998) mention that 'the genre-based approach is restrictive, especially in the hands of unimaginative teachers, and this is likely to lead to lack of creativity and de-motivation in the learners and it could become boring and stereotyped if overdone or done incorrectly' (p. 311).

### 2.2.3 The process approach to writing

Recent approaches to writing have focused on the process rather than the end product of writing (Kelly & Graham, 1998; Nunan, 1989; Leki, 1991). The process approach was introduced in the mid-1960s. According to Rohman, in this approach the writing is classified into three stages: 1) the pre-writing stage, that includes tasks that take place before writing; 2) the drafting and writing stage; 3) the re-writing stage, in which attention is paid to any grammatical, punctuation or spelling mistakes (Rohman, 1965). However, Rohman did not describe the process approach to writing in sufficient detail (Williams, 1998).

More light was shed on the process approach to writing in research conducted at the beginning of the 1970s. Thus, 'although Janet Emig (1971) is rightly credited with originating process pedagogy in composition, it is important to recognize that the late 1960s witnessed an intellectual shift in many fields toward process' (Williams, 2003, p. 100). It has been found that

writing is not linear but a recursive process that necessitates the activities of pre-writing, writing and post-writing (Emig, 1971; Raimes, 1985; Zamel, 1983; Hyland, 2003; Rose, 1980; El Mortaji, 2001; El-Aswad, 2002). With regard to the use of the term 'recursive', during the process of composition writers can move forwards or backwards to any activities whenever they find that useful (Perl, 1978, 1980; Raimes, 1985). This means that even if a writer has almost finished a composition, he or she may find that it is necessary to collect additional data from the library. As a result, they may have to revise their essay in order to cope with any new information (Tribble, 2003; Hyland, 2003).

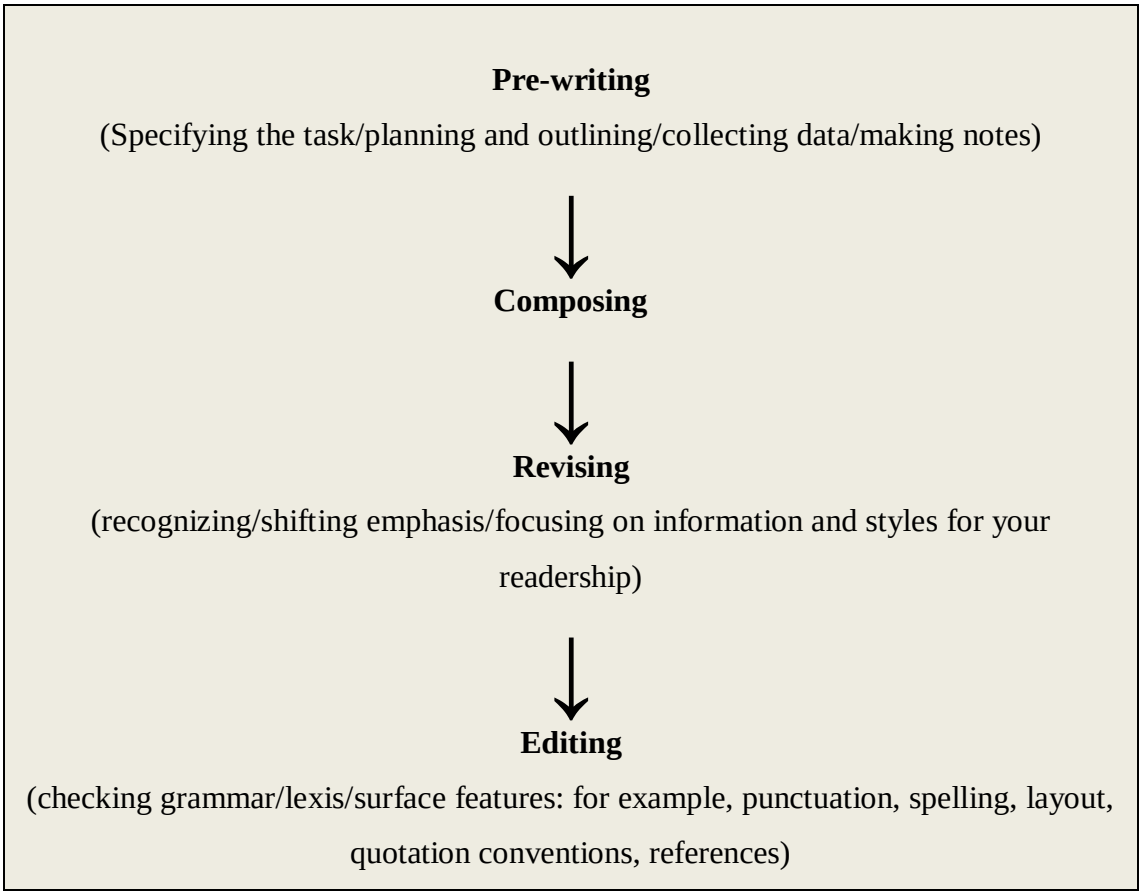
The process approach to writing also places more emphasis on writing skills (planning, revising and drafting) than on linguistic knowledge (spelling, grammar, punctuation and vocabulary) (Badger & White, 2000). Students therefore have to be taught writing through its process and stages such as planning, drafting, revising, editing and publishing in order to write freely and arrive at a product of good quality (Belinda, 2006). Moreover, one of the beneficial aspects of the process approach to writing in the ESL setting is that teachers consider a writer to be an 'independent producer of text' (Hyland, 2003, p. 10). However, while the process approach to writing has positive advantages for the writer, it does not pay much attention to the reader, which is not particularly helpful for those readers who expect to acquire some knowledge from a text (Tribble, 2003).

### 2.2.3.1 Stages and activities of the process approach to writing

According to Kroll (2003), some stages and activities of the process approach to writing that take place in L2 classes (for instance, pre-writing, drafting and revisions that could be made through feedback from the teacher or from peers) are important. These activities take place when writing in both L1 and L2 classes (New, 1999). Williams (2003) also mentions that

all students involved in writing need to engage in the activities contained in the various stages of the process approach: namely, pre-writing stage activities such as brainstorming, collecting ideas, discussing; the drafting stage, and the revising and editing stages. In addition, these activities can be used as many times as the writer needs (Tribble, 1996, 2003). Figure (1) clearly shows the four stages of the process approach to writing.

**Figure (1) Stages of the process approach to writing**




### *A) Pre-writing*

A significant feature of the process approach to writing is that students collect and produce ideas before finishing the actual writing (Zamel, 1982). According to Hewings and Curry (2003), brainstorming and student discussions are helpful strategies that may be used to collect and

gather ideas effectively. During the pre-writing stage students can use various methods, such as brainstorming, word clustering and free writing, as a way of discovering themselves and their ideas (Elbow, 1973). Brainstorming means thinking quickly in order to produce and collect ideas for a specific topic or problem; it should therefore be done freely without any structure or judgment, and collaborative learning is the best way of ensuring that it is carried out effectively (White & Arndt, 1991). Planning a topic is another important strategy of the pre-writing stage that helps learners to organize and write successfully (Peacock, 1986). According to Flower and Hayes (1981), planning is a mental strategy, so students may return to it at any time during the writing process.

Another technique of the pre-writing stage is writing and making notes in order to collect, generate and organize ideas. Ideas are generated in a free and unstructured way and without being organized. Organizing ideas is a structuring strategy that could be carried out through selecting appropriate names as headings and categories (White & Arndt, 1991). Making an outline during the pre-writing stage is another useful strategy. According to Williams (2003), writers may find it necessary and useful to write down their important ideas in outline form, starting with small ideas and moving to more general ones.

### *B) Composing / Drafting*

Getting started in writing an essay is one of the difficult stages in the process approach to writing, because it requires a great deal of attention, application and focus (Harris, 1993; Hedge, 2000). The drafting stage comes after the completion of pre-writing activities such as specifying the writing topic, collecting data and making an outline (Williams, 2003; King & Chapman, 2003; Tribble, 1996, 2003). During drafting students should keep writing their essay from beginning to end without stopping (Gebhard, 2000). According to King and Chapman (2003),

during this stage writers should focus on the actual writing and leave checking both grammatical and spelling mistakes to the final stages.

### *C) Revising*

Hedge (1988) mentions that 'good writers tend to concentrate on getting the content right first and leave details like correcting spelling, punctuation and grammar until later' (p. 23). The main concern of the revising stage is to complete the content correctly, whereas correcting grammatical and spelling mistakes can be done during the editing stage (Tribble, 2003). Focusing on reorganizing sentences and adding more appropriate vocabulary are essential aspects of the process approach to writing (Williams, 2003). In the revising stage writers should carry out activities such as deleting unnecessary sentences and moving certain words or paragraphs forward or backward (Zamel, 1981; Williams, 2003; Hedge, 2000).

### *D) Editing*

The last stage of the process approach to writing is editing. This stage concentrates on linguistic accuracy: grammar, spelling and punctuation (Harris, 1993). Hewings and Curry (2003) state that the editing stage involves checking references and formatting the students' writing. In this stage students may employ various strategies to correct their mistakes, such as working in pairs or in groups, and use any available resourses such as textbooks, dictionaries and computers (King & Chapman, 2003; Hewings & Curry, 2003).

## 2.2.3.2 Studies related to the process approach to writing

Various studies and researchers have examined the process approach to writing in different situations in order to show the advantages and benefits of this approach.

Using the process approach to writing plays a role in changing the attitudes and opinions of students. Belinda (2006) implemented six writing programmes on process writing in six primary classrooms in Hong Kong, three in the upper primary levels and three in the lower levels. She investigated the effectiveness of these processes on changing students' writing and attitudes by comparing all six classrooms with each other and the upper and lower levels in general. These comparisons were between pre- and post-tests of questionnaires, interviews and observations. The study purpose was to improve students' writing strategies in all stages of the process approach, including pre-writing, drafting and revising. Because children at primary levels are interested in reading, they were taught how to write a story through processes and stages. This type of writing was used for both pre- and post-tests. The researcher noticed that the process approach to writing had been found to be a useful and helpful strategy; however, it could be more effective for students fluent in English in strengthening their writing skills.

Belinda's study was concerned with primary school children, whereas the current research involved adult ESL learners. It is thus important to understand the background of teaching English and specifically writing skills in Saudi Arabia in order to evaluate how closely Belinda's study fits with this research. The system of education in some Middle Eastern countries, including Saudi Arabia, is divided into the following stages: primary schooling for six years, intermediate for three years, secondary for three years, and post-secondary for four to five years. The teaching of English language starts in the final year of primary schooling and is confined to teaching the letters of the English alphabet. At intermediate and secondary levels, the dominant pedagogical approach is still the grammar-translation approach (El-daly, 1991; Aljamhoor, 1996; Alnofal, 2003; Alhaysony, 2008). ESL students at Saudi schools start to learn writing skills at both secondary and post-secondary levels. However, according to Alnofal

(2003), the teaching of writing skills has not been paid much attention compared to the teaching of the skills of reading, listening and speaking.

In order to assess the relevance of Belinda's study to this research, it is also important to know that ESL students in Hong Kong start to practise writing skills at primary level. Belinda mentions that the product-oriented approach is used in teaching writing (p. 2). She adds, however, that over the last few years the process approach to writing has been recognized as being more effective than the traditional methods of teaching writing. Thus, despite the differences in age between Belinda's sample of primary school children and the sample of adult Saudi students used in this study, the similarities in the classroom teaching of English in both cases means that the results of Belinda's research are useful for the current study.

A few researchers have compared the effectiveness of self-assessment in students' process-based writing in L1 or L2 with that used in product-based writing. El-Koumy (2004) compared ESL students adopting the process approach to writing with other students using a product approach. The sample was 80 male Arab students divided into two classes. The students were studying at a general secondary school in Menoufya in Egypt. The students in both process and product groups were given a pre-test and a post-test to enable the researchers to assess the difference between the two groups in terms of self-assessment. In the pre-test the students were asked about the role of TV in our lives, whereas the post-test was about the impact of computers on our lives. The results showed that the process group produced a greater quantity of writing than the product group, whereas the product group was better than the process group in terms of the quality of writing. El-Koumy found that self-assessment of the process of writing encouraged students to develop their thinking skills and writing strategies, so they became able to discover and elaborate their ideas effectively.

Regarding using the process approach to writing in the field of technology, Parks, Huot, Hamers and Lemonnier (2005) investigated whether process-based writing would be appropriate in the context of ESL language arts courses over a four-year period. Francophone high school students in Quebec studying on an information and communication technologies (ICTs) programme took part in the research. The researchers used some qualitative methods to obtain their data, namely, the analysis of documents, observation, videotaping and interviews. At the end of the study, the researchers noticed that the students had become able to describe the writing process (meta-linguistic knowledge). Before the Grade 7 students had been involved in the study, they had no knowledge of the process approach to writing. The results obtained from some of the excerpts from the interviews showed that the students were able to describe the processes and stages of the writing approach and that they had become able to use certain labels to identify some of these processes

## 2.3 Theoretical Framework of the Collaborative Learning Strategy

In the mid-1930s, well before the development of the process approach to writing at the beginning of the 1970s, the Russian researcher Lev Vygotsky was already talking about the importance of writing in developing thought. Vygotsky's research reached the English-speaking world around 1962. The main theoretical perspective and framework of collaborative learning in groups comes from Vygotsky's social constructivist view (Thousand, Villa & Nevin, 1994; Gillies & Ashman, 2003; Vanderburg, 2006; Rojas-Drummon & Merce, 2003). According to Vygotsky, children can learn and perform tasks individually only when they interact with more capable people who can help and 'scaffold' them effectively. 'Scaffolding' is defined by Dennen (2004) as 'a metaphor for a structure that is put in place to help learners reach their goals and is

removed bit by bit as it is no longer needed, much like a physical scaffold is placed around a building that is under construction and removed as the building nears completion' (p. 815).

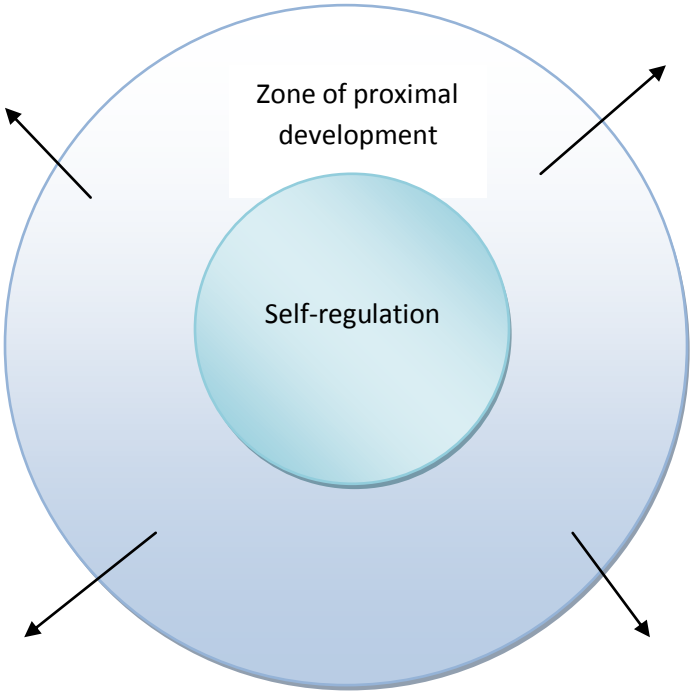
At that time, social interactions and an inner voice were two important concepts for most writing research, which focused on the positive role played by social interactions in developing writing. Vygotsky believed that the repeated social interactions of people with experts can develop thought. Vygotsky's theory of learning supports the collaborative learning approach because 'it analyzes how we are embedded with one another in a social world' (Kessler, 1992, p. 56). Vygotsky's (1978, 1986) concept of the ZPD is considered to be the theoretical background for peer collaboration in second language writing. The ZPD establishes two levels of development: the actual level, which is determined through the ability of the learner to do something individually, and the possible level, which is determined by the ability of the learner to do it with the help of an adult or a more advanced and capable classmate (De Guerrero & Villamil, 2000). The functions in the ZPD are called 'buds' of development and the actual development is called the 'fruits' of development (Vygotsky, 1978). Vygotsky believed that the child can be developed on both the social plane and the psychological plane (1978). According to Lantolf (2000), Vygotsky's idea is that 'all higher mental abilities appear twice in the life of the individual: first on the intermental plane in which the process is distributed between the individual, and some other person(s) and/or cultural artifacts, and later on the intramental plane in which the capacity is carried out by the individual acting via psychological mediation' (p. 17).

To explain the difference between the inter-mental and intra-mental planes, Wertsch (1997, cited in Smith, 2007) describes inter-mental speech as a functional tool in communicating with others; whereas intra-mental speech is a psychological tool that occurs inside the person

with him/herself. The inter-mental plane is therefore considered as a social level and the intra-mental plane is considered as a psychological level (Lantolf, 2000).

According to Vanderburg (2006), three concepts are fundamental to the development of learning: the ZPD, scaffolding and the inner voice. Advanced individuals can scaffold, develop and create an inner voice in individuals who are weak or who need more support through their zone of proximal development. Van der Veer and Valsiner (2000) state that there is an association between concepts of scaffolding and the ZPD, that were originally adopted by Vygotsky to refer to how adults present cultural meanings to children. The term 'scaffolding' was then popularized by Bruner and became well known in the field of education (cited in De Guerrero & Villamil, 2000). Bruner (1978) used the word 'scaffolding' metaphorically to describe a mother's efforts to keep talking to her child. Five features characterize a mother's scaffolding: a) the difficulty of the task is reduced; b) the child becomes more focused and concentrated; c) the support is offered for children; d) more models are offered (cited in De Guerrero & Villamil, 2000). The ZPD may be illustrated simply by Lier's (1996) diagram, shown in Figure (2), below:

**Figure (2) Zone of proximal development**




The circular area of 'self-regulation' shown in Lier's diagram refers to anything people may do by themselves confidently without asking for help from others. Outside this circle is the area of the zone of proximal development, which includes any skills or knowledge with which a person needs help and assistance from more capable persons. In addition, any things beyond the area of the ZPD are considered out of the reach of learners, so they are not available for learning. Self-regulation, according to Lantolf and Appel (1994), is the movement from the inter-mental to the intra-mental plane that helps young learners to gain and exercise full control over their behaviour.

Moreover, Kessler (1992) mentions that learning is a collaborative process in which dialogue between adults and children plays an important role in enabling children to solve their problems effectively. In the field of education, this means that learners are able to perform

particular activities under the guidance and supervision of an advanced person such as a teacher or another student who knows more than they do.

In addition, Vygotsky (1978) measured cognitive development in children by asking them to solve standardized problems. After two eight-year-old students had cooperated with each other, one of them had the ability to solve problems designed for a twelve-year-old, while the other child had only acquired the ability to solve problems designed for a nine-year-old. The zone for the first child was therefore four (this being the difference in years between his actual age [8] and his ability [that of a twelve year-old]); by contrast, the zone for the second child was only one. This difference between the chronological mental age of children and their ability to solve problems is what Vygotsky called the ZPD.

In parallel to Vygotsky's perspective on learning in small groups, Piaget (1932) also developed a theory of collaborative learning called the cognitive development theory. According to this theory, children reconstruct and re-examine their understanding when contradictions occur during their interactions with others. Through this re-examination they acquire new understanding and additional information which helps them to resolve the contradictions (Gillies & Ashman, 2003). Piaget's theory requires not only the assimilation but also the accommodation of stimuli in the environment (Wadsworth, 1989). As stated by another group of researchers, 'this new approach described itself as a socio-constructivist approach: it enhanced the role of *inter*-actions with others rather than actions themselves' (Dillenbourg, Baker, Blaye & O'Malley, 1996, p. 3). This dyadic technique is based on getting two students with different ideas about something to discuss how to respond to a particular issue or question together for a few minutes and then testing them individually to determine whether students who disagreed on a particular issue can now solve the problem easily and effectively (Thousand, Villa & Nevin, 1994).

### 2.3.1 Distinguishing collaborative learning from other uses of group work

Collaborative learning can include various different strategies, one of which is peer feedback (Van Gennip, Segers & Tillema, 2010). Studies on the teaching of writing skills do not differentiate between collaborative writing and peer feedback (Gebhardt, 1980; Storch, 2005; Grami, 2010). According to Grami (2010), 'Because peer feedback involves group work, it can be seen as a collaborative learning practice'. It is important to understand the role of feedback in collaborative learning. According to Gebhardt (1980), 'Feedback, in fact, can almost be considered the base of collaborative writing because it is what allows all the other principles to work' (p. 67). There are various kinds of feedback, such as peer feedback, teacher feedback and conferencing (Freedman, 1987). A clear definition of the application of feedback in learning writing skills is provided by Freedman (1987), who states that such feedback

> 'Includes all reactions to writing, formal or informal, written or oral, from teacher or peer, to a draft or a final version. It can also occur in reaction to talking about intended pieces of writing, the talk being considered a writing act. It can be explicit or less explicit' (p. 5).

Collaborative learning helps students to give and receive feedback to and from each other (Al Ahmad, 2003; Hansen, 2005; Baker, 2009; Mangelsdorf, 1992; Pilotti & Chodorow, 2009). According to Storch's study (2005), 'the students' feedback on the experience of collaborative writing was overall very positive' (p. 169). Giving and receiving feedback and working in groups are thus considered to be two of the principal features of collaborative learning. According to Grami (2010, p. 30), 'peer feedback is still considered a novel concept in the Saudi educational context'. Feedback is not only useful for beginners but also for advanced writers because it enables them to evaluate their drafts and avoid any possible mistakes (Ferris, 2002; Hyland & Hyland, 2001; Ashwell, 2000). Not receiving feedback either from teachers or from peers could

result in complicated and unrevised drafts (Hyland, 2003; Ferris, 2002; Hyland & Hyland, 2001; Ashwell, 2000; Hedge, 1988; Zellermayer, 1989; Freedman, 1987; Cardelle & Corno, 1981).

Collaborative learning in the form of collaborative writing has been variously referred to in the literature in different contexts as 'peer feedback' (Gebhardt, 1980; Storch, 2005; Al-Hazmi & Scholfield, 2007; Grami, 2010), 'peer response, review, editing and evaluation' (Berg, 1999; Lundstrom & Baker, 2009), 'peer revision' (Villamil & de Guerrero, 1996; Suzuki, 2008) and 'peer learning' (Chen, 2007).

There is also a variety of additional forms of feedback available in the classroom: for instance, written or oral conferencing (Mooko, 1996; Hyland, 2003; Rollinson, 2005); teacher-students face-to-face conferencing (Hyland, 2000, 2003; Ferris, 2002), and error feedback, which involves drawing students' attention to the type of error they have made: for example, - mistakes in choosing the appropriate verb tense (Ferris, 2001). Another form of feedback that can be given in the classroom is direct and indirect teacher feedback (Ferris, 1995, 1998, 2001). Direct feedback occurs when the teacher explains the error in the form to the student, whereas indirect feedback happens when the teacher tells the students that there is a mistake in the form and that it needs to be corrected. Other forms are 'corrective feedback' (Lyster & Ranta, 1997; Panova & Lyster, 2002; Lochtman, 2002; Ellis et al., 2008; Shaofeng, 2010); 'praise feedback', such as 'that's great' and 'that's nice'; affirmative feedback (e.g., 'yes' and 'no'); laughter, and non-verbal usages (e.g., gestures) (Reigel, 2008).

### 2.3.2 Collaborative learning and communicative language teaching

Since using small groups in learning a second language is based on the communicative approach to L2 instruction that focuses on helping learners to use L2 (Storch, 2002, 2005, 2007),

it is important to look at some aspects of communicative language teaching theory, such as the definitions, framework and elements related to CLT, and to analyse some of the implications of its use for second language teaching and learning.

Communicative language learning depends on involving all the members of the group in the process of cooperation (Savignon, 1983). Communication is the exchange of feelings, knowledge, ideas, opinions and information among people. We use language to communicate, so we do not just communicate facts to each other, but we also convey what we feel about those facts (Revell, 1979). Educators have hoped that the adoption of communicative language teaching will help second language students master the necessary skills for communication with speakers of the target language. It is important to mention the fact that in the 1970s, research into communicative competence distinguished between linguistic and communicative competence, in order to highlight the difference between knowledge about linguistic forms and the knowledge that enables a person to communicate functionally and interactively. As Littlewood (1984) has mentioned, the communicative approach emphasizes communication rather than structure. For example, learning how to use the pattern *can + infinitive* enables learners to employ a variety of communicative functions.

The major discussion on the importance of communicative competence for language teaching was introduced by Canale and Swain (1980), who came up with a new framework of communicative competence. This framework is composed of the following four elements: grammatical competence, pragmatic competence, sociolinguistic competence and strategic competence. The first two elements are concerned with knowledge of the linguistic system itself, and the rest are related to more functional aspects of communication. Grammatical competence, which is the first element, refers to the aspect of communicative competence that encompasses

'knowledge of lexical items and of rules of the morphology, syntax, sentence-grammar semantics and phonology' (p. 29). This element focuses on sentence-level grammar and production of texts (written and verbal) (Bachman & Palmer, 1996).

The second element is pragmatic competence. It concerns the user's knowledge of rules of discourse. This means everything from simple spoken conversation to lengthy written texts (articles, books and the like). While grammatical competence is concerned with sentence-level grammar, discourse competence focuses on inter-sentential relationships.

The third element is sociolinguistic competence, which refers to knowledge of the sociocultural rules of the language and discourse. This type of competence includes an understanding of the social context in which the language is used, the function of the interaction in which the learners are engaged and the information they share. Savignon (1983, p. 37) says that only in a full context of this kind can a judgment be made on the appropriateness of a particular utterance.

Strategic competence (later called the effectiveness of communication) refers to 'the verbal and non-verbal communication strategies that may be called into action to compensate for breakdowns in communication due to insufficient competence' (Canale & Swain, 1980, p. 30). It is this kind of strategy that is useful in persuasion. The implication is that people are concerned with knowledge about how to solve communicative problems in general, which may then be exploited when actual problems occur and performance is required.

Communicative Language Teaching (CLT) focuses on language skills: namely, speaking, listening, reading and writing (Littlewood, 2007). The learner is considered the centre of the teaching-learning process (White, 2007). Teachers provide learners with activities that enable students to practise in their classroom. CLT differs from other learning approaches such as

grammar-translation in that the learner is at the centre of the teaching and learning process (Littlewood, 1981; Nunan, 1995; White, 2007). In communicative activities, the learner should start looking not only at language forms (grammar and vocabulary), but also at how people use these forms when they want to communicate with each other, because communicative ability is the goal of foreign language learning. For example, the form "Why don't you close the door?" could be used for different communicative goals, such as making a suggestion, giving an order or even asking a question (Littlewood, 1984). One of the most important implications of this approach is thus that teachers should focus on activities and exercises that enable the student to communicate within different meaningful contexts, instead of focusing on grammatical rules. Brown (1994) says: 'the search for fluency should not be done at the expense of communication' (p. 245). This means that the teacher should allow students to continue to communicate as long as the message is clear. The literature is full of examples of how second language speakers who have a good command of grammar have failed to communicate with speakers of the target language. This is because they were not trained to communicate in real life situations, and therefore were not exposed to authentic language.

Littlewood (1984) has talked about some contributions that communicative activities can make to language learning. He claimed that communicative activities can provide whole-task practice. This means that instead of training students to acquire skills in part, they are given opportunities to practise them in their entirety. For example, learning to swim involves not only practising individual movements (part-skills) but also swimming short and long distances (whole-task). In foreign language learning, providing learners with whole-task practice in the classroom means giving them different types of communicative activities. Littlewood also mentioned that communicative activities can increase the learners' motivation, because they

know that their objective is to communicate with their classmates. Their motivation to learn will be increased when they notice how their classroom learning is related to their objectives. Communicative activities can also take place inside and outside the classroom as a natural process, which operates when a person is involved in using the language for communication. In addition, communicative activities can provide an opportunity for positive personal relationships to develop among learners and between learners and teachers (Littlewood, 1984).

While a communicative activity is taking place, a classroom is far from quiet, however. The students do most of the speaking, and frequently the scene of a classroom during a communicative exercise is active, with students leaving their seats to complete a task. Because of the increased responsibility to participate, students may find they gain confidence in using the target language in general. Students are more responsible managers of their own learning. Teachers in communicative classrooms will find themselves talking less and listening more, and becoming active facilitators of their students' learning. The teacher sets up the exercise, but because the students' performance is the goal, the teacher must step back and observe, sometimes acting as referee or monitor (Larsen-Freeman, 1986). Similar to Freeman's statement concerning the roles of the teacher in communicative language teaching, the following description of these roles is provided by Littlewood (1984):

1- He is a general overseer of his learner's learning, so he should organize and coordinate the activities so that his learners perform their tasks effectively and coherently.
2- He is a classroom manager, so he should distribute his learners into grouping activities and make sure that these are organized satisfactorily at a practical level.

3- He is sometimes a language instructor, so he may present new language, evaluate and correct the learners' performance.

4- He is a consultant and advisor, so he may help and advise his learners and also may discuss their weaknesses and strengths.

5- He is sometimes a co-communicator, so he may participate in the activity. In this role, he stimulates and presents new language without being the main initiator of the activity.

The presence of the teacher in a communicative activity functions as psychological support for many learners because they regard him as a source of guidance and help. For example, if they are not able to cope with the demands of a situation, the teacher can provide them with the necessary language items or if they cannot agree with each other, he should resolve their disagreement (Littlewood, 1984). Revell (1979) discussed what the teacher should do about mistakes made by students in second language learning. She concentrated on not disrupting their communicative activities and even on not disturbing their concentration. The teacher in this case can make a note of any mistakes he hears, and go through them with individual students when the activity has finished. Another method that the teacher may use to deal with mistakes made by a group of students is to record the activity, using a video or audio recorder, and then play it back to them several times. Playing is usually not only enjoyable for them, but also useful for generating a good deal of discussion. The teacher may discuss issues with them or ask them to discuss things with each other in groups or in pairs.

Second language skills may be categorized into four broad domains which make the person communicate competently (Littlewood, 1984):

1- The learner has to attain a high range of linguistic competence spontaneously and flexibly in order to express his or her message effectively.
2- The learner should be able to distinguish between the form that he needs for linguistic competence and the function that he needs for communicating and performing the message.
3- The learner should be able to improve and develop different strategies and skills of language in order to communicate and convey meanings effectively and correctly. Moreover, he should be able to solve problems and remedy any failures by using different language.
4- The learner must be aware of the different social meanings of language forms in order to use generally acceptable forms and avoid potentially offensive ones.

Following the literature, it is possible to define the term 'group' as used in CLT as two or more people performing a task together. Group behaviour in collaborative learning as defined here differs from that of groups in communicative language teaching by virtue of the existence of the expert and in the use of some distinctive features of CL: the elements of positive interdependence, individual accountability, face-to-face interaction, social skills and group processing (see pages 43-46 for more details). As stated earlier, in this study Vygotsky's (1978, 1986) concept of the ZPD is considered the theoretical background for CL in ESL (see pages 22-26 for more details).

Collaboration refers to an active give-and-take of ideas between persons, rather than one person passively learning from another. Collaborative learning experiences are those in which participants discover solutions and create knowledge together (Damon, 1984, p. 334). According to Cohen (1994), collaborative learning means that students work together in small groups on a

specific activity and each student has to participate effectively. Yamarik (2007) considered collaborative learning as 'a teaching method where students work in small groups to help one another learn academic material' (261). Klingner and Schumm (1998) stated that collaborative learning doesn't only mean putting students together and asking them to work cooperatively; the most important factor affecting the success of small group work is to know how to structure the learning environment in order to develop the students' performance. Collaborative learning should not only be about students communicating and discussing with each other in groups, but also about sharing materials and following elements of CL successfully (Johnson & Johnson, 1987, 1990; Graham, 2005).

Bossley (1989) defines collaborative learning in the form of collaborative writing as simply two or more people working together in a group to write a document (cited in Lowry Curtis Lowry, 2004). Rice and Huguley (1994) state that it is performed by two or more people to produce and complete a text, and includes brainstorming and generating ideas, planning and organizing, drafting, revising and editing.

Collaborative learning is based on Vygotsky's (1978, 1986) concept of the ZPD that is considered the theoretical background for peer collaboration in second language writing. According to De Guerrero and Villamil (2000), the ZPD establishes two levels of development: the actual level and the possible level (see page 56 for more details). The more capable person (expert) can assist the less capable person (Storch, 2005). So, collaborative learning involves students who are less advanced in knowledge and who need support and help from more advanced students, who act as experts. Some studies (Gabriele, 2007; Schmitz & Winskel, 2008) studied the effectiveness of using more advanced peers to improve less advanced students and found that this strategy was more beneficial than having students collaborate with each other.

## 2.4 Benefits of collaborative learning for language education

The findings of research conducted into the use of CL in second language learning have been positive (e.g., Storch, 2002, 2003, 2005; Swain & Lapkin, 1998; DiCamilla & Anton, 1997). The results indicate that CL has a positive effect not only on accuracy in grammar but also on discourse. According to Williams (2003), small groups are clearly beneficial not only in writing activities but also in most teaching activities. Gillies and Ashman (2003) mention that compared to certain traditional approaches, such as individual and competitive learning, the collaborative learning strategy has a beneficial effect on a large number of dependent variables: for instance, achievement, productivity, motivation, good relationships with participants, overcoming stress and adversity. The collaborative learning strategy was thus found to be beneficial and useful not only in language education specifically but also in various aspects of education in general, such as motivation and interactive activities (Swain & Lapkin, 1989; Phipps, Kask & Higgins, 2001; Graham, 2005).

Collaborative learning provides structured opportunities for individuals to work together to reach common goals. It is usually contrasted with traditional individualistic and competitive classroom environments (Kessler, 2003). For example, individual learning does not help students to benefit from their contribution to their learning, whereas the main concern of competitive learning is to place students in competition with each other. Hill and Hill (1990) assert that CL can enable learners to achieve highly, develop their thinking and deepen their understanding, develop leadership skills, promote positive views about other learners, build self-esteem and acquire a sense of belonging, and that it also makes for enjoyable learning. Performing tasks in a group can therefore lead children to provide each other with information, suggestions, reminders and encouragement (Gillies & Ashman, 1998, 2003). Harmer (2004) suggests that successful

group activities help students to learn from each other and enable each one to access the other's mind and knowledge. Graham (2005) studied how students' reflections on and performance in collaborative writing encouraged them to discuss, debate, disagree and also to teach one another. CL also enabled them to be more interactive and cooperative and perhaps prepared them more suitably for the twenty-first century. By contrast, he found that during their collaboration, students concentrated on the product rather than the process of writing, and therefore paid a great deal of attention to sentence-level errors rather than to the content and ideas of the text.

Collaborative learning is a strategy that helps to increase both the quality and productivity of writing skills. Ferguson-Patrick (2007) was interested in developing beginner writers, so she studied the effectiveness of implementing CL to develop the literacy of L2 children at a primary school in Newcastle, Australia. The students were taught interpersonal skills in order to help them to collaborate effectively. They were then given writing tasks to accomplish in pairs and each one was asked to use a different colour in order to adopt the concept of individual accountability. Both observation and tape-recording were used to analyse the pair's talk during each writing session. The findings showed that using coloured pencils was an effective strategy in helping children to share tasks. However, the recordings of all seven sessions indicated that the children did not engage in pre-writing talk even though the researcher kept reminding them to talk and discuss with each other before writing. However, the recordings of the sessions indicated that they did nevertheless employ a strategy of re-reading written texts in order to understand the meaning before continuing on. This strategy helped to increase their productivity in writing. The recordings also revealed other types of cooperative behaviour such as developing the skill of turn-taking. Writing collaboratively helped pairs to increase the number of different words they used.

Moreover, cooperation in small groups is effective in enabling weak students to learn from strong partners. It is clear that students who work individually may get stuck, so that working collaboratively with strong students may help them to understand the materials more easily. Gabriele (2007) examined the influence of high achieving peers on improving the achievement goals and comprehension monitoring of low achieving students. This study was conducted in an urban school in the mid-west of the United States, where thirty-two low upper elementary students were paired with high achieving students to improve their level of constructive activity (solving problems). Videotapes were made of the students solving mathematical word problems collaboratively, and these were then transcribed. The day following the experiment, the students were post-tested individually on similar problems. The results indicated that the low achieving students had improved in the post-test in terms of the constructive activities.

According to Schmitz and Winskel (2008), having low achieving students collaborating with experts or more able helpers is more beneficial than having them collaborate with each other. They studied the effectiveness of children partnering each other in a collaborative problem-solving task. The aim was to determine whether children of low-middle-ability dyads who engaged in exploratory talk with helpers would be better in a problem-solving task than children of low-middle-ability dyads who worked collaboratively with their partners. The study recruited 54 children (26 boys, 28 girls) from a government primary school in Western Sydney, Australia. The students' ages ranged between 10 and 12 years. The participants were given a pre-test problem-solving task to complete individually. Any students who took more than 20 minutes to complete the task would be assigned to the low-task-specific-ability category. Students who took between 12 and 20 minutes to complete it were categorized in the middle-task-ability group,

while those who finished in less than 10 minutes were classified as high-task-ability. After the first classification, 27 children were selected from the original 54; 13 of the 27 were found to be of low-high ability and 14 of low-middle ability. Because the researchers aimed to measure the effectiveness of helpers and experts, 7 of the low-high dyads were asked to help and assist 6 of the low-middle dyads by giving them roles to play and instructions to use during the collaboration. On the other hand, 7 of the low-high dyads and 7 of the low-middle dyads were asked to collaborate with each other without being given any roles or instructions. The roles and instructions were modified from Mercer, Wegerif and Dawes' (1999) study, as follows:

(1) Share all information
(2) Encourage others to speak
(3) All ideas are respected
(4) Asking why is okay
(5) Give reasons for your ideas
(6) Try to agree
(7) Discuss each other's ideas before making a decision.

All participants were given small clip-on microphones and audio recorders were placed on the desks. The study's results showed that although no significant differences appeared between those dyads who were given roles and instructions and those who were not, it was clear that the exploratory talk of students who collaborated with the low-middle-ability students was more effective than that of students in the low-high-ability dyad condition.

As mentioned earlier, collaborative learning has been used to solve problems in education. According to Kagan (1994), it helps to (1) increase academic achievement; (2) increase the level of competitive relations among students; and (3) encourage students to become involved in social and effective settings. Slavin (1983) examined the influence of collaborative learning on academic achievement. He chose 46 learners from classes in elementary and high school and

focused on their achievements. He found that 63% achieved impressive outcomes during involvement in CL, 33% indicated no differences, and only 4% showed good achievement in traditional methods.

Collaborative learning is considered an effective strategy for problem solving. Fawcett and Garton (2005) investigated the impact of CL on the problem solving ability of 100 children (aged between 6 and 7 years) at a primary school in Western Australia and attempted to determine whether using explanatory language or knowledge differences were contributing factors. The children completed two sorting tasks involving blocks of various colours, shapes and sizes, and were given the choice to work together collaboratively or to work individually. The findings indicated that children who completed the activity collaboratively achieved a higher number of correct sortings than those who completed it individually. A comparison between the pre- and post-test results of the collaborative group revealed that children of a lower sorting ability who completed their work collaboratively with peers of a higher sorting ability had improved significantly in the post-test.

The collaborative learning strategy has also emerged as a significant concept within the field of language education. According to Nunan (1992) and McWham et al. (2003), collaborative learning is now a necessity for education. They list several reasons for this. First, students need to develop certain aspects of their learning together. Second, the number of projects that require a team approach in the classroom has increased recently all over the world. Third, teachers often want to experiment with alternative techniques that may help them to control and organize their classrooms. Finally, researchers, teachers and students all have the desire to create a collaborative environment that will help students to learn from each other equitably. Kessler (2003) investigated the extent to which CL is used in teacher education

courses and the problems associated with using it. He emailed surveys randomly to 595 teachers who used to teach in the United States. The divisions of the survey were designed for four different categories of teacher: a) those who had never before used CL; b) those who had used it before but did not like it; c) those who had used it; d) those who had used only some elements of CL. He found that 86% of the teachers believed that learning is a social, interactive process, so the outcomes of using CL would be positive compared to using the traditional method of teaching. The survey revealed various problems associated with using CL, such as an inability to develop student commitment to work with their groups collaboratively. This method was also found to be problematic when teachers wanted to assess and evaluate individual work.

Collaborative learning is considered by some as a new, cheap strategy, which is easy to teach, and, whenever students work with each other collaboratively, they will have the opportunity to acquire new skills, knowledge and understanding; consequently they will be able to improve their performance effectively (Webb, 1993). CL methods are 'inexpensive, relatively easy to implement, and consistently effective in a time of diminishing resources and rising expectations for education' (Slavin, 1987, p. 78). CL is also beneficial and useful in motivating and encouraging students at most stages of learning, in elementary, intermediate and secondary education, and even at postgraduate level. Working in small groups can improve students' motivation. Students who are strongly motivated can encourage low-motivated students by collaborating with them (Garibaldi, 1979; Gunderson & D. Johnson, 1980; D. Johnson & Ahlgren, 1976).

In addition, learning in groups helps students to interact with each other collaboratively. According to Williams (2003), working in groups provides learners with the opportunity to talk about their activities socially and collaboratively. Discussing in groups is considered one of the

best ways to make writing more meaningful and clearer and to help students to improve their writing strategies. In addition, interactive activities help students to become able to read their work critically (Hawkins, 1980; Huff & Kline, 1987, cited in Williams, 2003). Being able to read critically helps students to build their mental processes and become better writers. Somapee (2002) investigated the effectiveness of CL in developing students' critical thinking skills in Business English I at Chiangrai Commercial School in Chiangrai, Thailand. The researcher designed an experimental study that included two groups: a treatment group that was taught business English using a collaborative learning strategy and a non-treatment group that was taught through the traditional method. The findings indicated that the thinking skills of learners who used collaborative learning improved more than those of students in the other group. The results from the questionnaire showed that the attitudes of learners in the experimental group were moderately positive.

Although some aspects of CL have been found to have positive results, however, some research findings have revealed a negative side. Storch (2005) noticed that some students were reluctant to work in pairs. They preferred to perform their tasks individually rather than collaboratively. Moreover, collaborative learning may not help to reduce the writer's anxiety and apprehension. Murau (1993) investigated the effect of peer review on writing anxiety. Questionnaires about attitudes and feelings were given to four Japanese, four Brazilian and two Chinese, one Mexican and one Israeli student. He found that 92% of the participants used peer review. Although 100% of the participants believed that peer review was helpful, their feelings about it were negative. They felt anxious, embarrassed and uncomfortable, even though they thought it was beneficial to receive feedback and correct each other. Moreover, peer review may give some students a lack of confidence in their writing. Only one student felt positive about peer

review. Since English was not his first language, he saw making mistakes as normal. By contrast, Kagan (1994) claims that CL is appropriate for ESL students because it helps to reduce anxiety and give each student in a small group the opportunity to interact with others.

The examination of previous studies presented in this section has shown some of the positive and beneficial aspects of CL. One of the main questions in this study concerns whether or not these benefits are experienced by ESL learners in a Saudi context.

## 2.5 Elements of Collaborative Learning

The collaboration of students in small groups does not mean students simply sitting side by side in order to communicate and discuss with each other. Nor does it mean allowing only one member of a group to complete all the work by him/herself with the others simply putting their names on the final product (Johnson & Johnson, 1987). Collaboration means talking about and/or sharing materials with others in the group and using the aspects and elements of CL successfully (Graham, 2005). In this section we present some of the distinctive features of CL that were used in this research.

In order to establish a formal collaborative learning strategy, teachers need to take into consideration five basic elements: (1) the ability of students to participate collaboratively in tasks and be ready to share their work with others; (2) individual and group responsibility; (3) face-to-face interaction; (4) teamwork skills, and (5) group processing (Smith, 1998). According to Johnson and Johnson (1999), there are five elements of collaborative learning that help students to increase their achievement and to improve, as follows:

### *1- Positive interdependence*

The first element that leads to successful collaborative learning is the belief that failing at least one student of the group means failing all, so that one member cannot succeed unless all members do, and vice versa (Johnson & Johnson, 1987, 1989). The success of each member in the cooperative group thus basically depends on all the others. Strong positive interdependence refers to the whole group working together effectively and successfully (Kagan, 1994). It is established when all members of the team become encouraged and motivated to ensure that everyone does well. However, weak positive interdependence is created when the success of the cooperative group is seen as being dependent on the success of at least one member in the group (Kagan, 1994). Positive interdependence helps students to improve their individuality and their social identity (Johnson & Johnson, 1987). In addition, positive interdependence is considered to be both the basis and the heart of CL (Graham, 2005; Kagan, 1994). Therefore, positive interdependence establishes mutual benefits for learners, a sense of joint responsibility that means they care about the success not only of themselves but also of other members in the group; it makes their social environment more supportive and thus helps them to be more motivated, confident and excellent in academic achievement (Nunan, 1992; Kohonen, 1992).

### *2- Individual Accountability*

This element is based on Vygotsky's (1978) belief that 'what a child can do with assistance today she will be able to do by herself tomorrow' (p. 87). The individual accountability technique is important and useful because it helps the group to know which students need more support, encouragement and assistance. One of the main purposes of the students cooperating together is therefore to strengthen every member of the group (Graham, 2005). Moreover, it enhances the concept that students cannot 'hitch a ride' on the work of other

members of the group. Teachers thus need to ensure that not only are all members of the group working collaboratively, but also that every single member of the group takes individual responsibility for making a concerted effort to contribute effectively to the group's work. According to Johnson (1991), there are some good ways to structure individual accountability, such as giving every member of the group a test to answer individually, choosing one of the group's members to represent the whole group, and asking some members to teach what they have learned to others.

***3- Face-to-Face Interaction***

Face-to-face interaction is fostered by the positive interdependence element. It can be defined as facilitating, supporting and encouraging individuals to assist each other's efforts (Johnson & Johnson, 1987). Face-to-face interaction has several effects on individual members of the learning group (Johnson & Johnson, 1987):

a- It helps them to exchange information and materials with others.

b- It provides feedback that helps them to improve their performance effectively.

c- It challenges the conclusions of each member and this helps to improve the quality of decision making.

d- It encourages students to be strongly motivated.

e- It decreases levels of anxiety and stress.

***4- Social skills***

The fourth important element of successful collaborative learning is using the appropriate social skills. Students can learn together successfully when they know and trust each other, communicate accurately, support and help each other, resolve any conflicts and solve problems successfully (Johnson & Johnson, 1991). However, the collaborative learning strategy will not be

used accurately and effectively if students do not learn the appropriate interpersonal skills. The teachers' role is thus to clarify to their students the social skills they need for their collaborative learning groups, skills such as leadership, conflict management, trust-building and decision making (Johnson & Johnson, 1989, 1999, 2003). The more skilful collaborators are socially, the more feedback they receive or give on this skill, the higher the achievement of the CL group will be (Graham, 2005).

***5- Group Processing***

This element is a reflection on sessions of collaborative learning in order to determine whether the actions of the group's members are helpful or if there is a need to make some changes. Group processing is therefore important because it gives the students the opportunity to evaluate and maintain their social skills and receive some feedback on their practice during the sessions. Moreover, in this stage teachers have an essential role to play in order to help students achieve successful collaborative groups. For example, observations of the students are a good way to find out whether the students understand all the structures, information, strategies and the basic elements of collaborative learning (Graham, 2005).

## 2.6 Collaborative writing in ESL classes

Using small groups in learning a second language depends on both a theoretical background and a pedagogical perspective (Storch, 2002). With regard to the pedagogical approach, the use of small groups is usually based on the communicative approach to L2 instruction that focuses on helping learners to use L2 (Storch, 2002). Collaborative writing refers to a group of writers working in small groups as a team to produce and complete a shared piece of writing. Although, according to Noël and Robert (2003), CW helps students to express their

viewpoints and ideas and saves time and effort, ESL writers have difficulties accomplishing it. Ballard and Clanchy (1992) claim that collaborative writing is not an easy task, especially for ESL/EFL speakers, because learning in group settings requires double the amount of effort: for instance, in sharing work together, responding to each other and accepting critiques from each other. However, as Elbow (1973) points out, CW in the classroom is useful and important, since if someone is stuck in his or her writing, it is better to contact and talk with someone else. He claims that 'two heads are better than one because two heads can make conflicting material inter-act better than one head usually can' (p. 49). Moreover, Storch (2002) interviewed a sample of ESL students and found that writing collaboratively could encourage them to share responsibility for making decisions on all aspects and categories of writing, including content, structure and language.

Some researchers, such as Hardaway, Murray and Elbow, believe that the effectiveness of collaborative writing is limited to the final stages of the process approach to writing: i.e., revising and editing. However, Gebhardt (1980) argues that collaborative writing has a positive effect not only in these final stages but also in the beginning stages: for instance, in brainstorming, collecting ideas, planning and outlining. In his opinion it would be a shame to limit collaboration to the final stages of the writing process because 'It seems to me that collaborative writing strategies should be applied to finding a promising topic, generating details on the topic, and locating the intended audience for a paper' (p. 73). Moreover, Storch's studies (1999, 2002 & 2005) indicated that using a collaborative learning strategy in writing classes is effective in beginning activities: namely, brainstorming and discussing collaboratively, and also in final stages such as the peer review and editing stages. One of the stages in the collaborative writing process involves reviewing (including peer editing, peer evaluation and peer response); in this

stage students either collect and get feedback on their own writing or give additional feedback on the papers of others (Hansen, 2005; Baker, 2009; Mangelsdorf, 1992). In the peer review stage, students tend to make suggestions to each other in order to improve their final drafts. In addition, peer review activities such as peer editing, peer evaluation and peer response function to give the students feedback. Gebhardt (1980) mentions that feedback is the basis of collaborative writing, so that the influence of peers is nothing without it. Moreover, Elbow (1975) advises the use of peer response in the revising and editing stages because it helps both the reader to become familiar with the writer's style and the writer to gain more experience in understanding the comments of others.

However, the peer review stage focuses mainly on the product rather than the process of writing. Nelson and Carson (1998) indicate that students in peer response groups focus on finding mistakes. They pay a great deal of attention to the correction of words and sentence-level problems, which is considered to constitute the final editing phase of the writing process. Nelson and Carson (1998) found that the main focus in group interactions was on aspects of the written product such as grammar, spelling and punctuation.

## 2.7 Paulus's (1999) Essay Scoring Rubric

In this research it was clearly necessary to measure changes in the students' essays over time. There are many scales for evaluating essays, such as the 'FL Composition Profile' and the 'Six Traits of Writing'. The FL Composition Profile scale was designed by Valdes and Dvorak (1989) to assess students in certain aspects of their writing on a scale of 0 - 100. The scale of the Six Traits of Writing was designed by Carlin-Menter (2006) to measure ideas, organization, voice, word choice, sentence fluency and conventions.

The scale that seemed most appropriate for this study, however, is known as Paulus's rubric (Paulus, 1999). It is therefore important to discuss her study here and to show evidence of the success of the rubric. The aim of Paulus's study was to determine whether training undergraduate ESL students studying on a pre-university composition writing course in the USA to practise feedback and revisions would be effective in improving their writing skills. When the students finished their first draft, they received both written and oral feedback from their classmates. After revising and writing the second draft, they received feedback from the teacher. Finally, they were asked to revise and submit the final draft. Paulus found that students produced 843 revisions in total, 62.5% of which focused on changes in surface aspects of the essays such as spelling and structure, while 37.5% concerned changes in meaning. She also found that both peer and teacher feedback helped students to improve their multiple drafts.

Her Essay Scoring Rubric was developed from the composition rubrics in the Michigan English Language Assessment Battery (MELAB) (Hamp-Lyons, 1991) that only measures essays holistically. Paulus's change was to add writing categories "in order to reflect what was taught in the course and the goals of this particular persuasive essay" (p. 285). The writing categories were Organization, Development, Cohesion/Coherence, Structure, Vocabulary and Mechanics. These categories will be explained further on page 81.

Paulus's own research showed that the rubric could be used successfully for evaluating students' essays and assessing aspects of their writing both globally and locally. Other studies concerned with teaching writing skills have used Paulus's Essay Scoring rubric: for example, Lundstrom and Baker (2009), who felt that it "allowed for an analytical assessment of both the global and local aspects of writing, in addition to providing a holistic, overall final assessment score" (p. 34). The rubric has been widely used in research such as that of Lundstrom and Baker

(2009), and Grami (2010). It was used in the current research because it suited the types of classroom and the approach adopted, and because it measured appropriate aspects of the students' performance (see pages 81-83 for further details).

## 2.8 Previous studies of Collaborative Learning

During the last three decades, the positive advantages of collaborative learning and its effective role in improving students' skills have become clear in many fields of learning, such as reading, second language acquisition, natural and social studies (Slavin & Madden, 1999; Shachar & Sharan, 1994; Foley & O'Donnell, 2002). This section sheds light on the relationship of CL with second language acquisition with an emphasis on learning L2 writing skills.

Gooden-Jones (1996) selected 10 immigrant volunteer students from a community college in New York City. These students had several times failed the language proficiency test that was a main condition for entrance to the college. Through different kinds of evaluation such as observation, questionnaires, interviews and written essays, he examined how the students developed their writing proficiency through a collaborative learning strategy. The students were taught the collaborative learning strategy for six weeks. They were also asked to keep a journal about their learning experiences. The researcher found that 80% of the students had passed the written achievement test (WAT) administered by the college. An analysis of the students' essays indicated that the collaborative learning strategy had led to an improvement in their writing skills.

Regarding the effectiveness of discussion during the pre-writing stage, Shi (1998) attempted to determine whether peer-talk that occurred during the pre-writing stage of writing could help ESL learners to write better quality essays than teacher-led discussions. The results

showed that peer discussion during the pre-writing stage helped students to produce strong essays in terms of verbs. In addition, it was found that students who had not engaged in any discussion produced long essays compared with those who had been involved in teacher-led talk, who wrote shorter drafts. Moreover, peer-talk during the pre-writing stage helped students to immerse themselves in the social context, either as a result of scaffolding by their teachers or by assisting each other to discover various words and ideas.

With regard to the development of fluency and accuracy of L2 in collaborative classrooms, Storch (1999) aimed to determine whether discussing grammar collaboratively could help students to produce accurate written texts more than working individually. The students were given three different exercises: a closed exercise, text reconstruction and composition. Each exercise included two versions: one was done individually and the other was carried out collaboratively. After comparing the three exercises that had been done collaboratively with those completed individually, the students' scores in the closed exercise revealed some development in certain grammatical aspects such as verb tense and derivational morphology, although the use of articles had not improved. The total score in the first version was 58%, but this had increased to 77% in the second version. Similarly, the finding in the text reconstruction exercise indicated an increase in average accuracy from 63% in the first version to 86% in the second version. The results of the composition exercises showed that the pairs wrote short essays in terms of numbers of words, sentences and clauses. However, the students produced less complex sentences after being involved in collaborative learning. In addition, the average percentage of errors in the first version was 13.6, but this had decreased to 7.75% in the second version. It was therefore clear that CL had a positive effect on overall grammatical accuracy.

Various researchers have studied the influence of collaborative learning on improving writing skills. Storch (2005) examined the effectiveness of using either pairs or small groups in improving English writing skills by making a comparison between texts written in groups with others written individually. The experiment was applied in an ESL classroom at a large Australian university. Storch gave the participants the opportunity to complete their work either individually or collaboratively. Only five of the participants chose to work individually while the remainder preferred to work collaboratively. They were asked to write one or two paragraphs. The researcher taught the class for four weeks. The students' scores in the diagnostic test ranged from 5 to 6 on a scale of 9. Those students who worked collaboratively used a tape-recorder to record their conversations while completing their compositions. They were then interviewed individually in order to obtain further information about their experience in the collaborative writing process. Storch found that the students who worked collaboratively spent a great deal of time writing their compositions but produced short texts compared to the students who wrote individually. Another finding was that writing collaboratively helped students to produce better grammatical and complex written texts. In addition, the pairs tended to write more complex sentences than those who wrote individually, as measured by the percentage of dependent clauses and T-units. A T-unit is defined by Hunt (1996) as 'one main clause plus whatever subordinate clauses happen to be attached to or embedded within it' (p. 735). Storch found that the length of the T-units was 16 words in the collaborative groups, but only 12 words with individuals. In terms of the process approach to writing, he found that working in small groups encouraged students to collaborate in order to generate ideas. Moreover, Storch reported after interviewing some of the students that collaborative writing had enabled them to collect and generate ideas and become able to use them effectively. In addition, both the ESL and EFL

students had become able to provide and obtain feedback from each other successfully, and stated that CW was a simple way to give and receive feedback on language, which might explain why students in pairs produced better essays in terms of grammar than others who wrote individually.

In another study, Storch and Wigglesworth (2007, 2009) made a comparison between texts produced by students writing in pairs with other texts produced individually in order to determine whether there were differences in certain aspects of writing, such as accuracy, fluency and complexity. The study was conducted at an Australian University; two thirds of the participants were female and one third was male and they all came from an Asian background. The first test involved writing a report based on visual prompts, while the second was an argumentative task. Since some studies have shown that pairs take a longer time in talking (e.g., Storch, 1999, 2005), individual students were given 20 minutes to finish the report task and 40 minutes for the essay, whereas pairs were given 30 minutes for the report and 60 minutes for the essay. A data analysis was carried out on the written texts of both individuals and pairs, and transcripts were made of the work of 12 pairs selected at random. The results indicated that there were significant differences between students who completed their tasks in pairs and those who worked individually in terms of accuracy; however, the differences in terms of fluency and complexity were not significant.

Storch's previous studies were all relevant to this research, since they compared the quality of written texts produced by students in cooperation with their peers with that of texts produced individually, in terms of accuracy (grammar) and fluency (Storch, 1999, 2005; Storch & Wigglesworth, 2007, 2009).

Peer revision is considered to be one of the collaborative writing strategies and has been investigated by several researchers. Suzuki (2008) examined the significance of pedagogical differences between self-revisions and peer revisions of written compositions among adult ESL learners. She aimed to study the relationship between self-revisions and peer revisions and negotiation. She also wanted to know which changes occur during both self- and peer revisions. The participants, who were all middle-class students and who had all obtained the same score on the TOEFL test, were asked to write essays on two different topics. They were then divided into two similar groups (A & B) in terms of language proficiency, writing accuracy, gender, age and length of L2 learning. The researcher used a variety of techniques to collect the data. She observed the whole class for three months and interviewed the students' teacher. She gave the students the opportunity to read a few chapters each week and to write summaries of what they had read. All students in both groups were asked to spend half an hour writing an essay about a famous historical personage. Group A was asked to complete a questionnaire giving demographic information. Then they listened to instructions on how to think aloud and practise how they could solve their writing problems. The L2 writers in group A engaged in self-revision for 15 minutes and their revisions were recorded. The students in group B, on the other hand, were instructed in methods of peer revision, and each student was asked to spend 15 minutes revising his/her classmate's essay for 15 minutes using clearly distinguishable writing. They then engaged in discussions with each other that were also tape-recorded. The instructions on both self- and peer revision were given not only in English but also in Japanese (this being the native language of the students). Suzuki found that the number of episodes of negotiation in peer revision was high (682 episodes) compared to the number of self-revisions (522 episodes). In contrast, students who had engaged in self-revisions had changed their texts 287 times, whereas

those who had engaged in peer revision had changed them only 166 times. These results indicate that those students who had engaged in peer revision had paid more frequent attention to both meta-talk, content and ideas, whereas the students involved in self-revisions focused on choosing words, correcting grammar and improving language form. In another part of Suzuki's (2009) study, she examined the L2 writers' self-assessments for changes in their texts after both self- and peer revision, concentrating on linguistic accuracy. The participants, procedure and analysis were similar to those in Suzuki's previous study (2008). The results showed that the number of text changes was slightly higher after peer revisions than after self-revision.

The relevance of Suzuki's (2009) study to this research lay in its concern with peer revision. For this research, collaboration during the revision stage was investigated through the questionnaire. It was therefore useful to consult Suzuki's study in order to see the significance of pedagogical differences found between self-revisions and peer revisions of written compositions produced by adult ESL learners.

In addition, Villamil and de Guerrero (1996) investigated several points relevant to peer revision, as follows: a) the kinds of revision activities in which pairs were involved; b) the strategies students use when engaging in peer revision, and c) the categories of social behaviour that occur when students are involved in dyadic peer revision. 54 students from the Inter-American University of Puerto Rico were chosen for this study. The students had been taught two writing courses: narration and persuasion, for four weeks. They were asked to write sample essays and taught how to engage in peer revision. The main purpose of the training was to produce a first draft that included peer revisions. Students were required to read their first draft aloud before engaging in peer revision. After revising the first draft in pairs, they were asked to write their final draft at home. The students' revisions were recorded and transcribed by graduate

students. The results showed that during peer revision collaborative dyads are encouraged to perform various social cognitive activities such as handling problems, drafting, making notes, reading and writing comments. In addition, five strategies were used in peer revisions: employing symbols and external resources, using the Ll, scaffolding, resorting to inter-language knowledge, and vocalizing private speech. The categories of social behaviour found to occur in dyadic peer revision were management of authorial control, collaboration, affectivity and adopting reader/writer roles. As the study of Villamil and de Guerrero (1996) investigated some points related to peer revisions, the findings were helpful for this research in demonstrating the type of behaviour found in such dyads.

In another study conducted by Villamil and Guerrero (2000), an in-depth investigation was carried out into the types of behaviour and mechanisms that make scaffolding and the use of the ZPD more effective in second language peer revision. Two Spanish male intermediate ESL college students, who had taken a course in writing development, were selected for this study. Thus the interaction of only one dyad was observed in order to assess the students' behaviour during ZPD activities. The students were first told to write sample essays, then instructed in methods of peer revision, and finally engaged in a peer revision session. One student was chosen at random to be the reader and the other to be the writer of the composition. They were also taught how to revise the draft and asked to record their discussion during the revision session. The methodology used was similar to that used in a previous study they had conducted in 1996. The results showed that the reader acted as a mediator and that various types of behaviour were facilitated. Scaffolding and use of the ZPD helped both participants to manage their interaction effectively, to explain and illustrate various grammatical issues, and to make their written texts more critical and analytical. This study was also useful for this research because it provided clear

observations concerning the importance of mechanisms of scaffolding and the ZPD during collaborative interaction between two ESL learners.

Berg (1999) investigated the effectiveness of using peer response in both revision and quality of writing. One group of 23 ESL students was trained in using peer response, while another group of 23 ESL students received no training. Berg then compared the first and second drafts of the trained students with the drafts of the untrained students. The main research question for this study concerned whether trained students would produce better results in both revision techniques and quality of writing. One of the interesting findings was that the trained ESL students were better able to improve their drafts through revision than the untrained students. Secondly, the trained students were found to have made more revisions in meaning than the untrained students. Both the improvements in the revised drafts and the increase in the number of meaning revisions resulted in the trained ESL students producing better quality second drafts than the untrained students.

Shull (2001) examined the effectiveness of the collaborative learning strategy that included peer-editing used to improve the writing skills of two high school English 11 standard classes at Romeoville High School in the USA. He aimed to determine if CL could be an appropriate approach to solving the problems in their writing. The data were gathered from essays written at the beginning and end of the study. He thus used a quasi-experimental approach that included teaching expository compositions to the experimental and control groups. The experimental group included 28 students and was taught through a collaborative learning strategy, whereas the non-treatment group contained 26 students and was taught using either traditional or teacher-centred methods. After conducting qualitative tests, Shull found that the

writing of students taught using a collaborative learning strategy had improved more than that of the control group.

Several researchers have examined students' perceptions of CL. Phipps, Kask and Higgins (2001) investigated the perceptions of 210 college students. Their results were contradictory: although the students' perceptions were positive regarding some elements of CL, such as positive interpersonal activity, small group skills and individual accountability, they were negative about certain other techniques, such as face-to-face interaction and group processing. In addition, 48 per cent of them considered CL to be useful for motivating students to learn effectively. Only 18 per cent of them believed that the collaborative learning strategy affected learning positively. Moreover, some other students said that although they did not mind sharing their marks for regular projects and assignments and during class, they did not like sharing marks for exams.

Mulryan (1994) examined the perceptions and attitudes towards working together cooperatively of 48 students in the fifth and sixth grades at a school in the USA and compared these with their teachers' perceptions. She interviewed the students in three stages: 1) at the beginning of the study; 2) at the end of the study, and 3) after observation of each lesson. Similarly, the teachers were interviewed at the beginning and at the end of the study. The study results showed that students' perceptions of CL were positive. They believed that CL helped them to minimize their mistakes by exchanging information and by giving them the total freedom to solve their problems in a supportive atmosphere. The teachers' perspectives on CL were also positive. They thought that CL gave their students the opportunity to learn from each other, work with and help others, and to seek help from others. The teachers added that the students should not only be working with each other but they should also be engaging in other

CL activities, such as encouraging, explaining and discussing. They felt the students should be willing to open their ears and listen to the opinions of others and to be active in their groups.

A collaborative network environment has also been found to enhance essay-writing processes. Lindblom-Ylänne and Pihlajamäki (2003) interviewed 25 law students who were studying on a course in legal history at the University of Helsinki. Both the students and their teacher had positive experiences of the essay-writing process. The students were divided into two groups. The first group contained students who felt that sharing their written drafts with peers was an interesting idea; the second group consisted of those who felt that sharing written drafts was a threatening idea. The study findings indicated that an active use of a computer-supported learning environment resulted in students getting good marks in their essays. Moreover, the majority of students felt that sharing written drafts collaboratively was a highly beneficial and useful experience.

It has also been noticed that the use of scaffolding may help students to regulate their learning effectively. Azevedo, Cromley and Seibert (2004) investigated the effectiveness of three different types of scaffolding (adoptive scaffolding, fixed scaffolding and no scaffolding) in regulating students' learning using hypermedia. The participants were 51 undergraduates (13 male and 38 female) at the Mid-Atlantic University in the USA. Various types of measurement were used with the students: a pre-test and a post-test, and a questionnaire. The topic was human circulatory systems, and parts of the tests involved matching words with corresponding definitions, labelling 20 components on a picture of the heart, drawing the path of the blood through the body, and writing an essay about circulatory systems. Students were shown a CD-ROM about the human body (e.g., heart, circulatory system and blood). The results showed that adoptive scaffolding improved students' mental processes more than the other two types. Fixed

and no scaffolding were found to be less effective in regulating learning than adoptive scaffolding.

Table 2.1 below contains a summary of previous studies on collaborative learning, indicating the nature of the study, numbers of participants involved, types of experiment used and the findings of the study. The table shows that the issues investigated in most previous studies on collaborative learning were:

- The benefits of peer-talk as opposed to teacher-led discussions (Shi, 1998).
- The quality of written texts produced by students in cooperation with their peers compared with that of texts produced individually, in terms of accuracy (grammar) and fluency (Storch, 1999, 2005; Storch & Wigglesworth, 2007, 2009).
- The use of self-revisions and peer revisions of written compositions (Suzuki, 2008).
- The types of behaviour and mechanisms that make scaffolding and use of the ZPD more effective in second language peer revision (Villamil & Guerrero, 1996, 2000).
- The attitudes and perceptions of both teachers and students concerning collaborative learning (Mulryan, 1994; Phipps, Kask & Higgins, 2001).
- The effectiveness of the collaborative learning strategy on improving writing skills (Shull, 2001).

Table 2.1 also details the research methods commonly employed, as follows:

- Observation (Shi, 1998).

- Collection of essays and conducting interviews with students (Storch, 1999, 2005; Storch & Wigglesworth, 2007, 2009).
- Having the subjects write essays and conducting observation (Villamil & Guerrero, 1996, 2000).
- Interview and questionnaire (Mulryan, 1994; Phipps, Kask & Higgins, 2001).

**Table 2.1 Previous studies of collaborative learning**

| Study Aim | Participants | Type of Evaluation | Treatment Groups | Findings |
|---|---|---|---|---|
| **Gooden-Jones (1996)** To examine how the students developed their writing proficiency through CL strategy | 10 immigrant volunteer students from a community college in New York city | Observation, questionnaires, interviews and written essays | The volunteers were taught the CL strategy for six weeks and asked to keep a journal about their learning experiences. | 80% of the students had passed the written achievement test (WAT) administered by the college. CL strategy had improved students' discovery of writing skills as a method of learning |
| **Shi (1998)** To determine whether peer-talk during pre-writing stage could help improve quality of essays more than teacher-led discussions. | 47 international students at elementary, intermediate and advanced levels of English in Ontario, Canada. | Tape recording and Observation. | Some analytic instruments were used in this study such as non-parametric tests for rating scores, length of essays in terms of the numbers of verbs used in the pre-writing discussions. The researcher developed a coding scheme for verbs that helped to determine whether there was a difference between peer-discussions and teacher-led discussions. | Peer discussion during the pre-writing stage helped students to produce strong essays in terms of verbs. Students who did not engage in any discussion produced long essays compared with those who had been involved in teacher-led talk who produced shorter drafts. Peer-talk during the pre-writing stage helped students to involve themselves more deeply in social contexts because they were scaffolded by their teachers or they assisted each other cooperatively to discover various words and ideas. |

| Study Aim | Participants | Type of Evaluation | Treatment Groups | Findings |
|---|---|---|---|---|
| **Storch (1999)** To see if discussing grammar collaboratively could help students to produce more accurate written texts than working individually. | Eleven international students had finished their English academic course from an Australian University with an English level of intermediate or advanced. | Three different exercises: a closed exercise, text reconstruction, and composition. | Every exercise included two versions; the first version was done individually, whereas the other version was completed collaboratively. Comparing the three exercises that had been done collaboratively with those completed individually. | The students' scores in closed exercises showed development in some grammatical aspects such as verb tense and derivational morphology but articles were not improved. Text reconstruction indicated an increase in average accuracy from 63% in the first version to 86% in the second version. CL had a positive influence on overall grammatical accuracy. |
| **Storch (2005)** Comparing texts produced by pairs with other texts produced individually and investigating the nature of the writing processes evident in the pair talk. | 23 adult ESL learners at a large Australian University | Students were asked to compose a short (one to two paragraphs) text. Tape-recorded interview. | Students were given the choice to work either in pairs or individually and were asked to write one or two paragraphs. Students were taught for four weeks. Their scores in the diagnostic test ranged from 5 to 6 on a scale of 9. The students in pairs were given a tape recorder to tape their conversation while completing their compositions. They were interviewed individually to obtain more information about their experiences during CW. | Pairs wrote shorter compositions than individuals. Collaborative writing helped students to produce better texts in terms of grammatical accuracy and complexity. Higher percentage of dependent clauses and T-units found for pairs than for individuals. Interviewing indicated that CW enabled students to discover ideas together and exposed them to different views. In addition, CW helps to provide feedback on language. |

| Study Aim | Participants | Type of Evaluation | Treatment groups | findings |
|---|---|---|---|---|
| **Storch & Wigglesworth (2007, 2009)** Comparing written texts produced by students working in pairs with other texts produced individually to find out whether there were differences in certain aspects of writing such as accuracy, fluency and complexity. | The study was carried out at an Austrian University. Two thirds of the participants were female and one third was male; all students were from an Asian background. Their average ages of 26 and 24. | Writing an essay and a report. | Individual students were given 20 minutes to finish the report task and 40 minutes for the essay, whereas pairs were given 30 minutes for the report and 60 minutes for the essay. | There was no difference in terms of fluency and complexity between students who completed their tasks individually and others who completed in pairs.<br>The differences between the two groups in terms of accuracy were significant. The pairs produced more accurate and more error-free clauses. |
| **Suzuki (2008)** To assess differ-ences between self-revisions and peer revisions of written composit-ions among adult ESL learners.<br>2- The relationship between self-revisions and peer revisions and negotiation. | 24 Japanese sophomore students at the university who were studying English as a compulsory course. | Observation<br>Interviews<br>Questionnaire<br>Thinking aloud. | Observing the whole class for three months.<br>Interviewing students' teacher.<br>Summarizing some chapters weekly.<br>Writing an essay for half an hour. | Number of episodes of negotiation in peer revision was higher than in self-revisions. Students using self-revision had changed their text 287 times; in the peer revisions this had occurred 166 times.<br>Peer revisions paid more frequent attention to both meta-talk, content and ideas, whereas choosing words, correcting grammar and improving language form were paid more attention in self-revisions. |

| Study Aim | Participants | Type of evaluation | Treatment groups | Findings |
|---|---|---|---|---|
| **Villamil & Guerrero (1996)** To investigate points relevant to peer revision: a) What kinds of revision activities do pairs engage in? b) Strategies that students use during peer revisions, and c) what categories of social behaviour occur when students engage in dyadic peer revision? | Only 54 students from the Inter-American University of Puerto Rico. | Writing essays and recording. | Students had been taught two writing courses: narration and persuasion, for four weeks. They were asked to write some sample essays and taught how to engage in peer revision. Students read their first draft aloud before involvement in peer revisions. After revising the first draft in pairs, they were asked to write their final draft at home. Students' revisions were recorded and transcribed by graduate students. | Encouragement by collaborative dyads during peer revision using some social cognitive activities such as reading, assess-ing, dealing with trouble sources, composing, writing comments, copying and discussing task procedures. |
| **Villamil & Guerrero (2000)** In-depth investig-ation into types of behaviour and mechanisms that make scaffolding and use of ZPD more effective in second language peer revision. | Two Spanish male intermediate ESL college students. | Dyad's interaction. | One student was chosen to be reader and one to be writer of the composition. They were taught how to revise the draft and asked to record their discussion during revision. | The reader was a mediator. Scaffolding and use of ZPD helped participants to manage their interaction effectively, explain and illustrate some grammatical issues make their written texts more critical and analytical. |

| Study Aim | Participants | Type of evaluation | Treatment groups | Findings |
|---|---|---|---|---|
| **Berg (1999)** To assess effectiveness of using peer response on both revision and quality of writing. | 23 ESL students were trained in using peer response and compared with another untrained 23 ESL learners. | First and second draft essays were collected to measure the quality of writing and revision. | Comparing the first and the second drafts of trained students with drafts of untrained students. | Training helped ESL students to improve their revised drafts more than untrained students. The trained students made more meaning revisions than the untrained students. |
| **Shull (2001)** To assess effectiveness of collaborative learning strategy in improving writing skills. | The treatment group consisted of 28 students; non-treatment group contained 26 students. | Collection of pre- and post-tests of students' essays. | Experimental group was taught using CL. Control group, or non-treatment group, was taught though traditional or teacher-centred methods. | Students in the experimental group improved their writing more than the control group. |
| **Phipps, Kask and Higgins (2001)** To assess attitudes towards and motivation for using collaborative learning strategy | 210 college students (freshman, sophomore, junior) Different disciplines (psychology, economics and so forth). | Written questionnaire | Measuring students' attitudes towards and perceptions of the five elements of CL. | Students' attitudes were more positive concerning some elements of CL, such as positive interpersonal activity, small group skills and individual accountability, but less positive regarding face-to-face interaction and group processing. 48% considered CL useful for motivating students to learn effectively.18% considered CL to affect learning positively. |

| Study Aim | Participants | Type of evaluation | Treatment groups | Findings |
|---|---|---|---|---|
| **Mulryan (1994)** To assess students' and teachers' perceptions of CL. | 48 students in fifth and sixth grade in USA. | Interview. | Interviewed students in three stages: 1) at the beginning; 2) at the end; 3) after observation of each lesson. Similarly, teachers were interviewed at the beginning and at the end of the study. | CL helped students to minimize their mistakes by exchanging information and giving them total freedom to solve their problems in a supportive atmosphere. The teachers' perspectives were that CL gave their students the opportunity to learn from each other, work with and help others and seek help from others. |
| **Azevedo, Cromley and Seibert (2004)** To investigate the effectiveness of three different types of scaffolding in regulating students' learning using hypermedia. | 51 undergraduates (13 male and 38 female) at the University of the Mid-Atlantic in the USA. | Pre-test and post-test, and questionnaire | The topic was circulatory systems; parts of students' tests involved matching words with corresponding definitions, labelling 20 components on a picture of the heart, drawing the path of the blood through the body, and writing an essay about circulatory systems. | Adoptive scaffolding improved students' mental process more than the other two types.<br>Fixed and no scaffolding were less effective in regulating learning than AS. |
| **Grami (2010)** Evaluating the success of integrating peer feedback into ESL writing classes in terms of developing writing and social skills. | 61.6% of the students were in both first and second year, whereas the remaining was in third and fourth year. | Pre-test and post-test, Semi structured questionnaire | The treatment group trained to use peer feedback beside to teacher-written feedback; whereas a control group received only teacher-written feedback. | Even thought that students in both groups did better in the test, students who involved in the peer feedback group outperformed the other group in every aspect of writing investigated |

## 2.9 Conclusion

The purpose of this chapter was to review the literature related to the collaborative learning strategy. The discussion of the theoretical framework of CL revealed that, although it is not a new idea, it has recently been seen as applicable to, and even necessary for ESL classrooms. The findings of previous studies have shown that CL has a positive influence at some stages of the writing process: for instance, in allowing students to discuss their writing with each other, enabling them to discover various additional words and ideas, and helping them to produce better texts in terms of grammatical accuracy. In addition, CL has been found to be beneficial for enhancing critical thinking and problem solving skills, involving students in various social contexts and in encouraging them to interact with each other effectively. However, various aspects of CL have not been covered and explored in previous research, as was seen in Table 2.1. These include investigating the effectiveness of collaborative learning in producing better written texts in terms of organization, development, cohesion, vocabulary, grammar and mechanics. As a result, this study aimed to answer the following two questions:

1- Would students who are involved in collaborative writing settings produce better written and better organized essays than students working individually?
2- Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings?

In the following chapter the methodology used in the study will be discussed in detail, including appropriate ways to answer the research questions, the research design, participants and procedures.

# Chapter 3: Methodology and Research Design

## 3.1 Introduction

Taking previous research into account, the present study sought answers to the two main research questions, outlined in Chapter 1 (see page 5). The first question concerned the performance of students after involvement in CL; having the students write pre-and post-test essays and rating them by using a rubric was therefore considered an appropriate method to employ, based on Shull (2001). The second question involved assessing perceptions and opinions both before and after involvement in CL; questionnaires and interviews were considered to be appropriate methods of accomplishing this, as used in Storch (1999, 2005); Storch and Wigglesworth (2007, 2009); Mulryan 1994), and Phipps, Kask and Higgins (2001). The methods employed in this study therefore resemble methods used in previous studies that helped the researcher to notice the development of students after involvement in collaborative learning.

The aim of this chapter is to discuss in detail the methodology used in the study. In the first section, the research questions and the methods used to answer them are described. The second section contains a presentation of the research design, including both the strategy and the methods employed in the study. In the third section, the sample used for the purposes of this study is described, including descriptions of both the subjects of the research and the general student population from which the sample was taken. The various procedures used in conducting the study are also highlighted in this section. In the final section, several other methodological concerns are discussed, such as reliability, validity and replication of the study's methods and instruments, methods of data analysis, and the originality and limitations of the methodology.

## 3.2 Research questions

The principal aim of the study was to discover whether collaborative writing benefits students, involving two sub-research questions:

1- Would students who are involved in collaborative writing settings produce better written and better organized essays than students working individually?

2- Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings?

The research questions, therefore, required a design in which all students would be given a pre-test at the beginning of the study and a post-test eleven weeks later. It was also decided that experimental and control groups would be set up; the experimental collaborative learning (CL) group would receive special treatment for two or three hours a week for three months and the control traditional learning (TL) group would receive their usual classroom instruction.

The two sub-research questions were answered through the following questions:

- Is there a difference between the experimental CL group and the control TL group at pre-test?
- Does the experimental CL group change from pre-test to post-test?
- Does the control TL group change from pre-test to post-test?
- Is the experimental CL group different from the control TL group at post-test?

### 3.2.1 Research question (1)

**Would students who are involved in collaborative writing settings produce better written and better organized essays than students working individually?**

The aim of the first research sub-question was to assess the performance of students before and after involvement in collaborative learning; a pre-test and a post-test design was therefore

considered to be appropriate. Students in both the experimental (CL) and control (TL) groups were therefore asked to write essays on a specific topic in the first week of the study as a pre-test. At the end of the study, they were asked to write the same essay again; this formed the post-test (see appendix A). The pre-test/post-test method was deemed to be appropriate for this study because it would involve collecting and marking students' essays and according scores to their work that could be considered to be representative of their achievement; thus, a comparison between the scores obtained in the two tests would be a valid method of determining whether or not CL is effective.

### 3.2.2 Research question (2)

**Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings?**

The data necessary to assess the students' attitudes and perceptions were obtained from questionnaires and interviews. The questionnaire was divided into two parts: general writing questions (1-23) and collaborative writing questions (1-20) (see appendixes B-1 and B-2). The students in both groups were given the questionnaires at the beginning and at the end of the study in order to assess any changes in their attitudes and perceptions concerning collaborative writing.

The students in the experimental CL group had experienced using CL and been given the two parts of the questionnaire to complete at the beginning and at the end of the study. Although the important post-test information about attitudes would come from the experimental group who had been trained in CL, rather than from the control TL group who had not received such training, the students in the control TL group were also given the same two parts of the questionnaires to complete before and after the end of the study. The rationale behind asking the control TL group to comment on CL practices was to see how aware they were of CL through other English language courses and skills: namely, listening,

speaking and reading, without having been trained specifically in CL. In addition, the statements in the questionnaires were made easy to understand so that the researcher was able to collect valid and reliable answers from students in the control group.

Four students from the experimental CL group were also selected for interview at random and on the basis of marks they had obtained for writing during the previous term. The interview questions are found in Appendix C. Table 3.1 presents a summary of the research questions and the methods used to answer them; a detailed description is provided in the following section.

**Table 3.1 Methods employed to answer the research questions**

| Research Question | Method | Type of measurement |
|---|---|---|
| **Q1.** Would students who are involved in collaborative writing settings produce better written and better organized essays than students working individually? | Essays were collected from all students at the beginning and end of the study. | Judgment of expert teachers rating the students' essays for organization, development, cohesion, structure, vocabulary and mechanics (Paulus's Scale, see appendices F-1 and F-2). |
| **Q 2.** Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings? | Questionnaires were administered to all students at the beginning and the end of the study. | Questionnaires designed by the researcher (See appendix B). |
| | Interviews of four students from the experimental CL group after their involvement in collaborative learning. | Expressed opinions of students in an interview designed by the researcher (See appendix C). |

## 3.3 Research Hypotheses

1. **There will be a significant difference in the experimental CL group between the pre-test and the post-test as measured by the following sub-hypotheses:**

**1.1 There will be significant differences in the essays of students in the experimental CL group before and after involvement in the collaborative learning strategy.**

1.1.1 The organization of students' essays will be significantly different after their involvement in collaborative learning.

1.1.2 The development of students' essays will be significantly different after their involvement in collaborative learning.

1.1.3 The coherence of students' essays will be significantly different after their involvement in collaborative learning.

1.1.4 The vocabulary used in the students' essays will be significantly different after their involvement in collaborative learning.

1.1.5 The structure of students' essays will be significantly different after their involvement in collaborative learning.

1.1.6 The mechanics of students' essays will be significantly different after their involvement in collaborative learning.

**1.2 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire will be significantly different.**

1.2.1 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning collaboration during the pre-writing stage will be significantly different.

1.2.2 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning collaboration during the revision stage will be significantly different.

1.2.3 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning collaboration during the editing stage will be significantly different.

1.2.4. The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the importance of collaborative learning will be significantly different.

1.2.5 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in helping them to get better scores will be significantly different.

1.2.6 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in providing comments on students' writing will be significantly different.

1.2.7 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in increasing understanding of accountability will be significantly different.

1.2.8 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the benefits of reading and listening to other students' essays in groups will be significantly different.

1.2.9 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the factor that collaborative learning helps in acquiring and using new vocabulary correctly will be significantly different.

1.2.10 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the factor that students feel more satisfied after writing their essays in collaborative groups will be significantly different.

## 2. There will be a significant difference in the control TL group between the pre-test and the post-test as measured by the following sub-hypotheses:

**2.1 There will be significant differences in the students' essays before and after involvement in the traditional learning method.**

2.1.1 The organization of the students' essays will be significantly different after their involvement in the traditional learning method.

2.1.2 The development of the students' essays will be significantly different after their involvement in the traditional leaning method.

2.1.3 The coherence of the students' essays will be significantly different after their involvement in the traditional leaning method.

2.1.4 The vocabulary used in the students' essays will be significantly different after their involvement in the traditional leaning method.

2.1.5 The structure of the students' essays will be significantly different after their involvement in the traditional leaning method.

2.1.6 The mechanics of the students' essays will be significantly different after their involvement in the traditional leaning method.

**2.2 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire will be significantly different.**

2.2.1 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning collaboration during the pre-writing stage will be significantly different.

2.2.2 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning collaboration during the revision stage will be significantly different.

2.2.3 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning collaboration during the editing stage will be significantly different.

2.2.4 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the importance of collaborative learning will be significantly different.

2.2.5 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in helping them to get better scores will be significantly different.

2.2.6 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in providing comments on students' writing will be significantly different.

2.2.7 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in increasing understanding of accountability will be significantly different.

2.2.8 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the benefits of reading and listening to other students' essays in groups will be significantly different.

2.2.9 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the factor that collaborative learning helps in acquiring and using new vocabulary correctly will be significantly different.

2.2.10 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the factor that students feel more satisfied after writing their essays in collaborative groups will be significantly different.

## 3. There will be a significant difference between the experimental CL group and the control TL group at time 2 as measured by the following sub-hypotheses:

**3.1 There will be significant differences between the post-test essays written by students in the experimental CL group and those written by students in the control TL group.**

3.1.1 The organization of the post-test essays of students in the experimental CL group will be significantly different from that of the post-test essays written by students in the control TL group.

3.1.2 The development of the post-test essays of students in the experimental CL group will be significantly different from that of the post-test essays written by students in the control TL group.

3.1.3 Cohesion in the post-test essays of students in the experimental CL group will be significantly different from that in the post-test essays written by students in the control TL group.

3.1.4 The vocabulary used in the post-test essays of students in the experimental CL group will be significantly different from that used in the post-test essays written by students in the control TL group.

3.1.5 The structure of the post-test essays of students in the experimental CL group will be significantly different from that of the post-test essays written by students in the control TL group.

3.1.6 The mechanics of the post-test essays written by students in the experimental CL group will be significantly different from that of the post-test essays written by students in the control TL group.

**3.2 There will be significant differences between the attitudes and perceptions of the students in the experimental CL group and those in the control TL group as tested by the collaborative learning questionnaire at the post-test.**

3.2.1 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning collaboration during the pre-writing stage at the post-test.

3.2.2 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning collaboration during the revision stage at the post-test.

3.2.3 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning collaboration during the editing stage at the post-test.

3.2.4 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the importance of collaborative learning at the post-test.

3.2.5 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in helping to get better scores at the post-test.

3.2.6 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in providing comments on students' writing at the post-test.

3.2.7 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in increasing understanding of accountability at the post-test.

3.2.8 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of reading and listening to other students' essays in groups at the post-test.

3.2.9 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in acquiring and using new vocabulary at the post-test.

3.2.10 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in increasing the students' satisfaction with their writing at the post-test.

## 3.4 Ensuring similarity between the experimental CL and control TL groups

The current study aimed to compare two groups: the experimental CL group that received collaborative learning instruction and the control TL group that received traditional language teaching (see pages 106-122 for a full account of the treatment for both groups).

Essentially, while students in both the experimental CL and control TL groups were taught the process approach to writing and were involved in writing essays individually, the experimental CL group had additional training in writing essays collaboratively.

According to Dornyei (2007), 'from a theoretical perceptive, the ultimate challenge is to find a way of making the control group as similar to the treatment group as possible' (p. 116). The researcher needs to make sure that both the control and treatment groups are equal at the time of commencement of the experiment (Mitchell & Jolley, 1988). It was thus important to ensure that both the groups used in this research were as equal in proficiency as possible at the beginning of the study, that they had the same or very similar backgrounds and that they were studying in the same context in the same department and the same (second) year of study. The equivalence between the experimental CL group and the control TL group was as follows:

a- All participants in both groups were studying in the second year in the English language department at Al-Qassim University in Saudi Arabia. All students were therefore considered to be at the lower-intermediate level.

b- All the students were male and aged between 20 and 26, with an average age of 23.

c- The teacher taught both groups equally three times a week for eleven weeks. He taught not only the experimental CL group but also the control TL group the process writing approach that included the stages and activities of pre-writing, drafting, revising and editing.

d- The study procedures will be described in more detail from page 106 onwards.

The scores of the students in both groups from the previous semester were used to show that the proficiency of the experimental CL group and that of the control TL group were equal at the beginning of the study. A full comparison will be presented in Chapter 4 (page 133). In brief, after comparing the two groups through an *independent* t-test, we found that

the means were 68.6 for the experimental CL group and 69.5 for the control TL group, with a mean difference of 0.9; the difference between the two groups was thus 0.77, which is greater than 0.05, and was therefore not significant (see Appendix M). The means found for both groups indicated that they were similar in proficiency before the beginning of the study.

## 3.5 Essay-scoring rubric

The main method for assessing essays in this study is based on Paulus (1999), who investigated not only the difference between the first and third drafts of students' essays in improving their writing skills but also the effectiveness of teacher response and peer response on the revisions of undergraduate ESL students studying on a pre-university composition writing course in America. Her 'rubric' for assessing the essays was based on a scale from 1 as the lowest score to 10 as the highest score for six categories of writing (Baker & Lundstrom, 2009), as follows:

- *Organization* refers to the unity of ideas and paragraphs. The topic sentence and supporting details of the essay are clear and the ideas are related to each other. The paragraphs include introduction, body and conclusion.
- *Development* means using examples and supporting ideas appropriately. Each point in the essay is developed using any kind of supporting evidence, such as examples.
- *Cohesion/coherence* refers to using transition words correctly and to the relationships between ideas.
- *Structure* focuses on grammatical issues: e.g., using verbs and tenses, such as present, past, and past participle, correctly.
- *Vocabulary* refers to precision in using words and clarity in meaning.
- *Mechanics* refers to spelling, punctuation and capitalization.

The full form of the rubric used in this research is provided in Appendix D.

Each essay was scored by two judges. These were expert teachers who measured the students' compositions according to the scales of Paulus's rubric (1999) (see Appendix D). They measured the organization and the ideas in the development of the essays. They also measured the accuracy of the essay structure, vocabulary and mechanics, taking into account grammatical errors (e.g., errors in using prepositions and articles, verb tense and so on), the selection of appropriate vocabulary, and the avoidance of any mistakes in spelling and punctuation.

The two expert teachers were given the pre-test and post-test essays of students in both the experimental CL and the control TL groups for marking and judging (see Appendix F). A third expert acted as adjudicator if there was no correlation between the first and second markers. After collecting the students' scores from the two markers, a satisfactory IRR co-efficient was calculated to examine the level of correlation. Then, mean scores were calculated for each student.

The two expert teachers were near-native speakers with mother tongues of Pakistani and Arabic working in the English language department at Al-Qassim University who had been teaching English as a foreign language, including writing skills, for a long time. Their experience was not limited to teaching writing skills but also included rating and grading essays using various kinds of rubric. The two expert teachers marked and assessed both the pre-test and the post-test for both experimental CL and control TL groups. The essay scores were collected from both markers for analysis in order to ensure inter-rater reliability.

The use of Paulus's scale to assess the students' writing proficiency was appropriate for this study for the following reasons:

1- Baker and Lundstrom (2009) successfully used a version of Paulus's rubric to assess 30-minute essays. Since the aim in the present research was to assess 60-minute essays, it was decided that this researcher could also use a version of Paulus's rubric.

2- The rubric provided the opportunity for both holistic and analytical scoring. Holistic scoring refers to the overall assessment of the work by combining many categories into one level, whereas analytical scoring gives a more detailed description of each category (Lee & VanPatten, 1995).

3- The rubric scale provided levels for each categories starting from 1 as the lowest and ending with 10 as the highest. Paulus's rubric thus has an advantage over other rubrics that use scales of 4, 5 or even 6 levels.

4- The categories in Paulus's rubric were easy for the markers to grasp as they related to everyday criteria used by teachers, and hence it would be easy to explain the results to teachers.

5- The student's essays could be allocated marks on a scale of 1 to 10. For each sub-scale, overall marking was out of 60. Other scales, such as TOEFL, either paper-based (PBT), computer-based (CBT), or internet-based (iBT), range from only 1-6; the Test of Written English (TWE) placement test ranges from 0-6; the Six Traits of Writing Rubric has a range of 1-4. Paulus's rubric thus provides a fairly delicate measure for each scale.

## 3.6 Research design and materials

After obtaining permission from Al-Qassim University in Saudi Arabia, the study was carried out among ESL students in the English language department. It was decided to take a quantitative approach to collecting data for this research, which would be supplemented by a small amount of qualitative data. Since the main purpose of the research was to study the effectiveness of collaborative learning as a method of improving ESL students' writing skills, it was deemed appropriate to use an experimental approach. The current study included two groups: the experimental CL group, who were taught using CL and the control TL group, who were taught using a traditional learning method, as shown in the table below.

**Table 3.2 Group distribution based on treatments and tests**

| | Pre-test | Treatment | Post-test |
|---|---|---|---|
| **Experimental CL Group** | O | CL method | O |
| **Control TL Group** | O | TL method | O |

The symbol (O) refers to the measurement of the effects of the treatment (Campbell & Stanley, 1963). The experimental strategy gave the researcher control over the study environment and the selection of participants so that the whole population in the English language department could be equally represented. The researcher could assign classes to the two conditions and control any variables that may influence the subjects' behaviour (Blaxter, Hughes & Tight, 1996). The study was begun in April 2009 and lasted twelve weeks; the following table clarifies the procedures adopted for applying the tests and methods of this study.

**Table 3.3 Procedures adopted during the 11 weeks of the study**

| First week | From the second to the eleventh week | The last week |
|---|---|---|
| **Writing essays**<br>All students wrote essays. Expert teachers were selected to judge students' essays on Paulus's rubric (1999). | Each week, the experimental CL group was taught how to write essays through collaboration, whereas the control TL group was taught how to write essays through the traditional learning method. | **Writing essays**<br>All students wrote essays. The same expert teachers judged the students' essays on Paulus's rubric (1999). |
| **Questionnaire**<br>A questionnaire tested participants' perceptions before involvement in the study. | | **Questionnaire**<br>The same questionnaire was used again to test participants' perceptions after the twelve weeks. |
| **Interview**<br>Four students from the experimental CL group were selected at random for interview, at the end of the study in order to measure participants' perceptions after involvement in collaborative learning. | | |

As mentioned earlier, the teacher for both the experimental CL group and the control TL group was the researcher himself. This fact might have some negative effects such as bias and subjectivity that could affect the validity of the study. The following measures were thus

taken to avoid or mitigate the risk of a 'halo-effect' from the researcher also being the teacher:

- Although the researcher was himself the teacher for both the experimental CL group and the control TL group, the students' essays and results were judged by independent raters in order to collect valid and reliable findings. In order that the judges did not know who the students from either the experimental CL or the control TL group were, the drafts were coded and the students were kept anonymous by using numbers. Moreover, their main teacher was not involved in rating the essays.
- As mentioned in the previous chapter of this thesis, collaborative learning in the form of collaborative writing is considered a new strategy in Saudi universities. It includes elements and conditions in which students need a great deal of training in class in order to achieve improvement. ESL teachers therefore need to have participated in numerous training courses in order to apply CL effectively. Moreover, since not all the teachers in the department were willing to teach the course required for this study for three months, this being considered by many of them to be too long a period of time, the researcher had to be the teacher of both groups. Because of my long experience in both teaching and researching in the area of writing skills, the limited amount of time available for the study, and English department policy, I was aware of how to teach both groups to ensure that they received both treatments equally. According to Carver et al. (1992), "Teacher familiarity and facility with apprenticeship techniques and with the design skill model as a whole is the key to teaching design skills" (p. 400).
- The fact that the researcher knows that the study is in progress may affect her/his teaching (Paulus, 1999). In order to avoid the risk of the 'halo-effect', the students should not know the purpose of the study. According to Paulus (1999), the participants may know that the research is in progress; however, they may not have information about the study

purpose and focus (Paulus, 1999). The students were told at the beginning of the study that the researcher was a PhD student and was simply collecting data for his research. They had been told that their main teacher would continue teaching them as soon as the researcher finished collecting data, so they students knew that the researcher would not be setting them any examinations or tests in either the mid-term or the final exam. They had been informed that they would be taught and trained for eleven weeks, so any instruments used would not influence their marks or official assessment.

- As mentioned above, the students' essays and results were judged by independent raters in order to collect valid and reliable findings. This is the basic defence against bias in the analysis, any possible bias being counteracted by the use of two judges. However, it was also necessary to ensure that there was no bias in the classroom, with one group being favoured over the other. Thus, the head of the English language department from time to time observed the researcher's teaching of both experimental CL and control TL groups in order to make sure that both groups were taught similarly without preference being given to either one. He was informed that both groups would be taught the process approach to writing similarly, but that the first group would receive special training in writing collaboratively rather than individually. The research aim was explained to him at the beginning of the study so that he would take note of any bias or subjectivity that might influence the study validity (see Appendix N).

### 3.6.1 Writing Essays

In the pre-test and post-test, all students in both groups were asked to write an essay on the following topic: **'Describe your reasons for coming to university'** (see Appendix A). This prompt was specially chosen because it was more or less equivalent in difficulty and familiarity for all students in the two groups. The students were given 60 minutes to complete

their essays. Since they had finished only one year of university studies, they were considered to be at the lower-intermediate level.

The fact that the same topic was used in both pre-test and post-test might suggest that any improvement was the result of practising writing on the same topic twice, at the beginning and at the end of the study. However, there are two ways of testing this claim: 1) if the improvement was simply the result of practice, this would mean that improvement should be found not only in the experimental CL group but also in the control TL group. Hence a comparison was made between the two groups to see if there were any differences between the essays written by one group and those written by the other group. 2) The pre-test was conducted in the first week of the study, while the post-test was administered in the twelfth week; the intervening period was therefore long enough to mean that the students might have forgotten what they had written in their pre-test.

### 3.6.2 Questionnaires

A questionnaire was used in this study to collect data on the students' attitudes towards and perceptions of collaborative writing. The researcher designed the questionnaire on the basis of those used in previous studies and of his own long experience in teaching writing. The students were given the questionnaire at the beginning and also at the end of the study. The questionnaire was translated from English into Arabic in order to make sure that they understood it clearly.

The questionnaire was divided into two sections: section 1 questions 1-23 were concerned with the attitudes and perceptions of students regarding writing skills (see Appendix B-1); section 2 questions 1-20 were concerned with collaborative learning, with more emphasis on collaborative writing, as shown in Appendix B-2. All the discussion in the final chapter will refer to one questionnaire.

In both sections of the questionnaire the *Likert* scale was adopted. This scale is appropriate for use with closed-ended items that include 'a characteristic statement', and where respondents are asked to indicate the extent to which they 'agree' or 'disagree' with it by making one of the responses ranging from 'strongly agree' to 'strongly disagree' (Dornyei, 2007). The students in this study were asked to choose one of five responses, as shown in the following example:

| *Working together in groups is a good strategy that helps me to write effectively* | | | | |
|---|---|---|---|---|
| | | | | |
| Strongly agree | Agree | Undecided | Disagree | Strongly disagree |

During the analysis of the questionnaire data, the answers in the scale were assigned a number for the purpose of scoring: e.g., 'strongly agree' = 1, 'agree' = 2 and so on. The questionnaire was distributed twice to all students in both the experimental CL and the control TL groups. The first occasion was before they had yet received any treatment, and the second was after they had finished the course.

The questionnaire that was concerned with the attitudes of students toward CL was designed specifically for this research. The majority of the questions concerning CL were worded positively, for two reasons: a) the questions were designed by the researcher; b) negative questions might make some participants feel confused and lead to misunderstanding; students in Saudi Arabia normally prefer answering positively worded questions because this gives them more of a sense of achievement than answering negatively worded questions. According to Brown and Rodgers (2000, cited in Grami, 2010), when producing a sound non-standardized questionnaire it is important to avoid using negative items. However, the researcher designed a few negative statements about CL for inclusion in the questionnaire (questions 2, 4 and 5) in order to collect some different attitudes from the population.

The researcher mitigated the risk of possible skewed answers by the following methods: first, he tried to make the questionnaire as relevant to the topic as possible by avoiding any unnecessary questions. After designing the questionnaire, it was revised many times by the supervisor in order to achieve content validity. Second, the statements in the questionnaires were simple to understand, short and translated into Arabic in order to obtain as valid data as possible. Wallace (1998) mentions that a questionnaire should not be too long, not confused, and must be framed in the first language of the respondents in order to make sure that they provide valid data. Third, the researcher conducted a pilot study to find out whether the questionnaires required any changes, modifications or deletions. After conducting the pilot study with three students, the researcher found that some questions were ambiguous or confusing and therefore needed to be reworded or rewritten. Fourth, the researcher also designed another version of the questionnaire in Arabic and showed it to some Arabic experts, asking them to identify any ambiguous statements that might lead to misunderstanding among the population. According to Grami (2010), an Arabic version of the questionnaire 'would be more convenient for those students whose English proficiency might be lower than others and for freshmen if they will be included' (p. 73).

The first section of the questionnaire (questions 1-23), given in Table 3.4 below, was concerned with the perceptions of students regarding writing skills. The twenty-three questions were categorized according to the following four factors and sub-factors:

**1. Attitudes of students towards writing skills** *(10 questions):*

The first factor included more questions (10) than the others as it was aimed at collecting general information about writing skills: for instance, 'Writing essays is very difficult for me' and 'I think writing is boring'. It was important to acquire background information about the students' attitudes towards writing in general before asking them about their perceptions of collaborative learning and the process approach to writing in particular. The most important

four stages of the process approach to writing were discussed in the previous chapter (see pages 15-22). The first factor was divided into six sub-factors, as follows:

1.1 Ease and interest of writing skills.

1.2 The importance of writing skills.

1.3 The importance of the process approach to writing.

1.4 The priority of correcting grammatical and spelling mistakes.

1.5 Motivation for practising writing skills.

1.6 Opportunity for practising writing skills.

**2. Attitudes of students towards the pre-writing stage** *(6 questions):*

The pre-writing stage was the second factor, and included six questions. This factor was concerned with various issues, such as planning a topic for the essay, collecting ideas and vocabulary, making an outline, organizing ideas and understanding the topic of the essays. The second factor was divided into four sub-factors, as follows:

2.1 Taking enough time to understand the essay topic.

2.2 The difficulty of understanding the essay topic.

2.3 Planning for the topic mentally and physically.

2.4 Collecting and organizing ideas.

**3. Attitudes of students towards the drafting and revising stages** *(4 questions):*

Four questions were concerned with the students' perceptions of the drafting and revising stages: for instance, 'During writing, I normally do revisions before finishing my writing completely' and 'During the writing stage, I usually follow the plan that I have written before writing'. This factor was divided into four sub-factors, as follows:

3.1 Following the essay plan when starting writing.

3.2 Difficulty in starting to write the essay.

3.3 Making revisions before finishing the first draft of the essay.

3.4 Using the vocabulary supplied by the teacher.

**4. Attitudes of students towards the editing stage** (*3 questions):*

Only three questions were concerned with the editing stage of writing because this stage is a small technical area: for instance, 'During the editing stage, I make several revisions before submitting my final draft' and 'During the editing stage, I concentrate on finding appropriate words and vocabulary'. This factor was divided into four sub-factors, as follows:

4.1 Finding appropriate vocabulary during the editing stage.

4.2 Revising essays several times before submitting during the editing stage.

4.3 Correcting grammatical and spelling mistakes during the editing stage.

The general writing questionnaire is presented in the table below.

**Table 3.4 Questionnaire to collect students' attitudes towards writing**

| N | Questions |
|---|---|
| 1 | Writing an essay is very difficult for me. |
| 2 | I think that writing is an important skill |
| 3 | Writing isn't just completing a composition, but planning, drafting, revising and editing. |
| 4 | I think that the most important aspect of the skill of writing is grammar. |
| 5 | I find it interesting to practise and learn writing skills. |
| 6 | I do not have the motivation to learn writing skills. |
| 7 | I get a lot of opportunities to practise writing in class. |
| 8 | I think learning writing skills is boring. |
| 9 | Before starting writing, I spend a lot of time trying to understand and familiarize myself with the topic. |
| 10 | Before I start writing (pre-writing stage), I plan the topic mentally. |
| 11 | Before I start writing, I plan my topic by making an outline and writing down my ideas. |
| 12 | It is difficult for me to get new ideas for my writing topic. |
| 13 | Organizing ideas is the most difficult part for me. |
| 14 | Before I start writing, I have difficulty understanding the topic of the essay. |
| 15 | During the writing stage, I usually follow the plan that I have written before starting to write. |
| 16 | When I start writing, my priority is to concentrate on grammatical and spelling errors. |
| 17 | During the writing and drafting stages, I usually don't know how to start writing. |
| 18 | When writing the first draft, no attention is paid to grammatical and spelling mistakes. |
| 19 | During writing, I normally do revisions before finishing my writing completely. |
| 20 | During writing, I concentrate on using the vocabulary supplied by my teacher. |
| 21 | During the editing stage, I concentrate on finding appropriate words and vocabulary. |
| 22 | During the editing stage, I make several revisions before submitting my final draft. |
| 23 | During my editing stage, I must correct grammatical and spelling mistakes. |

The second section of the questionnaire (questions 1-20, presented in Table 3.5 below) was concerned with the impact of collaborative learning on improving writing skills. All the questions concerned the students' attitudes towards the practices involved in the collaborative learning strategy. This section was divided into ten factors. The first three factors were about students' practices, while the remainder concerned their attitudes, as follows:

**1- Collaboration during the pre-writing stage**

The first factor was concerned with the attitudes of ESL students towards collaborating during the pre-writing stage, and included statements such as 'Before starting writing (pre-writing stage), planning a topic with friends is much better than individually'. Since the pre-writing stage includes various activities such as planning the topic, discussing ideas and making an outline for the essay, it was important to ask at least three questions (3, 4 and 17) in order to cover these activities. This factor was therefore divided into three sub-factors, as follows:

1.1 The importance of planning a topic with friends.

1.2 The benefits of making an outline and collecting ideas with classmates.

1.3 The importance of talking with friends to facilitate finding ideas for the topic.

**2- Collaboration during the revision stage**

The attitudes of the students towards collaborating during the revision stage were the second factor in this questionnaire; these were examined using statements such as 'Revising my essay with classmates many times can improve it effectively'. Since this factor only concerned revising essays with classmates, it involved only two questions (6, 16).

**3- Collaboration during the editing stage**

The attitudes of the students towards collaborating during the editing stage were assessed through their responses to statements such as 'I prefer editing and proofreading my activities and tasks in a group rather than individually'. Since the students in both groups were taught

that editing means focusing solely on grammatical, spelling and punctuation mistakes, one question alone (no. 7) was deemed adequate for this factor.

**4- The importance of collaborative learning for writing essays**

Five questions (1, 2, 5, 8 and 18) from the questionnaire were concerned with the students' attitudes towards the factor of 'The importance of collaborative learning for writing essays'.

**5- Benefits of CL in helping to get better scores**

Question 9 '*Writing in a group can help me to get better scores in my writing exams*', was related to the fifth factor 'Benefits of CL in helping to get better scores'.

**6- Benefits of CL in providing comments on students' writing**

Questions 10 '*Colleagues in my group are able to give comments on my writing*' and 11 '*I would like to get feedback from my friends on my compositions*' were related to the sixth factor 'Benefits of CL in providing comments on students' writing'.

**7- Benefits of CL in increasing understanding of accountability.**

Question 13 '*My experience of CL has increased my understanding of my own accountability*' was related to the seventh factor 'Benefits of CL in increasing understanding of accountability'.

**8- Benefits of reading and listening to other students' essays in groups.**

Questions 14 '*I like reading the essays of my classmates and I understand what they write*' and 15 '*I understand and learn from listening to students when they read their essays in front of others*' addressed the factor 'Benefits of reading and listening to other students' essays in groups'.

**9- Benefits of CL in acquiring and using new vocabulary**

Question 19 '*Collaborative writing helps me to acquire and use new vocabulary correctly*' was related to the ninth factor 'Benefits of CL in acquiring and using new vocabulary'.

**10- Benefits of CL in increasing the students' satisfaction in writing essays**

Questions 12 '*I would like to see students involved in more collaborative writing*' and 20 '*I feel more satisfied with my writing when I work in small groups than when I work individually*' addressed the factor of 'Benefits of CL in increasing the students' satisfaction in writing essays'.

The number of questions varied from one factor to another depending on the need to collect more or less information or data from the students. For example, five questions were assigned to the fourth factor 'The importance of collaborative learning for writing essays'. Since the core of the research was investigating students' attitudes towards using a collaborative learning strategy in an English writing classroom, this factor needed more questions compared to other factors.

The collaborative learning questionnaire is presented in the table below.

**Table 3.5 Questionnaire on students' attitudes towards collaborative learning**

| N | Questions |
|---|---|
| 1 | Working together in groups is a good strategy that helps me to write effectively. |
| 2 | Writing about something with my friends is not suitable for me. |
| 3 | Before starting writing (pre-writing stage), planning a topic with friends is much better than individually. |
| 4 | Before I start writing (pre-writing stage), making an outline and writing down ideas with classmates are not good methods. |
| 5 | Working by myself without help from others is very important for me. |
| 6 | Working and writing in groups helps me to know how to revise my essay effectively. |
| 7 | I prefer editing and proofreading my activities and tasks in a group rather than individually. |
| 8 | Working with other students is very important for me. |
| 9 | Writing in a group can help me to get better scores in my writing exams. |
| 10 | Colleagues in my group are able to give comments on my writing. |
| 11 | I would like to get feedback from my friends on my compositions. |
| 12 | I would like to see students involved in more collaborative writing. |
| 13 | My experience of CL has increased my understanding of my own accountability. |
| 14 | I like reading the essays of my classmates and I understand what they write. |
| 15 | I understand and learn from listening to students when they read their essays in front of others. |
| 16 | Revising my essay with classmates many times can improve it effectively. |
| 17 | At the pre-writing stage, talking with my friends can facilitate finding ideas for my topic. |
| 18 | Sharing my essay with my friends collaboratively is useful and beneficial. |
| 19 | Collaborative writing helps me to acquire and use new vocabulary correctly. |
| 20 | I feel more satisfied with my writing when I work in small groups than when I work individually. |

According to McDonough and McDonough (1997), some advantages of a questionnaire are: a) they can be small or large-scale; b) data collection can take place anywhere and at any time. Questionnaires were deemed appropriate for this study because the

social climate of the study was open and free, allowing full and honest answers to be given, since the population were all students in the English language department at Al-Qassim University. Questionnaires can measure three types of data: 1) specific facts about the respondents such as age, gender and race; 2) the behaviour, actions, life-style and habits of respondents; 3) the attitudes, beliefs, opinions and values of the respondents (Dornyei, 2007). The attitudes and perceptions of ESL students concerning the effectiveness of using collaborative learning in improving their writing skills were the main concern in this study.

In addition, the questionnaire items were in closed formats, since this helps students to respond easily and clearly. According to Wallace (1998), closed questions make it easy for respondents to choose a suitable answer. Free writing by the respondents is not required, as they need only select one of the given alternatives (Dornyei, 2007). One of the advantages of closed questions is that respondents have to select from specific given options (agree, disagree etc); thus the researcher is able to write down the precise answer they have chosen; the disadvantage is that it in effect puts words in their mouths, rather than letting them speak for themselves. In the current study the researcher took into consideration some essential points related to the format of the questionnaire. For example, the questionnaire started with a general introduction to the content of the questionnaire, including definitions of relevant terminology, a description of the purpose of the study, and a series of clear instructions that would help the students to understand exactly how to complete the questionnaires (Dornyei, 2007).

### 3.6.3 Semi-Structured Interview

The instruments described above, namely, writing essays and the questionnaire, were considered central to the study design, and it was expected that the data collected would be sufficient to determine whether or not using CL in writing classrooms would give better results than using the traditional learning method. However, it has been pointed out that

interviews can also be used to achieve the researcher's objectives, to develop a further hypothesis or as an additional technique to other instruments (El-Aswad, 2002). Thus, the interview method was also used in this research to provide supporting or supplementary information on the students' attitudes and perceptions concerning collaborative learning in the form of collaborative writing. The interview in this study was used to explore students' attitudes towards certain points related to CL. It therefore helped the researcher to obtain more data about the students' attitudes and perceptions regarding the effectiveness of practising collaborative learning in improving the writing skills of EFL learners in Saudi Arabia; this more in-depth information was used to supplement that obtained through the questionnaires.

Three kinds of interviews are recognised (Denscombe, 2003; Bryman, 2004): 1) the structured interview, in which questions are organized before conducting the interview; 2) the semi-structured interview, in which both freedom in talking and control over the organization of the questions by the researcher are considered the main features; 3) the unstructured interview, in which the interviewer has the full right to talk freely without any limitations. The positive characteristic of the semi-structured interview is that it encourages interviewees to talk freely without any stress, and without the interviewer forcing them to answer any specific questions. The researcher thus used semi-structured interviews in this study because he wanted the interviewees to express their feelings about using CL in writing classrooms freely. According to Nunan (1992, p. 150), the semi-structured interview gives the interviewee full control and power to take in free and flexible environments. Denscombe (2003) and Bryman (2004) mention that the semi-structured interview is a free and flexible method in which the researcher is able to exercise control and guidance.

A sample of four EFL students from the experimental CL group was selected to represent the whole population. According to Lee, Woo and Mackenzie (2002), using only a

few participants for interview is recommended for studies that use more than one instrument. The selection of only four students to represent the whole group for this study was based on the following:

1- As mentioned earlier, the interview was not considered a central method for collecting data in this study, so selecting only a small number of participants for interview was enough.
2- Selection was based on the marking system of the university, as follows: category (A) represented students who had obtained a mark of 50-60; category (B) represented students who had obtained a mark between 60-70; category (C) represented students who had obtained a mark between 70-80; and category (D) was for students with a mark of 80 or over.

The reason for involving only students from the experimental CL group for interview was because of their eleven weeks of experience and practice of CL during the field study, even though other students in the control TL group were aware of CL from other courses without having been specifically trained in it. The interviewees were chosen on the basis of the marks they had obtained for writing during the previous term. The selection of students was based on the marking categories in order to represent the whole classroom. Student D was selected as an 'expert' who was the monitor for one of the collaborative learning groups.

With regard to the method of conducting the interviews, they were conducted in a quiet room and a tape-recorder was prepared to record the students' answers, which would be transcribed later. The students were interviewed individually, so that each student could take his time. They were given the choice of being interviewed either in L1 or L2; thus the interviewee had the freedom to select the language he thought would enable him to express his opinions most clearly. The interviews were carried out at the end of the study in order to measure participants' perceptions after involvement in collaborative learning.

The researcher preferred to converse with each interviewee in Arabic at the beginning of each interview in order to warm up and make them feel more relaxed. After conducting the interviews at the end of the study, the students' answers were transcribed by the researcher.

Eleven questions concerned the attitudes and perceptions of students after involvement in collaborative learning classrooms (see Appendix C), as follows:

1- 'When do you think you learn better?'

To warm up, it was important to ask a general question to obtain information and background about the students' attitudes to learning.

2- 'If you get stuck or face a problem while practising any English skill, what do you prefer to do?'

Students may experience difficulty overcoming English-language problems and may use different methods and strategies for overcoming these difficulties. This question encouraged them to talk freely about appropriate methods and solutions.

3- 'Do you like learning English individually? Why?'

It was important to determine the students' perceptions of learning individually: whether or not they preferred it and the reasons behind their preference.

4- Do you like learning English in a group? Why?

This question is similar to the previous one but was directed at finding out whether the students liked learning English in groups or not. The reason for asking this question was to make it possible to determine whether the students' involvement in collaborative learning had influenced their preference to learn English in groups or individually.

5- 'Did you enjoy learning writing skills before you were involved in the collaborative learning method?'

This question was concerned with finding out whether the students were interested in learning writing skills before their involvement in collaborative writing.

6- ‘What kind of difficulties do you normally encounter when you start writing?’

This question is a general one that aimed to encourage students to talk freely about difficulties and problems they encountered when they started writing.

7- ‘Do you experience difficulties in finding the right vocabulary when you start writing?’

Similarly, the aim of this question was to determine whether finding the right vocabulary when starting writing was difficult or not.

8- ‘During pre-writing activities such as brainstorming and planning, do you think that you learn from working together with classmates, for instance in structuring and planning ideas? Can you explain in some detail?’

Collecting, outlining, planning ideas and brainstorming are activities in the pre-writing stage of the process approach to writing. It was important to find out whether the students thought that doing these activities in groups was useful and beneficial in enabling them to write essays effectively.

9- ‘During drafting activities, do you feel that you write better collaboratively than individually without any help from others?’

Drafting is the second stage in the process approach to writing. The aim of this question was thus to identify the students’ attitudes and feelings regarding collaborative work in the drafting stage and to determine whether or not they found it useful.

10- ‘During the revising and editing stages, do you feel that working together can help you to overcome difficulties such as correcting mistakes, restructuring ideas, finding the right vocabulary and so on?’

Both revising and editing are stages in the process approach to writing. This question asked the students how they felt about collaborating in these stages and whether CL helped them to solve particular writing problems such as mistakes in spelling, grammar and vocabulary.

11- ‘When you read your essay in front of your classmates in the same group, do you feel that your writing can be better?’

Students may sometimes read their essays aloud after completing their writing, so this strategy may be helpful in correcting and in writing successfully.

Although the interview was not a central method in this research, it might give additional information about the attitudes of students towards using CL in English language classes. It was useful to me because I collected some further data from students who were different from each other in terms of their proficiency and accuracy in writing essays.

## 3.7 Study sample

The subjects of this study were male students studying in the second year in the English language department at Al-Qassim University in Saudi Arabia. The reasons for choosing this sample were:

1) These students were considered to be at the lower-intermediate level so they had less experience of writing than some of the other students, such as those in the third or fourth year.

2) The second-year writing curriculum was concerned with teaching writing skills through stages such as pre-writing, drafting, revising and editing. The similarities between this curriculum and the course planned for this study would assist the researcher’s aim to determine whether learning collaboratively would improve the writing process of ESL learners.

Male students studying in the second year were selected as the sample of the study. The students were aged between 20 and 26 with an average age of 23; however, they were distributed into two different classes prior to administering the study. The researcher chose

one class at random to be assigned to the experimental CL group, while another class made up the control TL group.

### 3.7.1 The numbers of students in the experimental CL and control TL groups who completed pre- and post-test essays

Before starting the field study, there were a total of 25 students in the experimental CL group. However, two students failed to complete either their pre-test or their post-test essays and were therefore excluded from the analysis. The total number of students from this group who were included in the analysis was thus 23. Similarly, before starting the field study, there were a total of 29 students in the control TL group. However, four students failed to complete either their pre-test or their post-test essays and were therefore excluded from the analysis. The total number of students from this group who were included in the analysis was thus 25, as shown in Table 3.6

**Table 3.6 The total number of participants from the experimental CL and control TL groups who completed pre-test and post-test essays**

| Groups | Participants |
|---|---|
| **Experimental CL** | 23 |
| **Control TL** | 25 |

### 3.7.2 The numbers of students in the experimental CL and control TL groups who completed pre-and post-test questionnaires

Since some of the students from both the experimental CL and control TL groups were absent on the days when either the pre-test or post-test questionnaires were completed, they were excluded from the analysis. As a result, only 21 students from the experimental CL group and another 21 students from the control TL group completed both the pre- and post-test questionnaires, as shown in the following table.

**Table 3.7 The total number of participants from the experimental CL and control TL groups who completed pre-test and post-test questionnaires**

| Groups | Participants |
|---|---|
| **Experimental CL** | 21 |
| **Control TL** | 21 |

## 3.8 Pilot study

It was important to conduct a pilot study in order to examine not only the research instrument, but also the data collection procedures. The aim of the try-out was to assess the quality of the instrument so that it might be revised and improved before using it with the actual subjects of the research (Seliger & Shomany, 1989). The pilot study was carried out in November 2008 and the sample was three male Saudi students studying at the English language centre at Newcastle University. Two of them had been in the UK for only two months, which meant that they were effectively beginners in English. The third one had been in the country for 10 months and was studying at the upper-intermediate level in the English language institute at Newcastle University. His experience of English was greater than that of the other two, which meant that he could help them to progress and improve their English writing skills. Because the sample in the pilot study was small and the actual research to be carried out required teaching for a long time, the researcher selected only some of the proposed activities and instruments. The pilot study was conducted according to the following steps:

1- The students were given both questionnaires in order to assess their attitudes and perspectives concerning both writing skills in general and collaborative learning in particular through the pre-writing, revision and editing stages of writing.

2- The students were given a topic to write about collaboratively. They began by collecting ideas and vocabulary. Next they wrote their first draft without checking for grammatical or spelling mistakes. Finally, they revised and edited their essays collaboratively.

3- The students were given the same questionnaire again in order to find out whether or not their attitudes and perspectives had changed.

During the pilot study the researcher noticed the following points:

a- It might be necessary to change the number of members working together in a group. During the pilot study, the researcher noticed that a group of three was sometimes inappropriate in order to obtain and receive an adequate amount of information; this suggested that it might be preferable to organize the classes into groups of different numbers such as three, four or five members or even in pairs.

b- The researcher might try to find out whether the role played by expert students in either groups or pairs was positive, negative or neutral. In other words, the researcher needed to know whether the presence of an expert could result in any improvement or progress for less capable learners.

c- During the pilot study the researcher realized that some items in the questionnaire were in need of correction; others needed to be either modified or excluded in order to avoid any confusion or repetition.

## 3.9 Description of the activities and tasks used in the study

After obtaining permission from the English language department at Al-Qassim University, the researcher chose students studying in the second year to represent the study sample for the reasons mentioned on page 103. He randomly selected one group to be the experimental CL group and another one to be the control TL group. The study was conducted in the English Language and Translation Department (ELTD). The students in both groups met

three hours a week for three months. Only the first three weeks of the study were assigned for teaching both groups how to write essays through practising the process approach, based on the pre-writing, drafting, revising and editing stages of writing and the activities associated with each stage. The students in the experimental CL group were taught how to accomplish these stages in collaboration with their classmates, whereas the other students in the control TL group were taught how to use and practise the stages of the process approach to writing individually, without any help from other classmates.

As explained in the previous chapter, collaborative learning presupposes the existence of an expert who gives support and help for the weak students. According to Faigley and Witte (1981), expert writers are those who make more macrostructure changes to initial drafts (cited in Paulus, 1999, p. 282). The expert provides the scaffolding suggested by the Vygotskian approach (see Chapter 2, page 22 onwards). The selection of experts in the current study was based on their having achieved distinction (90% and over) in the previous term's writing course. Five students were chosen to give support to those classmates whose scores in the previous term's writing test showed that they needed to pay additional attention to their academic writing.

The collaborative training in the experimental CL group consisted of putting the students in sub-groups of four or five members or even in pairs, and making them tackle the task collaboratively. According to Johnson and Johnson (1987), collaborative learning does not mean simply sitting students side by side to discuss and complete the work or asking one member of the group to finish the task by him/herself. Collaborative learning means using elements of CL effectively in order to produce and complete the work successfully (Johnson & Johnson, 1987; Graham, 2005). Thus, students in the experimental CL group were taught to adopt the five elements of CL (see pages 43-46 for more details), as follows:

**A) Positive interdependence:** the students were taught that one member of the group cannot succeed unless all members do and vice versa. This element helped the students to encourage each other to make sure that each member was working by giving feedback effectively. They were reminded from time to time that they should not depend on one member or on the expert of the group to give comments and feedback. Putting into practice the principle of positive interdependence should help them to care about their own success and the success of other members.

**B) Individual accountability:** the students were trained to focus on the weak students of the groups in order to give them more support and encourage them to work effectively. They were also taught that every member of the group should take individual responsibility to contribute to the group's work. In order to make sure that each member participate and take responsibility to share successfully, the expert in the group might ask one person to give or paraphrase comments to the whole group.

**C) Face to face interaction:** the students were encouraged from time to time to exchange information with each other, provide comments that helped them to write effectively and come up with final comments for each member's essay.

**d) Social skills:** the students were taught that to collaborate successfully, they should trust each other, help each other and argue with each other. Therefore, some social skills were required, such as trust-building, leadership and decision making. As Graham (2005) mentions, students can give or receive more comments and feedback if they are more skilful social collaborators.

**E) Group processing:** the students were given all the time and methods they would need in order to use CL effectively (a specific amount of lesson time was allocated to each aspect: e.g., the pre-writing stage should be completed in forty minutes etc).

The expert in each group had various responsibilities: namely, monitoring, guidance, encouraging others to talk, communicating ideas for the essay with the group members etc. The members of each group were told to relate to the expert whenever they needed further assistance.

As the researcher himself was the teacher of the course, his role required not only teaching both groups the pre-writing, drafting, revising and editing stages of the writing process but also training students in the experimental CL group how to share and collaborate with the other members of their groups effectively and continuing with the traditional instruction for the control TL group. As mentioned earlier, since not all the teachers in the department were willing to teach the course required for this study for three months, this being considered by many of them to be too long a period of time, the researcher had to teach both groups. During the weeks of teaching, the researcher was not only a teacher but also a trainer, monitor and facilitator for both groups. The students in both groups met three hours a week for three months. The field study was completed in eleven weeks; the activities and tasks are summarized below:

## Week 1

During the first week, the researcher conducted the pre-tests with the participants. First, both the experimental CL group and the control TL group were given a topic to write about for sixty minutes, namely, **'Describe your reasons for coming to university'**. At the next meeting, all the participants were asked to complete the questionnaire to provide information on their attitudes and perceptions concerning writing in general and collaborative writing in particular before they received any treatment.

## Week 2

During week two, the researcher taught the students in both the experimental CL and control TL groups the four stages of the process approach to writing outlined on pages 15-22. The

stages in the process approach to writing are considered important for ESL students and helpful for writers in general to produce good quality writing (Kroll, 2003; Belinda, 2006). These stages were as follows:

A- Pre-writing stage, including collecting, planning, organizing ideas, finding new words and vocabulary and producing an outline.

B- Drafting and writing stage, with the emphasis on writing a draft of the whole essay from beginning to end (Gebhard, 2000). Following King and Chapman (2003), in the drafting stage the students were encouraged to write without stopping until they had finished.

C- Revising stage, concentrating on the consistency of sentences: for instance, the use of tenses, changing unsuitable vocabulary and reorganizing paragraphs or sentences.

D- Editing stage, concerned with issues of linguistic accuracy such as spelling, grammar and punctuation.

## Week 3

The researcher had to make sure that all students in both groups understood the four stages of the process approach to writing as outlined in week 2. The students in the experimental CL group practised and discussed the writing stages with their classmates, while those in the control TL group studied the stages individually and asked the teacher if they had any queries. The study procedures for both groups are explained in detail below:

**Organization of sub-groups and 'experts' in the experimental CL group**

The students in the experimental CL group had been asked to organize themselves into small sub-groups. There were five sub-groups made up of four or five members and another two sub-groups consisting of only two members. Students who had obtained high scores in the previous term's writing exam (90% or over) were chosen to be experts, guides and monitors for all the sub-groups. The sub-groups consisting of only two members included one expert and one weak student. This meant that if any of the expert students from the other sub-groups

were absent at any time during the course, it would be possible to combine one or both of the pairs with other sub-groups whose expert student had not turned up. In addition, all the students were instructed not to swap or change sub-groups during the remaining weeks of the study. The students in the experimental CL group discussed with other members of their groups how they could practise the stages of the writing process effectively. During this week they were asked to choose any familiar topic to write about with their sub-groups for 120 minutes. They were then told to practise the stages of the process approach, as follows:

A- Pre-writing stage: (Collaborative) – 40 minutes

1- The students in the sub-groups were allowed twenty minutes to brainstorm, discuss, collect and contribute their ideas together.
2- The members of each sub-group were allowed ten minutes to discuss appropriate vocabulary and words that could be used in their writing tasks. The expert students were asked to help their sub-groups concerning the meaning of certain words and were told they could use dictionaries to check and find other, more suitable vocabulary.
3- They were allowed a further ten minutes to organize their ideas and produce outlines for the essays.

B- Drafting and writing stage: (Non-collaborative) – 30 minutes

After completing the pre-writing stage collaboratively, each student wrote his own essay for thirty minutes without asking the other members of the sub-group for help. In this stage the students took into consideration the fact that the main priority was to use the ideas and vocabulary they had collected together during the pre-writing stage in their writing without paying any attention to grammatical, spelling or punctuation mistakes. They should keep writing until they were sure that they had incorporated all the ideas and vocabulary successfully.

C- Revising stage: (Collaborative) – 25 minutes

This stage took only twenty-five minutes to complete. The students revised their writing tasks collaboratively by reading and revising together all the drafts produced by the sub-group's members. Each student placed his written draft in the middle of the sub-group in a position where everyone was able to see it and started to read it. They had been taught that the main aim in this stage was to revise the consistency of sentences, make sure they had used appropriate vocabulary, and reorganize and rearrange any unclear sentences and paragraphs. Each member of the sub-group offered comments until the student whose essay was being discussed felt that his draft had become clear, coherent, and well developed and organized. The students were informed that they should not offer any comments on grammar, spelling or punctuation in this stage. After receiving feedback from the other members of their sub-group, each student started writing the second draft of his essay.

D- Editing stage: (Collaborative) – 25 minutes

The students were allowed a further twenty-five minutes to edit their writing tasks collaboratively. In a similar way to the revising stage, each draft was placed in the centre of the sub-group where everyone could see it and the group members started to edit it together with help from the expert. In this stage the students checked for any mistakes in linguistic accuracy, including spelling, grammar and punctuation. Correcting errors and mistakes was the students' main priority in this stage. If either the sub-group members or the more capable student experienced any difficulties correcting errors or mistakes, they were allowed to use any of the available resources, which included dictionaries, computers and textbooks, or to ask their teachers.

**Organization in the control TL group**

While students in the experimental CL group practised and discussed the stages of the process approach to writing at the beginning of week three in sub-groups, the students in the control TL group discussed the stages with the teacher without any sharing of their ideas with

their classmates. The teacher wanted to make sure that all the students in the control TL group understood how to practise and use the stages of the writing process effectively. As with the experimental CL group, the students in the control TL group were asked to choose any familiar topic to write on individually for 120 minutes and were allowed to ask the teacher any questions or for any further information. Then they were told to practise the following stages:

A- Pre-writing stage: – 40 minutes

1- The students were allowed twenty minutes to brainstorm individually and collect their ideas.

2- Ten minutes were given to select appropriate vocabulary and words that could be used in their writing tasks. The students were encouraged to ask the teacher to help concerning the meaning of certain words. They were told to use any helpful resources such as dictionaries to check and find suitable vocabulary.

3- They were allowed a further ten minutes to organize their ideas and produce outlines for the essays.

B- Drafting and writing stage: –30 minutes

After completing the pre-writing stage, the students started to write their own essays individually for thirty minutes. In this stage, the main priority was to use the ideas and vocabulary they had collected during the pre-writing stage in their writing without paying any attention to grammatical, spelling or punctuation mistakes. They should keep writing until they were sure that they had incorporated all the ideas and vocabulary successfully.

C- Revising stage: –25 minutes

The time allowed for this stage to be completed was twenty-five minutes. The students started to read what they had written during the drafting stage. They learned from their

teacher that the main focus in this stage was on revising the consistency of sentences and making sure about using the vocabulary appropriately. They worked hard to reorganize and rearrange any unclear sentences or paragraphs. They were allowed to show their essays to their teacher to receive comments and feedback. The teacher checked the essay of each student in the control TL group in order to give comments and make sure the first draft had become clear, coherent and well developed and organized effectively. The teacher informed the students that in the revising stage no attention should be paid to grammatical, spelling or punctuation mistakes. After making sure that this stage had been completed, the students started to write their second draft.

D- Editing stage: –25 minutes

Another twenty-five minutes were given for the students to edit their writing tasks. In this stage the students needed to check and correct any mistakes in linguistic accuracy, including spelling, grammar and punctuation. The teacher reminded the students that correcting errors and mistakes should be the main priority in this stage. They were allowed to use certain available resources such as dictionaries, computers or textbooks in this stage. The students were also allowed to ask their teacher to explain to them any unclear grammatical or spelling issues.

To summarize the organization of both groups, the experimental CL group was divided into sub-groups and incorporated an expert in each sub-group for assistance, compared to the individual teacher-directed work of the traditional group. In addition, the expert students in the experimental CL group had no counterparts in the traditional group.

## Week 4

The students in both the experimental CL and control TL groups were asked to write about the following topic: '*Why do you think you attend the English language department? Give reasons and examples to support your answer*'.

**The experimental CL group**

Continuing with the same sub-groups that had been organized in week three, the researcher gave the students a topic on which to write essays collaboratively. The time allowed to complete the essays was 120 minutes, divided as follows:

A- 40 minutes were allocated for practising the pre-writing stage collaboratively in their subgroups, including discussing the meaning of the topic, writing down appropriate ideas, checking the meaning of vocabulary, organizing and producing an outline.

B- After they had collaborated in discussing, collecting ideas and vocabulary, writing down various reasons for attending the English language department and supplying examples to support these reasons, each student started writing his first draft individually. They wrote without stopping and without paying any attention to mistakes in grammar, spelling or punctuation. They were allowed 30 minutes to complete the first draft of their essays. Writing the first draft had been done individually rather than collaboratively. According to Gebhard (2000), during drafting students should keep writing their essays from beginning to end without stopping (Gebhard, 2000). Moreover, all writing tools, such as ideas and vocabulary, had been collected during the pre-writing stage, so the students did not need any further help from classmates or an expert and would be able to write the first draft individually.

C- The students grouped together again in their sub-groups in order to collaborate in carrying out revisions of all the first drafts. They focused on the clarity of sentences, the appropriateness of vocabulary and the arrangement of paragraphs. They spent 25 minutes

revising the essays. Then, after receiving comments and feedback from the other members of the group, each student wrote his second draft.

D- The students in each sub-group then collaborated in editing their second drafts. They focused on correcting any grammatical, spelling and punctuation mistakes. Finally, the final draft was produced and ready to submit.

During this lesson, the researcher observed the students' behaviour and helped them to solve any problems they encountered when writing collaboratively. After they had finished writing the essays, each student recorded his attitude towards and experience of writing in a group in a diary.

**The control TL group**

The same topic was given to the students in the control TL group to write on individually with help from the teacher; the time allowed to complete the essay was divided as follows:

A- 40 minutes were allocated for practising the pre-writing stage individually, including discussing the meaning of the topic with the teacher, writing down appropriate ideas, checking the meaning of vocabulary, organizing and producing an outline. The students were allowed to discuss appropriate vocabulary or ideas with the teacher. It was recommended that they make use of any suitable and available resources such as dictionaries and textbooks.

B- After spending forty minutes in the pre-writing stage collecting ideas, vocabulary and making an outline for the essay, the students started to write the first draft individually for thirty minutes. They were reminded that the main focus in this stage should be on what they had collected in the pre-writing stage, without paying any attention to mistakes.

C- After writing the first draft, the students spent twenty-five minutes revising it individually, focusing only on reorganizing and rearranging any unclear sentences. They were told that any grammatical, spelling or punctuation mistakes should be postponed to the last stage. The teacher's role was to check the students' essays in order to make necessary comments.

D- The students then spent another twenty-five minutes editing their final draft, concentrating on any grammatical, spelling and punctuation mistakes. The teacher checked the students' essays and gave feedback. The students were also encouraged to use any available resources, which included dictionaries, computers and textbooks, or to ask their teacher. Finally, the final draft was produced and ready to submit.

At the end of this week the students in the experimental CL group were divided into sub-groups, each of which incorporated an expert student to provide help, guidance and assistance, while those in the control TL group were assigned to work individually.

## Week 5

The students in both the experimental CL and control TL groups were asked to write about the following topic: '*Do you like living in a village or a city? Give reasons to support your answer*'.

**The experimental CL group**

The students were given two hours to write collaboratively, as follows:

A- The first 40 minutes were assigned for pre-writing activities, including discussion, checking the meaning of new vocabulary relevant to the topic of living in a village or a city, getting ideas and producing an outline that would help them to write their essays easily. All these activities were performed collaboratively and in their small sub-groups.

B- The second activity was writing the first draft. This activity was performed individually rather than collaboratively. Students translated the ideas and vocabulary they had collected and gathered collaboratively in the pre-writing activity into written work without paying any attention to mistakes in either spelling or grammar. The students spent approximately 30 minutes on this stage.

C- After finishing the first draft, the sub-groups gathered together to revise their essays collaboratively. Each student read his draft aloud in front of his sub-group. Then each

member offered comments and feedback regarding clarity of sentences, appropriateness of vocabulary selected, and highlighting any sentences that needed to be omitted or added. The students followed the same procedure with the drafts of all the members. They were given 30 minutes to revise and write their second drafts.

D- The final stage was the editing stage, which the students carried out collaboratively. The focus was on grammatical, spelling and punctuation mistakes, and each student re-read his draft in front of the other members of his group in order to obtain their comments and corrections.

The teacher's (researcher's) role in the CL group was to observe, guide and help the students with any learning difficulties. At the end of the lesson, the students made entries in their diaries about their attitudes towards and experiences of writing cooperatively and how this method of teaching was different from the traditional method normally used during their writing activity.

**The control TL group**

The students in the control TL group were asked to write about the topic individually, as follows:

A. 40 minutes were allocated for carrying out activities of the pre-writing stage: collecting ideas and appropriate vocabulary, discussing with the teacher with any unfamiliar points, and making an outline for the topic.

B. 30 minutes were allowed for writing the first draft individually. As mentioned before, the students were required to keep writing without stopping or paying any attention to mistakes.

C. 25 minutes were allocated for rereading, revising, reorganizing and rearranging any unclear sentences. In this stage the students received comments and feedback from the teacher. Mistakes in grammar and spelling should be delayed until the next stage.

D. Another 25 minutes were allowed for editing the final draft of the essay by focusing on grammatical, spelling and punctuation mistakes. The teacher gave comments and feedback to the students. In addition, the use of any helpful resources such as dictionaries, computer or textbook was recommended.

As in the previous weeks, each of the sub-groups in the experimental CL groups had an expert present. They were encouraged to complete the writing of their essays collaboratively with assistance from the expert, who provided help and guidance. Meanwhile, the control TL groups were assigned to work and complete their essays individually with assistance from their teacher.

## Week 6

Following the same procedures as in week 5, the students in both groups were asked to write about the following topic: '*Which do you prefer, saving money every month for the future or spending it all at once? Give reasons and examples to support your answer*'.

**The experimental CL group**

The students had two hours to complete their essays collaboratively following the same processes as in the previous weeks. The only stage that had to be done individually was the drafting and writing stage, whereas all other stages of the writing process were completed collaboratively. Again, the teacher's (researcher's) role was that of a monitor and observer of the work of the groups. At the end of the class, the students were asked to make diary entries about their experiences of and attitudes towards collaborative writing.

**The control TL group**

The students in the control TL group were given the same topic and also had two hours to complete their essays individually. Set amounts of time were allocated to each of the stages of writing: namely, pre-writing, drafting, revising and editing. The teacher's role was to give comments and feedback and explain any unclear issues.

The difference between the experimental CL group and the control TL group was noticeable and clear, as in the previous weeks.

## Week 7

Following the same procedures as in week 6, the students in both the experimental CL and control TL groups were asked to write about the following topic: '*Do you think that TV has a positive or negative influence on people's behaviour? Give reasons and examples to support your answer.*'

**The experimental CL group**

The students had 120 minutes to finish their essays with their sub-groups. They followed the same steps that had been followed in the previous weeks. The only stage that was carried out individually was the writing of the first, second and final drafts, while all the other stages (pre-writing, revising and editing) were completed collaboratively. The researcher's role was that of supporter, monitor and observer. At the end of the class, the students wrote about their experiences in their diaries.

**The control TL group**

The students in the control TL group were given the same topic on which to write individually for two hours. They followed the same procedures as in the previous weeks. The teacher gave comments and feedback on the students' essays.

The differences between the experimental CL group and the control TL group were the same as described in week three.

## Week 8

The topic on which the students wrote in this week was '*Do you like eating in restaurants or at home, and why?*'

The students in the experimental CL group had 120 minutes to complete their essays in their sub-groups. They followed the same processes they had followed in the previous

weeks. Similarly, the only stage that was done individually was the writing of drafts, and all other stages of the writing process were carried out collaboratively. At end of the lesson, the students were again asked to write up their diaries.

The students in the control TL group were also given 120 minutes to write individually on the same topic. They practised the same steps and writing stages that had been used in the previous weeks. They received comments and feedback from their teacher.

## Week 9

The topic for this week was '*Do you think that learning the English language is difficult or not? Give reasons and examples in support of your answer.*'

The students in the experimental CL group again had 120 minutes to complete their essays in their sub-groups. They followed the same processes and steps as before. The drafting stage was the only activity performed individually and all the other stages of the writing process (pre-writing, revising and editing) were accomplished collaboratively. The role of the expert students was to give support, assistance and guidance. At the end of the class, the students again wrote up their diaries.

The students in the control TL group were given the same topic and were also given two hours to complete their essays individually. They were told to divide the time according to the stages of the process writing approach. The teacher's role was to give comments and feedback on their drafts.

## Week 10

The topic this week was '*What do you think the most important animal in your town is? Give reasons and examples to support your choice.*'

The time available for the sub-groups in the experimental CL group to complete their essays was the same as in the previous weeks; the students practised collaborative learning and applied the same processes and steps that had been used in the previous weeks. The only

stages that were done individually were the drafting and writing stages. Each sub-group included an expert student who was assigned to give assistance and support. At the end of the week, the students wrote up their diaries.

The same topic was given to the control TL group to write about individually. They were reminded to follow the steps and procedures they had used in the previous weeks. They received comments and feedback from their teacher and were encouraged to use any useful helpful resources, such as dictionaries and textbooks.

### Week 11

Both the experimental CL group and the control TL group were given the post-tests. First, the researcher asked them to spend 60 minutes writing about the same topic they had written about in the pre-test, namely, **'Describe your reasons for coming to university'.** After writing their essays, the students in both groups were asked to complete the questionnaire.

## 3.10 Reliability, validity and replication

Research would be worthless if it was invalid or unreliable. It is therefore necessary to talk about the validity and reliability of this study. According to Cohen, Manion and Morrison (2000), validity in research means that instruments measure what they are supposed to measure. Qualitative validity can be achieved through honesty on the part of the researcher, the depth and richness of the data and the suitability of the subjects. On the other hand, quantitative validity can be achieved through choosing the study sample carefully, using appropriate instruments and selecting appropriate statistical analyses for the data.

The decision to base the study in the English language department at Al-Qassim University was instrumental in ensuring the validity of the study. This is because a course in teaching writing to second-year students which included learning writing skills through stages and activities: pre-writing, drafting, revising and editing, had already been set up at the

department. The setting was thus ideal for the aim of this research, which was to determine the effectiveness of collaborative learning in improving the process approach to writing.

Regarding the use of appropriate instruments, the pre-test and post-test essays were assessed using the scales of Paulus's rubric (1999). All the scores of the participants in both the experimental CL group and the control TL group were judged and rated by two near-native expert teachers. The researcher chose two judges or markers and a third to act as adjudicator if there was no correlation between the first and second markers.

The details of all markers' ratings are given in Appendix F. The judges used the essay-scoring rubric from Paulus (1999). The scale went from 1 as the lowest level to 10 as the highest, and the two judges gave both total and analytical scores (see Appendix D). In order to test whether there was a correlation between the first and second markers; Cronbach's alpha was used to calculate inter-rater reliability between the judges. Cronbach's alpha measures intra-class correlation and is considered to be an indicator of internal consistency (Howell, 2002; Cortina, 1994, cited in Larson-Hall, 2010). It is therefore important to establish a positive correlation in order to ensure consistency between the two judges.

In order to achieve reliability, the majority of the judges' ratings should vary in a similar fashion according to the participants they are judging. For example, if judge A gives participant 1 a high score and participant 2 a low score, judge B should also give participants 1 and 2 similar scores. According to Larson-Hall, (2010), variations in the sample are recommended (e.g., student A got 20, student B got 25), whereas any variation between the judges will make the rating less reliable. Larson-Hall (2010) also states 'If judges are consistent then there shouldn't be too much variation in these numbers. However, if there were a certain judge whose data change Cronbach drastically you might consider throwing out that judge's scores' (p. 173). Consistency between the judges would indicate small

variations in students' marks, which is considered a positive correlation. In this case, a mean score for each student would be recalculated from the combined scores given by markers 1 and 2.

It is important to have validity and reliability among the judges. Huot (1990) refers to 'The value of the judgment given by a rater (validity) and the ability of the raters to agree (reliability)'. Raters must judge an essay according to similar features if they are to agree with each other. The researcher gave all the raters the same rubric and trained them how to use it effectively in order to obtain valid and reliable results.

In terms of the reliability of both the questionnaire and the interviews, the researcher discussed with the students the procedure involved in completing the questionnaires and the importance of doing so honestly and accurately in order to enable him to collect valid and reliable data. With regard to the interview instrument, the researcher chose four students at random from the treatment group to represent their classmates. Referring to the previous term's writing exams, the researcher selected student A to represent any students who had obtained 50-60 marks; student B for any students who had got 60-70; student C to represent any students who had scored 70-80; and student D to represent any students who had got over 80.

The trustworthiness of results obtained from instruments or tests can lead to four types of validity: *content* validity, which is a measure of how effectively the items represent other items. In the current study, in order to ensure content validity, the assessment instrument had to include all the procedures necessary for measuring writing ability. The second type of validity is *concurrent* validity, which is a measure of how accurately the researcher is able to correlate one test with another. *Predictive* validity is the third type, and is a measure of how effectively a test or instrument meets a criterion. It is considered an important kind of validity in placement tests where the raters are able to predict the success

that students will achieve in any specific English language course. Lastly, *construct* validity is a measure of how well a test assesses some underlying construct (Huot, 1990; Salkind, 2000).

In addition to the types of validity described above, the researcher in this study used an experimental design that was evaluated by the two criteria of internal and external validity. He selected second-year students as the sample for this study to represent all students of the English language department with the aim of achieving a high degree of generalizability. Ensuring that this study could be applied in different situations with similar characteristics was one of the main goals of the researcher, since this would give the research external validity and mean that the findings would represent all ESL students in the world, thus achieving the goal of generalizability.

Regarding the reliability of the study, Cohen, Manion and Morrison (2000) mention three principles of reliability relevant to quantitative research: stability, which measures consistency through both time and across similar samples; equivalence, which can be achieved either by using similar forms of a test or instrument or by inter-rater reliability, when two researchers are involved in the research and different independent judges agree that both researchers entered data in a correct and similar way, and internal consistency, in which the tests or instruments are required to be applied twice. The researcher tried to make the research as stable as possible in order to achieve reliability. He selected two groups with similar characteristics (i.e., level of classes and age) in order to ensure the consistency and stability of the results.

## 3.11 Data Analysis

The scores for the students' essays in both pre- and post-tests were collected and marked by two expert teachers using Paulus's rubric. A higher score in the post-tests would indicate that

a student had improved. Since it was crucial to determine whether any improvement in students' writing from pre-test to post-test was the result of their having been involved in collaborative writing settings, rather than in writing individually, therefore, in addition to the *independent* t-test used to examine the difference between the mean in both the experimental CL and control TL groups, a *paired* t-test was also used to examine the difference between the mean in the pre-test and that in the post-test in the same group (e.g., the pre-test and post-test results of individual members of the experimental CL group were compared). The aim of using a *paired* t-test was to ascertain the Pearson correlation between dependent and independent variables and to determine whether there were significant differences or relationships between the two variables.

The students' questionnaires were also collected and analysed. The analysis took account of the two different sections of the questionnaire: first, the general questions (1-23), that required the *paired* t-test to find the difference between pre- and post-tests in terms of the mean for both the experimental CL and the control TL groups; secondly, the collaborative learning strategy part (questions 1-20), which focused specifically on writing skills, for which an *independent* t-test was used to compare the experimental and control groups in terms of the mean and standard deviation. In addition, the pre-test and post-test attitudes and perceptions of students in the same group were analysed through a *paired* t-test to determine whether there were any differences among students in the same group, in either the experimental or the control groups.

## 3.12 Originality and Limitations of Methodology

This is the first study of its type to be conducted in a Saudi university context. The aim of this study was to find out whether collaborative learning has an influence on improving ESL writing skills. The experimental approach of this study included pre-tests and post-tests

involving writing essays, and questionnaires designed to gather data about the subjects' writing and their attitudes towards the usefulness of collaborative learning in improving writing skills.

The study has the following limitations: the adopted methodology was limited to three instruments of data collection: subjects' essay scores, questionnaires and interviews. One obvious limitation is that the study provided no direct analysis of the essays themselves, only of people's judgments of them. One of the research questions in this study was '*Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings?*' and this was answered through an analysis of data obtained from questionnaires and interviews. However, other instruments were not used: for instance, diaries and observations. Another limitation is that this study was undertaken not only in a particular place but also with particular classes, and this may affect the generalizability of the findings and the possibility of applying the study in other, similar teaching situations. In addition, this research is considered a unique study that focused on collecting data through essay scores, questionnaires and interviews. The study was thus based primarily on a quantitative methodology with the addition of a small amount of qualitative research. However, other qualitative methods, such as video and audio recording, open response questions and so on, were not used in this study.

## 3.13 Summing Up

This study may be described as experimental research, since the subjects wrote essays and completed a questionnaire both at the beginning (pre-test) and at the end of the study (post-test). The research experiment was conducted over twelve weeks from April to July 2009 in the English language department at Al-Qassim University in Saudi Arabia. Two second-year classes were selected: 23 students formed the experimental CL group, who received ten

weeks' training in how to write essays collaboratively, while another 25 students formed the control TL group and were taught in the normal way, that was based on writing essays individually. Writing samples were measured using Paulus's rubric (1999). In the next chapter, the analyses of both the subjects' scores for their written essays and of their answers to the questionnaires are presented.

# Chapter 4: Analysis and Findings

## 4.1 Introduction

The purpose of the study was to discover whether applying a collaborative learning strategy in one particular classroom could improve and develop the students' writing skills. In this chapter the findings and results of the study are presented through analyses of the data obtained using the three different methods employed in this study. These data consist of the following: 1) the pre- and post-test scores allocated to the essays written by the students in both the experimental and control groups; 2) the students' responses to the general and collaborative learning questionnaires; 3) findings obtained from the interviews.

The pre-and post-test scores of the students in both the experimental CL and control TL groups were used to answer the first research question '*Would students who are involved in collaborative writing settings produce better written and better organized essays than students working individually?*' while the data obtained from the pre-and post-tests of the students' questionnaires were used to answer the second research question '*Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings?*' In addition, the interview responses of the four students from the experimental CL group were used to supplement the answers to the second research question.

## 4.2 The judges and judging

The essays of the students from both experimental CL and control TL groups before and after eleven weeks' involvement in the writing class were rated and marked by two near-native expert teachers. The raters were given a version of Paulus's (1999) rubric to use, as shown in appendix D. The rating of the essays was based on six categories of writing: organization, development, cohesion, vocabulary, structure and mechanics. Since each of the six categories

included ten levels, the students' essays were marked out of 60. After finishing marking the students' essays, a satisfactory coefficient was reported for these two markers (See Appendix F for the details of all markers' ratings). The researcher produced a mean score for each student in each category derived from the scores of the two markers.

## Inter-rater reliability

As mentioned in Chapter 3, in order to achieve reliability, the majority of the judges' ratings should vary proportionately according to the participants they are judging. For example, judge A may give participant 1 a high score and participant 2 a low score and judge B should give participants 1 and 2 similar scores to the first judge. Variations in the sample are recommended, whereas any variation in the judges will make the rating less reliable (Larson-Hall, 2010).

Cronbach's alpha was used to calculate inter-rater reliability for the judges. This measures intra-class correlation and is considered to be an indicator of internal consistency (Howell, 2002; Cortina, 1994, cited in Larson-Hall, 2010). The following tables clarify the reliability analysis of this study. For example, the first table, Table 4.1, shows Cronbach's alpha. Cronbach's alpha was 0.72, which is considered a fair and reliable result considering the low number of participants. According to some researchers, an acceptable level of Cronbach's alpha is between 0.70 and 0.80, so the higher the number of participants, the higher the alpha value can be (Larson-Hall, 2010).

**Table 4.1 Cronbach's alpha for the two judges**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | No. of Items |
|---|---|---|
| .724 | .723 | 8 |

The second table, Table 4.2, which is concerned with the correlations of pairs of variables, shows that the consistency of the judges' ratings was between 0.50 and 0.90. As this is

considered quite a large correlation, Cronbach's alpha can be considered to indicate reliability of the results in this case.

**Table 4.2 Correlations of pairs of variables**

| | G1 first marker pretest | G1 second marker pretest | G1 first marker posttest | G1 second marker posttest | G2 first marker pretest | G2 second marker pretest | G2 first marker posttest | G2 second marker posttest |
|---|---|---|---|---|---|---|---|---|
| **G1 first marker pretest** | 1.000 | .728 | .579 | .657 | .311 | .148 | .077 | .274 |
| **G1 second marker pretest** | .728 | 1.000 | .517 | .586 | .275 | .109 | .163 | .359 |
| **G1firstmarkerposttest** | .579 | .517 | 1.000 | .585 | .095 | .159 | .313 | .157 |
| **G1 second marker posttest** | .657 | .586 | .585 | 1.000 | .156 | .099 | .034 | .163 |
| **G2 first marker pretest** | .311 | .275 | .095 | .156 | 1.000 | .839 | .772 | .825 |
| **G2 second marker pretest** | .148 | .109 | .159 | .099 | .839 | 1.000 | .578 | .658 |
| **G2 first marker posttest** | .077 | .163 | .313 | .034 | .772 | .578 | 1.000 | .931 |
| **G2 second marker posttest** | .274 | .359 | .157 | .163 | .825 | .658 | .931 | 1.000 |

In addition, Table 4.3, which is concerned with consistency between the judges, indicates that there were no great variations in mean, variance or Cronbach's alpha. Larson-Hall (2010) states that 'if judges are consistent then there shouldn't be too much variation in these numbers' (p. 173).

**Table 4.3 Consistency between the judges**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|---|
| **G1 first marker pretest** | 161.9130 | 1173.901 | .255 | .676 | .724 |
| **G1 second marker pretest** | 164.3478 | 1178.328 | .182 | .640 | .733 |
| **G1 first marker posttest** | 147.4348 | 905.530 | .543 | .547 | .667 |
| **G1 second marker posttest** | 152.5652 | 1026.439 | .243 | .537 | .743 |
| **G2 first marker pretest** | 161.3913 | 1006.249 | .539 | .865 | .677 |
| **G2 second marker pretest** | 159.1304 | 902.482 | .475 | .767 | .685 |
| **G2 first marker posttest** | 153.6957 | 920.221 | .661 | .926 | .646 |
| **G2 second marker posttest** | 154.9565 | 946.771 | .494 | .937 | .679 |

It is evident from Table 4.4 below that the variance between the two judges was very small, which indicates that their results were consistent and that they agreed with each other.

**Table 4.4 Intra-class Correlation Coefficient**

| | Intraclass Correlation | 95% Confidence Interval | | F Test with True Value 0 | | | |
|---|---|---|---|---|---|---|---|
| | | Lower Bound | Upper Bound | Value | df1 | df2 | Sig |
| **Single Measures** | .247[b] | .117 | .447 | 3.628 | 22 | 154 | .000 |
| **Average Measures** | .724 | .514 | .866 | 3.628 | 22 | 154 | .000 |

It is obvious from the above tables that a satisfactory correlation co-efficient was found for the first and second markers, since the first marker's scores correlated closely with those of the second marker. This result indicated that it would be unnecessary to employ a third marker to adjudicate between any differences found in the ratings given by the first and second markers, as originally planned.

## 4.3 Equivalence of the experimental CL and control TL groups before receiving treatment

It was first necessary to show that the experimental CL and control TL groups were equivalent before receiving any treatments: in other words, to ensure that the baseline from which they started was essentially the same. This would allow comparisons to be made between the two groups and help the researcher to understand the results for both groups.

As mentioned in the previous chapter, the comparison of the pre-test essay scores reported in this section is based on 23 students in the experimental CL group and 25 in the control TL group, while only 21 students from the experimental CL and control TL groups completed both the pre- and post-test questionnaires (for more details, see Chapter 3, p. 104).

### 4.3.1 Essay scores in the pre-test

The results presented in Table 4.5 below show that the mean of the total score obtained by each student in the experimental CL group in the pre-test was 16.2, whereas the corresponding mean for each student in the control TL group was 18.6. The mean difference of 2.4 was not significant (*independent* t-test: t = 1.3, p. <.178).

**Table 4.5 Comparing overall pre-test scores of essays written by students in the experimental CL group and in the control TL group**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group** | 23 | 4.3 | 16.2 | 2.4 | 1.3 | .178 |
| **Pre-test: Control TL Group** | 25 | 7.5 | 18.6 | | | |

### 4.3.2 Attitudes and perceptions at the pre-test

Since the questionnaire was concerned with comparing the pre-test attitudes of students in different groups, the *independent* t-test was utilized. Data from all questions from the

collaborative writing questionnaires (questions 1-20, as shown on page 97) were analysed and the results showed that there was no significant difference between the attitudes and perceptions of students in the experimental CL group and those of students in the control TL group (t = .77, p. <.447). As shown in Table 4.6, the mean of the total score obtained by each student in the experimental CL group in the pre-test was 45.4, whereas the mean of the total score obtained by each student in the control TL group in the pre-test was 45.3, with a mean difference of 0.1. Therefore, the results showed that there was no difference between the perceptions of students in the experimental CL group and those of students in the control TL group before eleven weeks' involvement in the writing class.

**Table 4.6 Comparing pre-test scores relating to attitudes of students in experimental CL and control TL groups towards collaborative learning**

| | N | SD | Mean | Mean Difference | T | p |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group** | 21 | 8.1 | 45.4 | 0.1 | .77 | .447 |
| **Pre-test: Control TL Group** | 21 | 5.7 | 45.3 | | | |

The results from the pre-test thus ensured that, at the beginning of the instruction period, the two groups did not differ in essay scores or in attitudes and perceptions, and that any differences between the groups at later stages could only be ascribed to the differential treatments they received.

## 4.4 Pre- and post-test scores for the essays of students in the experimental CL and control TL groups

The pre- and post-test essays of the students in both the experimental CL group before and after involvement in collaborative learning settings and the control TL group before and after involvement in a traditional learning method were rated and marked by two expert teachers (see Appendixes F-1 and F-2). The raters were given a version of Paulus's (1999) scale, as shown in Appendix D. The rating of essays was based on six categories or aspects of writing: organization, development, cohesion, vocabulary, structure and mechanics. Each category included ten levels starting from one as the lowest and ending with ten as the highest, so the essays were marked out of 60. After finishing marking the students' essays, a satisfactory co-efficient was reported for markers 1 and 2. If the scores of the two markers were correlated with each other, the researcher would recalculate a mean score for each student derived from their combined scores. The anonymity of the students was ensured by using numbers, as shown in Tables 4.7 and 4.8.

**Table 4.7 Pre- and post-test scores for the essays of students in the experimental CL group before and after involvement in collaborative learning settings**

| Students | Pre-test | Post-test |
|---|---|---|
| 1 | 23.5 | 36 |
| 2 | 21 | 47 |
| 3 | 19 | 29.5 |
| 4 | 14 | 29 |
| 5 | 15 | 30.5 |
| 6 | 23.5 | 47.5 |
| 7 | 12 | 28 |
| 8 | 10.5 | 27 |
| 9 | 6 | 11.5 |
| 10 | 16 | 25 |
| 11 | 17 | 22 |
| 12 | 16 | 33 |
| 13 | 19.5 | 35 |
| 14 | 12.5 | 21.5 |
| 15 | 15 | 26.5 |
| 16 | 19.5 | 28 |
| 17 | 16 | 24 |
| 18 | 13 | 23 |
| 19 | 22.5 | 29.5 |
| 20 | 16.5 | 42 |
| 21 | 15 | 26 |
| 22 | 18 | 27 |
| 23 | 12 | 28 |

**Table 4.8 Pre- and post-test scores for the essays of students in the control TL group before and after involvement in traditional learning settings**

| Students | Pre-test | Post-test |
|---|---|---|
| 1 | 26 | 18 |
| 2 | 18.5 | 24.5 |
| 3 | 22.5 | 18.5 |
| 4 | 21.5 | 20 |
| 5 | 12 | 23.5 |
| 6 | 23.5 | 33 |
| 7 | 34.5 | 46 |
| 8 | 30 | 33 |
| 9 | 22 | 25.5 |
| 10 | 14 | 13.5 |
| 11 | 14 | 21 |
| 12 | 14 | 29 |
| 13 | 14 | 21.5 |
| 14 | 17.5 | 26 |
| 15 | 38 | 39.5 |
| 16 | 22.5 | 33 |
| 17 | 16 | 22 |
| 18 | 15.5 | 25 |
| 19 | 6 | 17.5 |
| 20 | 15 | 25.5 |
| 21 | 11 | 18.5 |
| 22 | 13 | 20 |
| 23 | 18 | 21.5 |
| 24 | 13.5 | 21.5 |
| 25 | 13 | 23.5 |

As shown in Tables 4.7 and 4.8 above, the students' essays were marked out of 60. The results showed that students in both the experimental CL and control TL groups obtained higher scores in the post-test than in the pre-test. Their scores had increased after eleven weeks' involvement in both learning methods in comparison to their scores in the pre-test. However, some students in the control TL group had lower scores in the post-test, as follows: student (1) went from 26 in the pre-test to 18 in the post-test; student (3) obtained marks of 22.5 in the pre-test and 18.5 in the post-test; student (4) got 21.5 in the pre-test and 20 in the post-test, and student (10) obtained marks of 14 in the pre-test and 13.5 in the post-test.

## 4.5 Research hypotheses analysis

Various hypotheses were developed in order to answer the research questions. Each separate factor was organized under the relevant hypothesis for the purposes of the analysis, as presented in the following research hypotheses:

1. **There will be a significant difference in the experimental CL group between the pre-test and the post-test as measured by the following sub-hypotheses:**

**1.1 There will be significant differences in the essays of students in the experimental CL group before and after involvement in the collaborative learning strategy.**

The first hypothesis was examined and analysed using a *paired* t-test, as shown in Table 4.9, since it involved looking at the same group twice. As mentioned above, 23 students from the experimental CL group completed both pre- and post-test essays. The findings indicated a highly significant difference between the pre- and post-test scores in this group ($t = 10.6$, $p. <.000$). The mean of the total score obtained by each student in the experimental CL group in the pre-test was 16.2, and the standard deviation was 4.3, whereas the post-test mean was 29.4 and the standard deviation was 8.1. The mean gain of 13.2 is therefore evidence that the

students obtained higher scores for their written essays after involvement in the collaborative learning classes.

**Table 4.9 Comparing overall pre- and post-test essay scores of students in the experimental CL group**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group** | 23 | 4.3 | 16.2 | 13.2 | 10.6 | .000 |
| **Post-test: Exp. CL Group** | 23 | 8.1 | 29.4 | | | |

The results confirmed the hypothesis that there would be significant differences in students' essays before and after involvement in the collaborative learning strategy.

The raters' scores for the students' writing were then analysed separately for the six elements of organization, development, cohesion, structure, vocabulary and mechanics covered in Paulus' rubric (see Appendix G). The *paired* t-test was used since this involved testing the same group twice. These aspects were classified under the following sub-hypotheses:

***1.1.1 The organization of students' essays will be significantly different after their involvement in collaborative learning***.

Table 4.10 shows that the mean obtained for the organization aspect for students in the experimental CL group was 2.7 in the pre-test and 4.8 in the post-test, giving a mean difference of 2.1, a highly significant difference ($t = 8.8$, $p. <.000$). This means that the students in the experimental CL group had improved their essay organization after involvement in collaborative learning. As a result, hypothesis 1.1.1 was confirmed.

**Table 4.10 Comparing pre-test and post-test essay scores of the experimental CL group in terms of organization**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Organization (Pre-test: Exp. CL Group)** | 23 | 1.0 | 2.7 | 2.1 | 8.8 | .000 |
| **Organization (Post-test: Exp. CL Group)** | 23 | 1.3 | 4.8 | | | |

***1.1.2 The development of students' essays will be significantly different after their involvement in collaborative learning.***

As shown in Table 4.11, the mean obtained in the pre-test was 2.5, while in the post-test it was 4.7, with a mean gain of 2.2, indicating a highly significant difference in the development category between the pre-test and post-test essays of the experimental CL group (t = 7.7, p. <.000), so hypothesis 1.1.2 was confirmed.

**Table 4.11 Comparing pre-test and post-test scores of the experimental CL group in terms of development**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Development (Pre-test: Exp. CL Group)** | 23 | 0.8 | 2.5 | 2.2 | 7.7 | .000 |
| **Development (Post-test: Exp. CL Group)** | 23 | 1.5 | 4.7 | | | |

***1.1.3 The coherence of students' essays will be significantly different after their involvement in collaborative learning.***

As indicated in Table 4.12, there was a highly significant difference between the pre-test and post-test essays of the experimental CL group in terms of cohesion (t = 8.0, p. <.000). The mean was 2.7 in the pre-test, whereas the post-test mean was 4.9, giving a mean difference of 2.2. Thus the cohesion of the students' essays had improved after their involvement in collaborative learning. As a result, hypothesis 1.1.3 was confirmed.

**Table 4.12 Comparing pre-test and post-test essay scores of the experimental CL group in terms of cohesion**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Cohesion (Pre-test: Exp. CL Group)** | 23 | 0.8 | 2.7 | 2.2 | 8.0 | .000 |
| **Cohesion (Post-test: Exp. CL Group)** | 23 | 1.4 | 4.9 | | | |

***1.1.4 The vocabulary used in the students' essays will be significantly different after their involvement in collaborative learning.***

As shown in Table 4.13, with regard to the vocabulary category, the mean obtained for the experimental CL group was 2.7 in the pre-test and 4.8 in the post-test, with a mean difference of 2.1, which was a highly significant difference (t = 9.1, p. <.000). Hypothesis 1.1.4 was therefore confirmed.

**Table 4.13 Comparing pre-test and post-test essay scores of experimental CL group in terms of vocabulary**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Vocabulary (Pre-test: Exp. CL group)** | 23 | 0.7 | 2.7 | 2.1 | 9.1 | .000 |
| **Vocabulary (Post-test: Exp. CL group)** | 23 | 1.4 | 4.8 | | | |

***1.1.5 The structure of the students' essays will be significantly different after their involvement in collaborative learning***.

The results shown in Table 4.14 below show that the pre-test mean obtained for the experimental CL group in the structure category was 2.6, while the post-test mean was 4.9, with a difference of 2.3, indicating a highly significant difference in terms of structure (t = 10.0, p. <.000). Hypothesis 1.1.5 was thus confirmed.

**Table 4.14 Comparing pre-test and post-test essay scores of the experimental CL group in terms of structure**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Structure (Pre-test: Exp. CL group)** | 23 | 0.7 | 2.6 | 2.3 | 10.0 | .000 |
| **Structure (Post-test: Exp. CL group)** | 23 | 1.4 | 4.9 | | | |

***1.1.6 The mechanics of students' essays will be significantly different after their involvement in collaborative learning***.

As shown in Table 4.15, the mean obtained for mechanics in the pre-test was 2.8, and in the post-test was 4.4, with a mean difference of 1.8. This result indicates a highly significant difference (t = 7.7, p. <.000), meaning that the mechanics of the students' essay writing had improved after their involvement in collaborative learning. Therefore, hypothesis 1.1.6 was confirmed.

**Table 4.15 Comparing pre-test and post-test essay scores of the experimental CL group in terms of mechanics**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Mechanics (Pre-test Exp. CL group)** | 23 | 0.8 | 2.8 | 1.8 | 7.7 | .000 |
| **Mechanics (Post-test Exp. CL group)** | 23 | 1.4 | 4.6 | | | |

To sum up, the findings presented above indicated that the students in the experimental CL group had improved in all six aspects of their writing after being involved in collaborative learning. However, some aspects showed a much greater improvement than others. The categories in which the students had improved the most were structure, followed by development and cohesion, then vocabulary and organization, while the area in which they had improved least was mechanics; however, t-tests showed all of these differences to be statistically significant. It could thus be concluded that engaging in a collaborative writing strategy resulted in a great improvement in the structure, development, cohesion, vocabulary

and organization of the students' essays, but in less improvement in mechanics. This result indicates that collaborative writing benefited the students a great deal in terms of the quality of their writing (development, cohesion and organization). By contrast, their involvement in collaborative learning did not help the students as much in terms of the accuracy of their writing (mechanics), even though there was still significant improvement. The above results are summarized in Table 4.16.

**Table 4.16 Summary of the results of the students' pre- and post-test essay scores in the experimental CL group according to categories of the rubric**

| | Aspects | Accepted | Significance by *paired* t-test |
|---|---|---|---|
| **1** | **Organization** | Yes | sig p> .000 |
| **2** | **Development** | Yes | sig p> .000 |
| **3** | **Cohesion** | Yes | sig p> .000 |
| **4** | **Vocabulary** | Yes | sig p> .000 |
| **5** | **Structure** | Yes | sig p> .000 |
| **6** | **Mechanics** | Yes | sig p> .000 |

**1.2 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire will be significantly different.**

In order to test this hypothesis, all questions from the collaborative writing questionnaire (1-20) were analysed using the *paired* t-test. A five-point Likert scale was used, according to which a number between 1 and 5 was assigned to each response, as follows: 'strongly agree' = 1, 'agree' = 2, 'undecided' = 3, 'disagree' = 4, and finally 'strongly disagree' = 5. The mean score for the questionnaire was thus calculated out of 5, as 1 always indicated the

highest and most positive improvement while 5 showed the least development. Questions 2, 4 and 5 were worded negatively, so the mean scores for pre- and post-tests were reversed to show development in a positive direction, in order to facilitate comparison and readability. As stated above, the number of students who completed pre- and post-test questionnaires was only 21, compared with the 23 who completed the essays.

The results presented in Table 4.17 show that the mean of the total score obtained by each student in the pre-test was 45.4, whereas the post-test mean was 34. The mean difference was thus 11.4 (the pre- and post-test means for questions 2, 4 and 5 were reversed for the purpose of analysis), which was highly significant (*paired* t-test, t = 3.4, p. <.002). This is clear evidence that the students' responses in the attitudes to CL questionnaires had changed for the better after their involvement in collaborative learning settings. Hypothesis 1.2 was therefore confirmed.

**Table 4.17 Comparing pre- and post-test attitudes towards CL questionnaire of students in the experimental CL group**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group** | 21 | 8.1 | 45.4 | 11.4 | 3.4 | .002 |
| **Post-test: Exp. CL Group** | 21 | 7.8 | 34 | | | |

The results show that the students' attitudes had changed for the better after they had been involved in collaborative learning settings for eleven weeks. Therefore, the hypothesis that 'the pre- and post-test responses of students in the experimental CL group in the attitude to collaborative learning questionnaire will be significantly different' was confirmed.

As described in the last chapter, the second section of the questionnaire (questions 1 - 20), presented in Table 3.5 (page 97), was organized into ten factors, as shown on pages 94-96. These were concerned with the ESL students' attitudes towards:

1- Collaboration during the pre-writing stage. This factor was divided into three sub-factors:

1.1 The importance of planning a topic with friends.

1.2 The benefits of making an outline and collecting ideas with classmates.

1.3 The importance of talking with friends to facilitate finding ideas for the topic.

2- Collaboration during the revision stage.

3- Collaboration during the editing stage.

4- The importance of collaborative learning for writing essays.

5- Benefits of CL in helping to get better scores.

6- Benefits of CL in providing comments on students' writing.

7- Benefits of CL in increasing understanding of accountability.

8- Benefits of reading and listening to other students' essays in groups.

9- Benefits of CL in acquiring and using new vocabulary**.**

10- Benefits of CL in increasing the satisfaction of students in writing essays.

Some of these factors involved up to 5 questions, some only one. These factors were then analysed separately, also using the *paired* t-test, since this involved testing the same group twice. They were classified under the following sub-hypotheses:

**1.2.1 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning collaboration during the pre-writing stage will be significantly different.**

Questions 3, 4 and 17 were related to the first factor of the collaborative learning questionnaire 'Collaboration during the pre-writing stage'. This stage of writing includes activities such as planning a topic, making an outline, and discussing and writing down ideas

in a collaborative learning setting rather than individually. Question 3 '*Before starting writing (pre-writing stage), planning a topic with friends is much better than individually*' was related to the first sub-factor 'The importance of planning a topic with friends'. As shown in Table 4.18, the mean for each student was 2.4 in the pre-test and 1.6 in the post-test, with a mean difference of 0.8, which was highly significant (t = 2.9, p. <.008). This result is evidence that the attitudes of students in the experimental CL group toward the importance of planning a topic with friends had improved after their involvement in CL.

Question 4 '*Before I start writing (pre-writing stage), making an outline and writing down ideas with classmates are not good methods*' was related to the second sub-factor 'The benefits of making an outline and collecting ideas with classmates'. This question was worded negatively, so the mean scores for pre- and post-tests were reversed to show a positive development, in order to facilitate comparison and readability. The results showed that the mean of the single score obtained by each student in the pre-test was 1.9, whereas the post-test mean was 0.9, with a mean difference of 1.0, which was highly significant (*paired* t-test, t = 3.5, p. <.002). The results indicated that the students thought that making an outline and writing down ideas with classmates were good methods that should be used before starting writing.

Question 17 '*At the pre-writing stage, talking with my friends can facilitate finding ideas for my topic*' was related to the third sub-factor 'The importance of talking with friends to facilitate collecting ideas for the topic'. The mean scores for the experimental CL group were 1.9 in the pre-test and 1.4 in the post-test, giving a mean difference of 0.5. The *paired* t-test showed that this difference was highly significant (t = 3.2, p. <.004). The result indicates that students in the experimental CL group thought that talking with friends could facilitate finding ideas for an essay topic.

All the results for the first factor in the collaborative learning questionnaire, as shown in Table 4.18 below, indicated that students in the experimental CL group felt that collaboration was beneficial for planning a topic, making an outline, and finding appropriate ideas for the topic of the essay. Therefore, hypothesis 1.2.1 was confirmed.

**Table 4.18 Comparing pre-test and post-test responses of experimental CL group concerning collaboration during pre-writing stage**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group(Q3)** | 21 | 1.2 | 2.4 | 0.8 | 2.9 | .008 |
| **Post-test: Exp. CL Group(Q3)** | 21 | 0.6 | 1.6 | | | |
| **Pre-test: Exp. CL Group(Q4)** | 21 | 1.1 | 1.9 | 1.0 | 3.5 | .002 |
| **Post-test: Exp. CL Group (Q4)** | 21 | 0.8 | 0.9 | | | |
| **Pre-test: Exp. CL Group(Q17)** | 21 | 0.8 | 1.9 | 0.5 | 3.2 | .004 |
| **Post-test: Exp. CL Group (Q17)** | 21 | 0.5 | 1.4 | | | |

**1.2.2 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning collaboration during the revision stage will be significantly different.**

Questions 6 and 16 were related to the second factor 'Collaboration during the revision stage'. Question 6 asked for the students' responses to the statement '*Working and writing in groups helps me to know how to revise my essay effectively*'; the mean of the single score obtained by each student was 2.6 in the pre-test and 1.8 in the post-test, with a mean difference of 0.8, which was highly significant (*paired* t-test, t = 4.9, p. <.000). With regard to question 16 '*Revising my essay with classmates many times can improve it effectively*', the pre-test mean of the experimental CL group was 2.1, whereas their post-test mean was 1.5, with a mean difference of 0.6, which was again significant (*paired* t-test, t = 2.3, p. <.030), as shown in Table 4.19.

**Table 4.19 Comparing pre-test and post-test responses of experimental CL group concerning collaboration during revision stage**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group (Q6)** | 21 | 0.8 | 2.6 | 0.8 | 4.9 | .000 |
| **Post-test: Exp. CL Group (Q6)** | 21 | 0.6 | 1.8 | | | |
| **Pre-test: Exp. CL Group (Q16)** | 21 | 0.9 | 2.1 | 0.6 | 2.3 | .030 |
| **Post-test: Exp. CL Group (Q16)** | 21 | 0.6 | 1.5 | | | |

The findings revealed that the attitudes of students in the experimental CL group towards collaborative learning had become more positive after their involvement in revising their essays collaboratively. Therefore, hypothesis 1.2.2 was confirmed.

**1.2.3 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning collaboration during the editing stage will be significantly different.**

Question 7 '*I prefer editing and proofreading my activities and tasks in a group rather than individually*' was related to the third factor 'Collaboration during the editing stage'. As shown in Table 4.20, the means of the single scores obtained by each student in the experimental CL group were 2.1 in the pre-test and 1.8 in the post-test, with a mean difference of 0.3, which was not significant (t = 1.3, p. <.208). Therefore, hypothesis 1.2.3 was not confirmed.

**Table 4.20 Comparing pre- and post-test responses of experimental CL group concerning collaboration during editing stage**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group (Q7)** | 21 | 0.8 | 2.1 | 0.3 | 1.30 | .208 |
| **Post-test: Exp. CL Group (Q7)** | 21 | 0.7 | 1.8 | | | |

### 1.2.4. The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the importance of collaborative learning will be significantly different.

Five questions (1, 2, 5, 8 and 18) from the questionnaire were related to the factor 'The importance of collaborative learning for writing essays'. For question 1 '*Working together in groups is a good strategy that helps me to write effectively*', the mean of the single score obtained by each student was 2.6 in the pre-test and 1.9 in the post-test, with a mean difference of 0.7, showing a significant difference (*paired* t-test, t = 2.8; p. <.010). The results indicated that the students thought that working in groups was a good strategy that helped them to write effectively.

Question 2 '*Writing about something with my friends is not suitable for me*' was worded negatively, so the mean scores for the pre-test and post-test were reversed to show a positive developmental direction. Therefore, the means of the single scores obtained by each student were 2.0 in the pre-test and 1.3 in the post-test, with a mean difference of 0.7. The *paired* t-test found a significant difference between pre-test and post-test responses (t = 3.3; p. <.032). The results for question 2 thus indicated that students in the experimental CL group felt that writing with friends was a suitable method of working.

Question 5 was '*Working by myself without help from others is very important for me*' and question 8 was '*Working with other students is very important for me'*. These questions may at first sight seem to be asking for the same information. However, the aim of the first question was to find out whether the students thought that working individually without getting any help from others was important, whereas the second question aimed to investigate whether they thought working in collaborative groups was important. Thus, the two questions require different responses and are therefore different from each other

For question 5 '*Working by myself without help from others is very important for me*', the mean scores were again reversed because the statement was expressed negatively, so the mean of the single score obtained by each student was 1.5 in the pre-test and 1.0 in the post-test, with a mean difference of 0.5, indicating a significant difference between pre- and post-test responses (*paired* t-test, t = 2.8; p. <.010). The finding thus indicated that students thought that working individually is not very important.

With regard to question 8 '*Working with other students is very important for me*', the mean of the single score obtained by each student was 2.3 in the pre-test and 1.9 in the post-test, with a mean difference of 0.4, which was not significant (t = 1.5; p. <.130).

Finally, for question 18 '*Sharing my essay with my friends collaboratively is useful and beneficial*', the mean of the single score obtained by each student was 2.4 in the pre-test and 1.7 in the post-test, giving a mean difference 0.7, which was significant (t = 2.6, p. <.016). The students therefore thought that the collaborative learning strategy was useful and beneficial.

The results for questions 1, 2, 5 and 18, shown in Table 4.21 below, indicate that the students' attitudes towards the importance of CL for writing essays had become more positive after completing the field study.

**Table 4.21 Comparing pre-test and post-test responses of experimental CL group concerning the importance of collaborative learning for writing essays**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group (Q1)** | 21 | 1.1 | 2.6 | 0.7 | 2.8 | .010 |
| **Post-test: Exp. CL Group (Q1)** | 21 | 0.9 | 1.9 | | | |
| **Pre-test: Exp. CL Group (Q2)** | 21 | 1.2 | 2.0 | 0.7 | 2.3 | .032 |
| **Post-test: Exp. CL Group (Q2)** | 21 | 1.2 | 1.3 | | | |
| **Pre-test: Exp. CL Group (Q5)** | 21 | 1.0 | 1.5 | 0.5 | 2.8 | .010 |
| **Post-test: Exp. CL Group (Q5)** | 21 | 0.6 | 1.0 | | | |
| **Pre-test: Exp. CL Group (Q8)** | 21 | 1.0 | 2.3 | 0.4 | 1.5 | .130 |
| **Post-test Exp. CL Group (Q8)** | 21 | 0.8 | 1.9 | | | |
| **Pre-test: Exp. CL Group (Q18)** | 21 | 1.0 | 2.4 | 0.7 | 2.6 | .016 |
| **Post-test Exp. CL Group (Q18)** | 21 | 0.6 | 1.7 | | | |

**1.2.5 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in helping them to get better scores will be significantly different.**

Question 9 '*Writing in a group can help me to get better scores in my writing exams*', was related to the fifth factor 'Benefits of CL in helping to get better scores'. As shown in Table 4.22, the mean of the single score obtained by each student in the pre-test was 2.5, whereas the post-test mean was 2.0, with a mean difference of 0.5, which was not significant (*paired* t-test, t = 1.9, p. <.066). Therefore, hypothesis 1.2.5 was not confirmed.

**Table 4.22 Comparing pre-test and post-test responses of experimental CL group concerning benefits of CL in helping to get better scores**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group (Q9)** | 21 | 0.9 | 2.5 | 0.5 | 1.9 | .066 |
| **Post-test: Exp. CL Group (Q9)** | 21 | 1.0 | 2.0 | | | |

**1.2.6 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in providing comments on students' writing will be significantly different.**

Questions 10 '*Colleagues in my group are able to give comments on my writing*' and 11 '*I would like to get feedback from my friends on my compositions*' were related to the sixth factor 'Benefits of CL in providing comments on students' writing'. The comparison revealed no significant differences between the pre- and post-test responses of students in the experimental CL group concerning this factor (Q10: t = 1.2; p. <.232, and Q 11: t = 1.9; p. <.069), as shown in Table 4.23. The mean of the single score obtained by each student for question 10 in the pre-test was 2.2, and the post-test mean was 1.9, with a mean difference of 0.3, while the mean in the pre-test for question 11 was 2.1 and the post-test mean was 1.7, with a mean difference of 0.4. Hypothesis 1.2.6 was thus not confirmed.

**Table 4.23 Comparing pre-test and post-test responses of experimental CL group concerning benefits of CL in providing comments on students' writing**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group (Q10)** | 21 | 0.7 | 2.2 | 0.3 | 1.2 | .232 |
| **Post-test: Exp. CL Group (Q10)** | 21 | 0.9 | 1.9 | | | |
| **Pre-test: Exp. CL Group (Q11)** | 21 | 0.8 | 2.1 | 0.4 | 1.9 | .069 |
| **Post-test: Exp. CL Group (Q11)** | 21 | 0.5 | 1.7 | | | |

### 1.2.7 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in increasing understanding of accountability will be significantly different.

Question 13 '*My experience of CL has increased my understanding of my own accountability*' was related to the seventh factor 'Benefits of CL in increasing understanding of accountability'. As shown in Table 4.24, the mean of the single score obtained by each student was 2.6 in the pre-test and 1.7 in the post-test, giving a mean difference of 0.9, that indicated a highly significant difference (*paired* t-test, t = 4.6, p. <.000). The result is evidence that the students felt that collaborative learning was effective in helping them to increase their understanding of accountability. Therefore, hypothesis 1.2.7 was confirmed.

**Table 4.24 Comparing pre-test and post-test responses of experimental CL group concerning benefits of CL in increasing understanding of accountability**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group (Q13)** | 21 | 0.8 | 2.6 | 0.9 | 4.6 | .000 |
| **Post-test: Exp. CL Group (Q13)** | 21 | 0.7 | 1.7 | | | |

### 1.2.8 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the benefits of reading and listening to other students' essays in groups will be significantly different.

'Benefits of reading and listening to other students' essays in groups' is another factor that was related to the effectiveness of collaborative learning. Questions 14 '*I like reading the essays of my classmates and I understand what they write*' and 15 '*I understand and learn from listening to students when they read their essays in front of others*' addressed this factor. The *paired* t-test revealed no significant difference for either question 14 (t= .085, p. <.933) or question 15 (t =1.6, p. <.110). The mean for each student in both the pre-test and the post-test for question 14 was 2.3, while for question 15 the mean for each student was 2.3

in the pre-test and 2.0 in the post-test, with a mean difference of 0.3, as shown in Table 4.25. Hypothesis 1.2.8 was thus not confirmed.

**Table 4.25 Comparing pre-test and post-test responses of experimental CL group concerning benefits of reading and listening to other students' essays in groups**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group (Q14)** | 21 | 0.9 | 2.3 | 0.0 | .085 | .933 |
| **Post-test: Exp. CL Group (Q14)** | 21 | 2.0 | 2.3 | | | |
| **Pre-test: Exp. CL Group (Q15)** | 21 | 0.8 | 2.3 | 0.3 | 1.6 | .110 |
| **Post-test: Exp. CL Group (Q15)** | 21 | 0.8 | 2.0 | | | |

**1.2.9 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the factor that collaborative learning helps in acquiring and using new vocabulary correctly will be significantly different.**

Question 19 '*Collaborative writing helps me to acquire and use new vocabulary correctly*' addressed the ninth factor 'Benefits of CL in acquiring and using new vocabulary'. The mean pre-test score for the experimental CL group was 2.0, while in the post-test it was 1.7, with a mean difference of 0.3, as shown in Table 4.26. The result indicated no significant difference (*paired* t-test, t = 1.9, p. <.069). Hypothesis 1.2.9 was therefore not confirmed.

**Table 4.26 Comparing pre-test and post-test responses of experimental CL group in terms of benefits of CL in acquiring and using new vocabulary**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group (Q19)** | 21 | 0.7 | 2.0 | 0.3 | 1.9 | .069 |
| **Post-test: Exp. CL Group (Q19)** | 21 | 0.9 | 1.7 | | | |

**1.2.10 The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire concerning the factor that students feel more satisfied after writing their essays in collaborative groups will be significantly different.**

Questions 12 '*I would like to see students involved in more collaborative writing*' and 20 '*I feel more satisfied with my writing when I work in small groups than when I work individually*' addressed the factor 'Benefits of CL in increasing the satisfaction of students in writing essays'. The results of the *paired* t-test were highly significant for both questions (Q12: t = 3.1, p. <.006; Q20: t = 4.1, p. <.000). The mean of the single score obtained by each student for question 12 was 2.7 in the pre-test and 2.1 in the post-test, with a mean difference of 0.6. For question 20, the mean in the pre-test was 2.6, whereas the post-test mean was 1.9, with a mean difference of 0.7, as shown in Table 4.27. The findings indicated that students felt more satisfied when writing their essays in collaborative groups than when writing individually. Therefore, hypothesis 1.2.10 was confirmed.

**Table 4.27 Comparing pre-test and post-test responses of experimental CL group concerning benefits of CL in increasing the satisfaction of students in writing essays**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Exp. CL Group (Q12)** | 21 | 0.9 | 2.7 | 0.6 | 3.1 | .006 |
| **Post-test: Exp. CL Group (Q12)** | 21 | 0.9 | 2.1 | | | |
| **Pre-test: Exp. CL Group (Q20)** | 21 | 1.1 | 2.6 | 0.7 | 4.1 | .000 |
| **Post-test: Exp. CL Group (Q20)** | 21 | 1.0 | 1.9 | | | |

To sum up, questions 1-20 in the collaborative learning questionnaire were divided according to different factors in order to investigate the attitudes and perceptions of students

in the experimental CL group concerning collaborative learning. The results for all questions are summarized in Table 4.28 to clarify the organization by factors.

**Table 4.28 Summary of the pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire**

| | **Factors:**<br>**ESL students' attitudes towards** | **Questions** | **Accepted** | **Significance by *paired* t-test** |
|---|---|---|---|---|
| 1 | **Collaboration during the pre-writing stage:**<br>1.1 The importance of planning a topic with friends. | 3 | Yes | sig p> .008 |
| | 1.2 The benefits of making an outline and collecting ideas with classmates. | 4 | Yes | sig p> .002 |
| | 1.3 The importance of talking with friends to facilitate finding ideas for the topic. | 17 | Yes | sig p> .004 |
| 2 | **Collaboration during the revision stage.** | 6 | Yes | sig p> .000 |
| | | 16 | Yes | sig p>.030 |
| 3 | **Collaboration during the editing stage.** | 7 | No | sig p> .208 |
| 4 | **The importance of collaborative learning for writing essays.** | 1 | Yes | sig p>.010 |
| | | 2 | Yes | sig p>.032 |
| | | 5 | Yes | sig p>.010 |
| | | 8 | No | sig p>.130 |
| | | 18 | Yes | sig p>.016 |
| 5 | **Benefits of CL in helping to get better scores.** | 9 | No | sig p>.066 |
| 6 | **Benefits of CL in providing comments on students' writing.** | 10 | No | sig p>.232 |
| | | 11 | No | sig p>.069 |
| 7 | **Benefits of CL in increasing understanding of accountability.** | 13 | Yes | sig p>.000 |
| 8 | **Benefits of reading and listening to other students' essays in groups.** | 14 | No | sig p>.933 |
| | | 15 | No | sig p>.110 |
| 9 | **Benefits of CL in acquiring and using new vocabulary.** | 19 | No | sig p>.069 |
| 10 | **Benefits of CL in increasing the satisfaction of students in writing essays.** | 12 | Yes | sig p>.006 |
| | | 20 | Yes | sig p>.000 |

Thus, the hypotheses relating to factors 1, 2, 7 and 10 were fully confirmed, the hypothesis relating to factor 4 was partially confirmed and those relating to factors 3, 5, 6, 8 and 9 were not confirmed.

## 2. There will be a significant difference in the control TL group between the pre-test and the post-test as measured by the following sub-hypotheses:

### 2.1 There will be significant differences in students' essays before and after involvement in the traditional learning method.

The hypothesis was also examined using the *paired* t-test. As mentioned previously, 25 students from the control TL group completed both the pre- and post-test essays. As shown in Table 4.29, a highly significant difference was found between the pre- and post-test essay scores of the control TL group (t = 5.7, p. <.000). The mean and Std. Deviation of the total scores for each student in the control TL group in the pre-test were 18.6 and 7.5 respectively, compared with a mean of 24.8 and Std. Deviation of 7.3 in the post-test. The mean difference was therefore 6.2, indicating that the writing skills of students in the control TL group had improved after their involvement in the traditional learning method for three months.

**Table 4.29 Comparing overall pre- and post-test essay scores of students in the control TL group**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL group** | 25 | 7.5 | 18.6 | 6.2 | 5.7 | .000 |
| **Post-test: Control TL group** | 25 | 7.3 | 24.8 | | | |

The results confirmed the hypothesis that there would be significant differences in the essays of students in the control TL group before and after involvement in the traditional learning method.

The raters' scores for the six aspects of the students' writing analysed in the rubric were then analysed separately, also using the *paired* t-test. These factors were classified under the following sub-hypotheses:

***2.1.1 The organization of students' essays will be significantly different after their involvement in the traditional learning method.***

Table 4.30 shows that the mean obtained for the organization aspect for students in the control TL group was 3.2 in the pre-test and 4.0 in the post-test, giving a mean difference of 0.8, a highly significant difference (t = 4.5, p. <.000). This means that the essay organization of students in the control TL group had improved after involvement in the traditional learning method. As a result hypothesis 2.1.1 was confirmed.

**Table 4.30 Comparing pre-test and post-test essay scores of the control TL group in terms of organization**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Organization (Pre-test: Control TL group)** | 25 | 1.4 | 3.2 | 0.8 | 4.5 | .000 |
| **Organization (Post-test: Control TL group)** | 25 | 1.4 | 4.0 | | | |

***2.1.2 The development of students' essays will be significantly different after their involvement in the traditional leaning method.***

As shown in Table 4.31, the mean obtained in the pre-test was 3.1, while in the post-test it was 3.9, with a mean difference of 0.8, indicating a highly significant difference in the development category for the control TL group (*paired* t-test, t = 4.0, p. <.000). Therefore, hypothesis 2.1.2 was confirmed.

**Table 4.31 Comparing pre-test and post-test scores of the control TL group in terms of development**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Development (Pre-test: Control TL group)** | 25 | 1.3 | 3.1 | 0.8 | 4.0 | .000 |
| **Development (Post-test: Control TL group)** | 25 | 1.3 | 3.9 | | | |

***2.1.3 The coherence of students' essays will be significantly different after their involvement in the traditional leaning method.***

As indicated in Table 4.32, there was a highly significant difference between the pre-test and post-test essays of the control TL group in terms of cohesion (t = 4.6, p. <.000). The mean was 3.1 in the pre-test, whereas the post-test mean was 4.1, giving a mean difference of 1.0. The cohesion of the students' essays had therefore improved after their involvement in the traditional learning method. As a result, hypothesis 2.1.3 was confirmed.

**Table 4.32 Comparing pre-test and post-test essay scores of the control TL group in terms of cohesion**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Cohesion (Pre-test: Control TL group)** | 25 | 1.2 | 3.1 | 1.0 | 4.6 | .000 |
| **Cohesion (Post-test: Control TL group)** | 25 | 1.2 | 4.1 | | | |

***2.1.4 The vocabulary used in the students' essays will be significantly different after their involvement in the traditional leaning method.***

With regard to the vocabulary category, the mean obtained for the control TL group was 3.0 in the pre-test and 4.2 in the post-test, with a mean difference of 1.2, which was a highly significant difference (t = 5.7, p. <.000), as shown in Table 4.33. This result showed that hypothesis 2.1.4 could be confirmed.

**Table 4.33 Comparing pre-test and post-test essay scores of the control TL group in terms of vocabulary**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Vocabulary (Pre-test: Control group)** | 25 | 1.3 | 3.0 | 1.2 | 5.7 | .000 |
| **Vocabulary (Post-test: Control group)** | 25 | 1.2 | 4.2 | | | |

***2.1.5 The structure of students' essays will be significantly different after their involvement in the traditional leaning method.***

The results presented in Table 4.34 show that the pre-test mean obtained for the control TL group in the structure category was 3.1, while the post-test mean was 4.2, with a difference of 1.1, which was highly significant (*paired* t-test, t = 4.5, p. <.000). The result indicated that hypothesis 2.1.5 could be confirmed.

**Table 4.34 Comparing pre-test and post-test essay scores of control TL group in terms of structure**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Structure (Pre-test: Control TL group)** | 25 | 1.2 | 3.1 | 1.1 | 4.5 | .000 |
| **Structure (Post-test: Control TL group)** | 25 | 1.1 | 4.2 | | | |

***2.1.6 The mechanics of students' essays will be significantly different after their involvement in the traditional learning method.***

This hypothesis was also tested using a *paired* t-test. As shown in Table 4.35, the mean obtained for mechanics in the pre-test was 3.1, and in the post-test was 4.2, with a mean difference of 1.1, which was a highly significant difference (t = 4.8, p. <.000). This means that the mechanics of the students' essay writing had improved after their involvement in the traditional learning method. Therefore, hypothesis 2.1.6 was confirmed.

**Table 4.35 Comparing pre-test and post-test essay scores of the control TL group in terms of mechanics**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Mechanics (Pre-test: Control TL group)** | 25 | 1.1 | 3.1 | 1.1 | 4.8 | .000 |
| **Mechanics (Post-test: Control TL group)** | 25 | 1.4 | 4.2 | | | |

The findings presented above indicate that the students in the control TL group had improved in all six measured aspects of their writing after being involved in the traditional learning method. However, they showed a much greater improvement in some aspects than in others. The categories in which the students had improved the most were vocabulary, followed by structure, mechanics and cohesion, while those areas in which they had improved least were development and organization. It could thus be concluded that engaging in traditional learning resulted in a greater improvement in the vocabulary, structure, mechanics and cohesion of the students' essays than in development and organization, although there was still significant improvement in these areas. The results are summarized in Table 4.36.

**Table 4.36 Summary of the pre- and post-test essay scores of students in the control TL group in terms of categories of the rubric**

| | Factors | Accepted | Significance by *paired* t-test |
|---|---|---|---|
| **1** | **Organization** | Yes | sig p> .000 |
| **2** | **Development** | Yes | sig p> .000 |
| **3** | **Cohesion** | Yes | sig p> .000 |
| **4** | **Vocabulary** | Yes | sig p> .000 |
| **5** | **Structure** | Yes | sig p> .000 |
| **6** | **Mechanics** | Yes | sig p> .000 |

**2.2 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire will be significantly different.**

In order to test this hypothesis, all questions from the collaborative writing questionnaires (1-20) were analysed using the *paired* t-test, as described for the experimental CL group in section 1.2. The number of students of the control TL group who completed pre- and post-test questionnaires was 21, rather than the 25 who completed the essays. The results presented in Table 4.37 indicate that the pre-test mean for each student in the control TL group was 45.3, while the post-test mean was 45.4, with a mean difference of 0.1, which was not significant (t = .56, p. <.577). Hypothesis 2.2 was thus not confirmed.

**Table 4.37 Comparing pre- and post-test attitudes of students in the control TL group in the collaborative learning questionnaire**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL group** | 21 | 5.7 | 45.3 | 0.1 | .56 | .577 |
| **Post-test: Control TL group** | 21 | 9.1 | 45.4 | | | |

As mentioned above, the collaborative learning questionnaire was divided into ten factors (see pages 94-96) that were also analysed using the *paired* t-test since this involved testing the same control TL group twice. All the factors were classified under the following sub-hypotheses:

**2.2.1 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning collaboration during the pre-writing stage will be significantly different.**

Questions 3, 4 and 17 were related to the first factor 'Collaboration during the pre-writing stage' that was divided into three sub-factors. As shown in Table 4.38 below, for the first sub-factor 'The importance of planning a topic with friends', the mean for each student for question 3 '*Before starting writing (pre-writing stage), planning a topic with friends is much*

*better than individually*' was 2.2 in the pre-test and 2.1 in the post-test. The mean difference was only 0.1, which was not significant (*paired* t-test, t = .491, p. <.629).

Question 4 '*Before I start writing (pre-writing stage), making an outline and writing down ideas with classmates are not good methods*' was related to the second sub-factor 'The benefits of making an outline and collecting ideas with classmates'. The statement was worded negatively, so the mean scores for the tests were reversed to facilitate comparison and readability. As a result, the mean of the single score obtained by each student in the pre-test was 1.5, while in the post-test it was 1.7, with a mean difference of 0.2, indicating no significant difference (*paired* t-test, t = .797, p. <.452).

Question 17 addressed the third sub-factor 'The importance of talking with friends to facilitate finding ideas for the topic'. The mean in the pre-test was 2.1 for each student, whereas in the post-test it was 1.9, with a small mean difference of 0.2. A *paired* t-test indicated no significant difference (t = .548, p. <.590). Hypothesis 2.2.1 was thus not confirmed. All the results for the first factor for the control TL group are shown in Table 4.38.

**Table 4.38 Comparing pre-test and post-test responses of control TL group concerning collaboration during pre-writing stage**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL Group (Q3)** | 21 | 1.0 | 2.2 | 0.1 | .491 | .629 |
| **Post-test: Control TL Group (Q3)** | 21 | 0.8 | 2.1 | | | |
| **Pre-test: Control TL Group (Q4)** | 21 | 0.9 | 1.5 | 0.2 | .767 | .452 |
| **Post-test: Control TL Group (Q4)** | 21 | 1.1 | 1.7 | | | |
| **Pre-test: Control TL Group (Q17)** | 21 | 1.1 | 2.1 | 0.2 | .548 | .590 |
| **Post-test: Control TL Group (Q17)** | 21 | 0.6 | 1.9 | | | |

**2.2.2 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning collaboration during the revision stage will be significantly different.**

With regard to the comparison of pre-test and post-test responses of the control TL group for questions 6 and 16, which were related to the second factor 'Collaboration during the revision stage', the mean of the single score obtained by each student obtained for question 6 was 2.6 in both pre- and post-tests, and the difference was not significant (*paired* t-test, t = .161, p. <.874). Similarly, the mean in both pre- and post-tests for question 16 was 2.1, so the difference was not significant here either (*paired* t-test, t = .000, p. <1.00). Therefore, hypothesis 2.2.2 was not confirmed. These results are presented in Table 4.39 below.

**Table 4.39 Comparing pre-test and post-test responses of control TL group concerning collaboration during revision stage**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL Group (6)** | 21 | 0.9 | 2.6 | 0.0 | .161 | .874 |
| **Post-test: Control TL Group (6)** | 21 | 1.1 | 2.6 | | | |
| **Pre-test: Control TL Group (16)** | 21 | 0.7 | 2.1 | 0.0 | .000 | 1.00 |
| **Post-test: Control TL Group (16)** | 21 | 0.7 | 2.1 | | | |

**2.2.3 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning collaboration during the editing stage will be significantly different.**

Question 7 '*I prefer editing and proofreading my activities and tasks in a group rather than individually*' was related to the factor 'Collaboration during the editing stage'. The mean of the single score for each student was 2.2 in the pre-test and 2.3 in the post-test, with a mean difference of 0.1, as shown in Table 4.40. There was no significant difference between the

responses for the pre-test and post-test (*paired* t-test, t = .767, p. <. 452). Hypothesis 2.2.3 could therefore not be confirmed.

**Table 4.40 Comparing pre-test and post-test responses of control TL group concerning collaborating during editing stage**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL Group (Q7)** | 21 | 0.8 | 2.2 | 0.1 | .767 | .452 |
| **Post-test: Control TL Group (Q7)** | 21 | 1.0 | 2.3 | | | |

**2.2.4 The pre- and post-test of responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the importance of collaborative learning will be significantly different.**

As mentioned in hypothesis 1.2.4, five questions (1, 2, 5, 8 and 18) in the collaborative learning questionnaire were related to the fourth factor 'The importance of collaborative learning for writing essays'. For question 1 '*Working together in groups is a good strategy that helps me to write effectively*', there was no significant difference between the responses for the pre- and post-tests of the control TL group (*paired* t-test, t = .815, p. <.424). The mean pre-test score for each student was 2.6 and in the post-test it was 2.8.

The mean scores for question 2, which was worded negatively, were reversed, so the mean single score for each student in the pre-test was 2.0 and in the post-test it was 2.5. This difference was also not significant (*paired* t-test, t= 1.6, p. <.116).

Question 5 was worded to support the idea that working individually without help from others was important. This question was expressed negatively, so the mean scores were reversed to indicate a positive development; thus the mean in the pre-test was 2.3 and in the post-test it was 1.9, giving a mean difference of 0.4, which was not significant (*paired* t-test, t = 1.4, p. <.162).

With regard to question 8 '*Working with other students is very important for me*', the mean pre-test score for each student was 2.0 and the post-test score was 2.5, with a mean difference of 0.5, which was not significant (*paired* t-test, t = 1.9; p. <.061).

For question 18 '*Sharing my essay with my friends collaboratively is useful and beneficial*', the mean pre-test score was 2.1 and the post-test score 2.5, with a mean difference of 0.4. The *paired* t-test found no significant difference between the responses for pre-test and post-test (t = 1.8, p. <.072), as shown in Table 4.41. Therefore, hypothesis 2.2.4 was not confirmed.

**Table 4.41 Comparing pre-test and post-test responses of control TL group concerning the importance of collaborative learning for writing essays**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL Group (Q1)** | 21 | 1.2 | 2.6 | 0.2 | .815 | .424 |
| **Post-test: Control TL Group (Q1)** | 21 | 1.2 | 2.8 | | | |
| **Pre-test: Control TL Group (Q2)** | 21 | 1.2 | 2.0 | 0.5 | 1.6 | .116 |
| **Post-test: Control TL Group (Q2)** | 21 | 1.3 | 2.5 | | | |
| **Pre-test: Control TL Group (Q5)** | 21 | 1.1 | 2.3 | 0.4 | 1.4 | .162 |
| **Post-test: Control TL Group (Q5)** | 21 | 1.1 | 1.9 | | | |
| **Pre-test: Control TL Group (Q8)** | 21 | 0.7 | 2.0 | 0.5 | 1.9 | .061 |
| **Post-test: Control TL Group (Q8)** | 21 | 1.0 | 2.5 | | | |
| **Pre-test: Control TL Group (Q18)** | 21 | 0.7 | 2.1 | 0.4 | 1.8 | .072 |
| **Post-test: Control TL Group (Q18)** | 21 | 1.1 | 2.5 | | | |

**2.2.5 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in helping them to get better scores will be significantly different.**

With regard to the fifth factor 'Benefits of CL in helping to get better scores', the mean of the single score obtained by each student for question 9 '*Writing in a group can help me to get better scores in my writing exams*' in the pre-test was 2.4 and in post-test was 2.3, showing no significant difference (*paired* t-test, t = 0.25, p. <.803), as indicated in Table 4.42. As a result, hypothesis 2.2.5 was not confirmed.

**Table 4.42 Comparing pre-test and post-test responses of control TL group concerning benefits of CL in helping to get better scores**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL Group (Q9)** | 21 | 0.8 | 2.4 | 0.1 | 0.25 | .803 |
| **Post-test: Control TL Group (Q9)** | 21 | 0.9 | 2.3 | | | |

**2.2.6 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in providing comments on students' writing will be significantly different.**

The sixth factor covered in the collaborative learning questionnaire was 'Benefits of CL in providing comments on students' writing'. The results for both questions 10 '*Colleagues in my group are able to give comments on my writing*' and 11 '*I would like to get feedback from my friends on my compositions*' indicated no significant difference between the responses for the pre-test and the post-test (question 10: t = .491; p. <.629; question 11: t = .188; p. <.853). The mean difference for both questions was only 0.1, as shown in Table 4.43. Hypothesis 2.2.6 was therefore not confirmed.

**Table 4.43 Comparing pre-test and post-test responses of control TL group concerning benefits of CL in providing comments on students' writing**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL group (Q10)** | 21 | 0.9 | 2.4 | 0.1 | .491 | .629 |
| **Post-test: Control TL group (Q10)** | 21 | 0.7 | 2.3 | | | |
| **Pre-test: Control TL group (Q11)** | 21 | 0.9 | 2.3 | 0.1 | .188 | .853 |
| **Post-test: Control TL group (Q11)** | 21 | 0.9 | 2.2 | | | |

**2.2.7 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the benefits of CL in increasing understanding of accountability will be significantly different.**

The seventh factor 'Benefits of CL in increasing understanding of accountability' was represented by question 13; the *paired* t-test found no significant difference between pre-test and post-test responses for the control TL group (t = .271, p. <.789). The mean of the single score for each student in both the pre- and post-test was 2.2, as shown in Table 4.44. Therefore, hypothesis 2.2.7 was not confirmed.

**Table 4.44 Comparing pre-test and post-test responses of control TL group concerning benefits of CL in increasing understanding of accountability**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL Group (Q13)** | 21 | 0.7 | 2.2 | 0.0 | .271 | .789 |
| **Post-test: Control TL Group (Q13)** | 21 | 0.6 | 2.2 | | | |

**2.2.8 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the benefits of reading and listening to other students' essays in groups will be significantly different.**

Questions 14 and 15 addressed the eighth factor in the collaborative learning questionnaire 'Benefits of reading and listening to other students' essays in groups'. For question 14 '*I like*

*reading the essays of my classmates and I understand what they write*', the mean of the single score for each student in the control TL group in the pre-test was 2.1 and in the post-test it was 2.2, which indicated no significant difference (t = .181, p. <.858).

For question 15 '*I understand and learn from listening to students when they read their essays in front of others*', the mean of the single score for each student was 2.9 in the pre-test and 2.5 in the post-test, giving a mean difference of 0.4. The *paired* t-test showed no significant difference between the pre-test and post-test responses of the control TL group (t = 1.6, p. <.107), as shown in Table 4.45. Hypothesis 2.2.8 could not therefore be confirmed.

**Table 4.45 Comparing pre-test and post-test responses of control TL group concerning benefits of reading and listening to other students' essays in groups**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL Group (Q14)** | 21 | 0.8 | 2.1 | 0.1 | .181 | .858 |
| **Post-test: Control TL Group (Q14)** | 21 | 0.7 | 2.2 | | | |
| **Pre-test: Control TL Group (Q15)** | 21 | 1.0 | 2.9 | 0.4 | 1.6 | .107 |
| **Post-test: Control TL Group (Q15)** | 21 | 0.8 | 2.5 | | | |

**2.2.9 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the factor that collaborative learning helps in acquiring and using new vocabulary correctly will be significantly different.**

Question 19 '*Collaborative writing helps me to acquire and use new vocabulary correctly*' was related to the factor 'Benefits of CL in acquiring and using new vocabulary'. It was analysed through the *paired* t-test and a significant difference was found between the scores for pre-test and post-test (t= 2.6, p. <.016). The mean of the single score obtained by each student in the pre-test was 1.7, whereas the post-test mean was 2.0, as shown in Table 4.46. The mean difference for students in the control TL group indicated that after the course they

were more inclined to disagree with the statement that collaborative writing helps them to acquire and use new vocabulary correctly. Therefore, hypothesis 2.2.9 was confirmed.

**Table 4.46 Comparing pre-test and post-test responses of the control TL group in terms of benefits of CL in acquiring and using new vocabulary**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL Group (Q19)** | 21 | 0.5 | 1.7 | 0.3 | 2.6 | .016 |
| **Post-test: Control TL Group (Q19)** | 21 | 0.7 | 2.0 | | | |

**2.2.10 The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire concerning the factor that students feel more satisfied after writing their essays in collaborative groups will be significantly different.**

Questions 12 and 20 represented the last factor 'Benefits of CL in increasing the satisfaction of students in writing essays'. In the results obtained for question 12 '*I would like to see students involved in more collaborative writing*', no significant difference was found between the responses for pre- and post-test (*paired* t-test, t = .384, p. <.705). The mean score was 2.3 for the pre-test and 2.4 for the post-test, with a mean difference of 0.1. For question 20 '*I feel more satisfied with my writing when I work in small groups than when I work individually*', the findings showed no significant difference (*paired* t-test, t = 1.7, p. <.104). The mean of the single score for each student in the pre-test was 2.2 and in the post-test it was 2.6, with a mean difference 0.4, as shown in Table 4.47. Hypothesis 2.2.10 could thus not be confirmed.

**Table 4.47 Comparing pre-test and post-test responses of control TL group concerning benefits of CL in increasing the satisfaction of students in writing essays**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Pre-test: Control TL Group (Q12)** | 21 | 0.8 | 2.3 | 0.1 | .384 | .705 |
| **Post-test: Control TL Group (Q12)** | 21 | 1.1 | 2.4 | | | |
| **Pre-test: Control TL Group (Q20)** | 21 | 0.9 | 2.2 | 0.4 | 1.7 | .104 |
| **Post-test: Control TL Group (Q20)** | 21 | 1.2 | 2.6 | | | |

In summary, questions 1-20 in the collaborative learning questionnaire were classified into factors to investigate the attitudes and perceptions of students in the control TL group concerning collaborative learning. All the results discussed above are summarized in Table 4.48 to clarify the organization by factors.

**Table 4.48 Summary of the analysis of the pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire**

| | **Factors:**<br>**ESL students' attitudes towards:** | **Questions** | **Accepted** | **Significance by *paired* t-test** |
|---|---|---|---|---|
| 1 | **Collaboration during the pre-writing stage:**<br>1.1 The importance of planning a topic with friends. | 3 | No | sig p> .629 |
| | 1.2 The benefits of making an outline and collecting ideas with classmates. | 4 | No | sig p> .452 |
| | 1.3 The importance of talking with friends to facilitate finding ideas for the topic. | 17 | No | sig p> .590 |
| 2 | **Collaboration during the revision stage.** | 6 | No | sig p> .874 |
| | | 16 | No | sig p> .1.00 |
| 3 | **Collaboration during the editing stage.** | 7 | No | sig p> .452 |
| 4 | **The importance of collaborative learning for writing essays.** | 1 | No | sig p> .424 |
| | | 2 | No | sig p> .116 |
| | | 5 | No | sig p> .162 |
| | | 8 | No | sig p> .061 |
| | | 18 | No | sig p> .072 |
| 5 | **Benefits of CL in helping to get better scores.** | 9 | No | sig p>.803 |
| 6 | **Benefits of CL in providing comments on students' writing.** | 10 | No | sig p> .629 |
| | | 11 | No | sig p> .853 |
| 7 | **Benefits of CL in increasing understanding of accountability.** | 13 | No | sig p> .789 |
| 8 | **Benefits of reading and listening to other students' essays in groups.** | 14 | No | sig p> .858 |
| | | 15 | No | sig p> .107 |
| 9 | **Benefits of CL in acquiring and using new vocabulary.** | 19 | Yes | sig p> .016 |
| 10 | **Benefits of CL in increasing the satisfaction of students in writing essays.** | 12 | No | sig p>.705 |
| | | 20 | No | sig p>.104 |

Thus, only the hypothesis relating to factor 9 was confirmed; the hypotheses relating to all other factors were not confirmed.

## 3. There will be a significant difference between the experimental CL group and the control TL group at time 2 as measured by the following sub-hypotheses:

### 3.1 There will be significant differences between the post-test essays written by students in the experimental CL group and those written by students in the control TL group.

The comparison of the essay scores was based on 23 students in the experimental CL group and 25 in the control TL group. The post-test results for the experimental CL group were as follows: mean = 29.4, Std. Deviation = 8.1, while the post-test results for the control TL group were: mean = 24.8, Std. Deviation = 7.3, t =18.2. The mean difference between the two groups was 4.6: this shows that the experimental CL group obtained higher scores in their written essays in the post-test than the control TL group, the difference being significant (*independent* t-test, t = 2.1 and p. <.045). The results are presented in Table 4.49 below.

**Table 4.49 Comparing post-test essay scores of students in the experimental CL group and in the control TL group**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group** | 23 | 8.1 | 29.4 | 4.6 | 2.1 | .045 |
| **Post-test: Control TL group** | 25 | 7.3 | 24.8 | | | |

The results indicated that the hypothesis that there would be significant differences between the post-test essays written by students in the experimental CL group and those written by students in the control TL group should be confirmed.

The raters' scores for the six aspects of the students' writing covered in Paulus' rubric were then analysed separately, also using the *independent* t-test, since this involved testing two different groups. These aspects were classified under the following sub-hypotheses:

### *3.1.1 The organization of the post-test essays of students in the experimental CL group will be significantly different from that of the post-test essays written by students in the control TL group.*

The results presented in Table 4.50 show that the mean post-test score for organization obtained by the experimental CL group was 4.8, whereas in the control TL group it was 4.0, with a mean difference of 0.8, which was not significant (*independent* t-test, t = 1.9, p. <.057). Thus, hypothesis 3.1.1 concerning organization was not confirmed, although the improvement in the experimental CL group scores was near-significant.

**Table 4.50 Comparing post-test essay scores of students in the experimental CL group and in the control TL group in terms of organization**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Organization (Post-test: Exp. CL group)** | 23 | 1.3 | 4.8 | 0.8 | 1.9 | .057 |
| **Organization (Post-test: Control TL group)** | 25 | 1.4 | 4.0 | | | |

### *3.1.2 The development of the post-test essays of students in the experimental CL group will be significantly different from that of the post-test essays written by students in the control TL group.*

The results shown in Table 4.51 indicate that the mean post-test score for development obtained by the experimental CL group was 4.7, whereas in the control TL group it was 3.9, giving a mean difference of 0.8. The *independent* t-test indicated a significant difference in the development category (t = 2.0, p. <.044). This means that development in the essay writing of students in the experimental CL group improved more than that of students in the control CL group. Therefore, hypothesis 3.1.2 was confirmed.

**Table 4.51 Comparing post-test essay scores of students in the experimental CL group and in the control TL group in terms of development**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Development (Post-test: Exp. CL group)** | 23 | 1.5 | 4.7 | 0.8 | 2.0 | .044 |
| **Development (Post-test: Control TL group)** | 25 | 1.3 | 3.9 | | | |

***3.1.3 Cohesion in the post-test essays of students in the experimental CL group will be significantly different from that in the post-test essays written by students in the control TL group.***

As shown in Table 4.52, the mean obtained for cohesion in the post-test essays of the experimental CL group was 4.9 and in the control TL group was 4.1, with a mean difference of 0.8, which was significant (*independent* t-test, t = 2.1, p. <.040). This means that the cohesion of the essay writing of students in the experimental CL group had improved more than that of students in the control TL group. Hypothesis 3.1.3 was therefore confirmed.

**Table 4.52 Comparing post-test essay scores of students in the experimental CL group and in the control TL group in terms of cohesion**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Cohesion (Post-test: Exp. CL group)** | 23 | 1.4 | 4.9 | 0.8 | 2.1 | .040 |
| **Cohesion (Post-test: Control TL group)** | 25 | 1.2 | 4.1 | | | |

***3.1.4 The vocabulary used in the post-test essays of students in the experimental CL group will be significantly different from that used in the post-test essays written by students in the control TL group.***

As shown in Table 4.53, the analysis of the vocabulary aspect gave the post-test mean for the experimental CL group as 4.8, while in the control TL group it was 4.2, with a mean difference of 0.6, which was not significant (*independent* t-test, t = 1.7, p. <.090). Therefore, hypothesis 3.1.4 was not confirmed.

**Table 4.53 Difference between post-test essay scores of students in the experimental CL group and those of students in the control TL group in terms of vocabulary**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Vocabulary (Post-test: Exp. CL group)** | 23 | 1.4 | 4.8 | 0.6 | 1.7 | .090 |
| **Vocabulary (Post-test: Control TL group)** | 25 | 1.2 | 4.2 | | | |

***3.1.5 The structure of the post-test essays of students in the experimental CL group will be significantly different from that of the post-test essays written by students in the control TL group***.

The analysis of the structure aspect, as shown in Table 4.54, gave a post-test mean of 4.9 for the experimental CL group and 4.2 for the control TL group, the difference being 0.7, which was significant (*independent* t-test, t = 2.0, p. <.043). This means that the structure of the essays written by students in the experimental CL group had improved more than that of students in the control TL group. Hypothesis 3.1.5 was therefore confirmed.

**Table 4.54 Difference between post-test essay scores of students in the experimental CL group and those of students in the control TL group in terms of structure**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Structure (Post-test: Exp. CL group)** | 23 | 1.4 | 4.9 | 0.7 | 2.0 | .043 |
| **Structure (Post-test: Control TL group)** | 25 | 1.1 | 4.2 | | | |

***3.1.6 The mechanics of the post-test essays written by students in the experimental CL group will be significantly different from that of the post-test essays written by students in the control TL group.***

As shown in Table 4.55, the mean obtained for the mechanics of the post-test essays of students in the experimental CL group was 4.6, while that obtained for students in the control TL group was 4.2, with a mean difference of 0.4, showing no significant difference (*independent* t-test, t = 1.0, p. <.292). Hypothesis 3.1.6 was thus not confirmed.

**Table 4.55 Comparing post-test essay scores of students in the experimental CL group and in the control TL group in terms of mechanics**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Mechanics (Post-test: Exp. CL group)** | 23 | 1.4 | 4.6 | 0.4 | 1.0 | .292 |
| **Mechanics (Post-test: Control TL group)** | 25 | 1.4 | 4.2 | | | |

The results presented above reveal that there were significant differences between the post-test essays of students in the experimental CL group and those of students in the control TL group in terms of development (p. <.044), cohesion (p. <.040) and structure (p. <.043). However, there were no significant differences in terms of organization (p. <.057), vocabulary (p. <.090) or mechanics (p. <.292). Nevertheless, the students who were involved in collaborative learning did better in all aspects of their writing than those in the control TL group, even though the differences were significant for only three of the measures in the rubric. All the results discussed above are summarized in Table 4.56 below.

**Table 4.56 Summary of the analysis of the post-test essay scores of students in the experimental CL and control TL groups in terms of categories of the rubric**

| | Aspect | Accepted | Significance by *independent* t-test |
|---|---|---|---|
| 1 | **Organization** | No | sig p> .057 |
| 2 | **Development** | Yes | sig p> .044 |
| 3 | **Cohesion** | Yes | sig p> .040 |
| 4 | **Vocabulary** | No | sig p> .090 |
| 5 | **Structure** | Yes | sig p> .043 |
| 6 | **Mechanics** | No | sig p> .292 |

Thus, we see that the aspects of development, cohesion and structure differed significantly, whereas the other aspects of organization, vocabulary, and mechanics did not. It may thus be said that collaborative learning was more effective than the traditional learning method in three categories namely development, cohesion and structure, but not in organization, vocabulary, and mechanics.

**3.2 There will be significant differences between the attitudes and perceptions of the students in the experimental CL group and those in the control TL group as tested by the collaborative learning questionnaire at the post-test.**

In order to test this hypothesis, all questions from the collaborative learning questionnaire (1-20) were analysed using the *independent* t-test. The number of students who completed the post-test questionnaire in both the experimental CL and control TL groups was 21, compared to the 23/25 involved in the essay scoring.

When comparing the attitudes and perceptions of the students in the experimental CL group with those of students in the control TL group as tested by the collaborative learning questionnaire, it was found that the mean of the total score obtained by each student in the post-test of the experimental CL group was 34, whereas in the control TL group it was 45.4, giving a mean difference of 11.4, that indicated a significant difference between the attitudes and perceptions of students in the experimental CL group and those in the control TL group (*independent* t-test, t = 2.1, p. <.036), as shown in Table 4.57.

**Table 4.57 Comparing post-test responses of experimental CL and control TL groups in the collaborative learning questionnaire**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL group** | 21 | 7.8 | 34 | 11.4 | 2.1 | .036 |
| **Post-test: Control TL group** | 21 | 9.1 | 45.4 | | | |

The hypothesis that there would be a significant difference between the attitudes and perceptions of students in the experimental CL group and those of students in the control TL group at the post-test should therefore be confirmed.

As mentioned before, the collaborative learning questionnaire was divided into ten factors (listed on pages 94-96). These were also analysed using the *independent* t-test, since this involved testing the experimental CL group against the control TL group at the post-test. These factors were classified under the following sub-hypotheses:

**3.2.1 There will be significant differences in the perceptions of the students in the experimental CL group and those in the control TL group concerning collaboration during the pre-writing stage at the post-test.**

Questions 3, 4 and 17 were concerned with the first factor 'Collaboration during the pre-writing stage', which was divided into three sub-factors. With regard to question 3, that was related to the first sub-factor 'The importance of planning a topic with friends', as shown in Table 4.58, the mean in the post-test for each student in the experimental CL group was 1.6; whereas in the control TL group it was 2.1, with a mean difference of 0.5, which was a significant difference (*independent* t-test, t = 2.2, p. <.031). The results indicated that there was a higher degree of agreement among students who were involved in the collaborative learning classroom with the statement that '*Before starting writing (pre-writing stage), planning a topic with friends is much better than individually*' than among students in the control TL group.

The second sub-factor was 'The benefits of making an outline and collecting ideas with classmates'. For question 4 '*Before I start writing (pre-writing stage), making an outline and writing down ideas with classmates are not good methods*', the mean scores were reversed; thus, the lower the value obtained for the mean, the greater was the improvement. The mean of the single score obtained by each student in the experimental CL group was 0.9

in the post-test, whereas in the control TL group it was 1.7, giving a mean difference of 0.8, which was significant (*independent* t-test, t = 2.5, p. <.016). The results for question 4 thus showed that by the post-test, the attitude of students in the experimental CL group towards making an outline and writing down ideas with classmates had improved more than that of students in the control TL group.

Question 17 was related to the third sub-factor 'The importance of talking with friends to facilitate finding ideas for the topic'. As shown in Table 4.58, the mean in the post-test for the experimental CL group was 1.4, while for the control TL group it was 1.9, with a mean difference of 0.5, which was highly significant (*independent* t-test, t = 2.8, p. <.007). The findings showed that by the post-test students who were involved in the CL group were more inclined to agree with the statement '*At the pre-writing stage, talking with my friends can facilitate finding ideas for my topic*' than those in the control TL group.

To summarize the results for the first factor covered in the collaborative learning questionnaire, students in the experimental CL group were more positive about the importance of collaborative learning when planning a topic, collecting and outlining ideas, and finding ideas for the essay topic than those in the control TL group. Therefore, hypothesis 3.2.1 was confirmed.

**Table 4.58 Comparing post-test responses of experimental CL and control TL groups concerning collaboration during pre-writing stage**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q3)** | 21 | 0.6 | 1.6 | 0.5 | 2.2 | .031 |
| **Post-test: Control TL Group (Q3)** | 21 | 0.8 | 2.1 | | | |
| **Post-test: Exp. CL Group (Q4)** | 21 | 0.8 | 0.9 | 0.8 | 2.5 | .016 |
| **Post-test: Control TL Group (Q4)** | 21 | 1.1 | 1.7 | | | |
| **Post-test: Exp. CL Group (Q17)** | 21 | 0.5 | 1.4 | 0.5 | 2.8 | .007 |
| **Post-test: Control TL Group (Q17)** | 21 | 0.6 | 1.9 | | | |

### 3.2.2 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning collaboration during the revision stage at the post-test.

Table 4.59 indicates the difference between the post-test responses of the experimental CL group and those of the control TL group regarding the second factor 'Collaboration during the revision stage'. For question 6, the post-test mean for the experimental CL group was 1.8, whereas in the control TL group it was 2.6, with a mean difference of 0.8, which showed a significant difference (*independent* t-test, t = 2.6, p. <.012). The extent of agreement with the statement '*Working and writing in groups helps me to know how to revise my essay effectively*' had increased more among those students involved in collaborative learning than among those who engaged in traditional learning. Similarly, the post-test mean of the single score for each student in the experimental CL group for question 16 was 1.5, whereas in the control TL group it was 2.1, which was a significant difference (*independent* t-test, t = 2.6, p. <.011). This result indicated that the agreement of students in the experimental CL group

with the statement '*Revising my essay with classmates many times can improve it effectively*' had increased after their involvement in collaborative learning.

The results for both question 6 and 16 revealed that the attitudes of the experimental CL group towards collaboration during the revision stage had improved more than those of the control TL group. Therefore, hypothesis 3.2.2 was confirmed.

**Table 4.59 Comparing post-test responses of experimental CL and control TL groups concerning collaboration during revision stage**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q6)** | 21 | 0.6 | 1.8 | 0.8 | 2.6 | .012 |
| **Post-test: Control TL Group (Q6)** | 21 | 1.1 | 2.6 | | | |
| **Post-test: Exp. CL Group (Q16)** | 21 | 0.6 | 1.5 | 0.6 | 2.6 | .011 |
| **Post-test: Control TL Group (Q16)** | 21 | 0.7 | 2.1 | | | |

**3.2.3 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning collaboration during the editing stage at the post-test.**

Question 7 was concerned with the third factor 'Collaboration during the editing stage'. As shown in Table 4.60, the mean post-test score for the experimental CL group was 1.8 and that for the control TL group was 2.3, giving a mean difference of 0.5, which was not significant (*independent* t-test, t = 1.9; p. <.058). Hypothesis 3.2.3 was therefore not confirmed, although there was a near-significant improvement in the experimental CL group scores.

**Table 4.60 Comparing post-test responses of experimental CL and control TL groups concerning collaborating during editing stage**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q7)** | 21 | 0.7 | 1.8 | 0.5 | 1.9 | .058 |
| **Post-test: Control TL Group (Q7)** | 21 | 1.0 | 2.3 | | | |

### 3.2.4 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the importance of collaborative learning at the post-test.

Five questions (1, 2, 5, 8 and 18) were related to the fourth factor 'The importance of collaborative learning for writing essays'. For question 1 '*Working together in groups is a good strategy that helps me to write effectively*', the results presented in Table 4.61 showed that the mean post-test score for the experimental CL group was 1.9, whereas for the control TL group it was 2.8, with a mean difference of 0.9, which was a highly significant difference (t = 2.8, p. <.007). Students in the experimental CL group were thus more inclined to agree that working in groups was a good strategy that helped them to write effectively than those in the control TL group.

For question 2 '*Writing about something with my friends is not suitable for me*', the mean scores were reversed. As a result, the post-test mean of the single score for each student in the experimental CL group was 1.3 and in the control TL group it was 2.5, with a mean difference of 1.2, which was highly significant (*independent* t-test, t = 2.8, p. <.006). The mean difference found for question 2 thus showed that students in the experimental CL group believed more strongly that writing with friends was a suitable method than students in the control TL group.

For question 5 '*Working by myself without help from others is very important for me*', the mean scores were also reversed, so the mean of the single score obtained by each student in the experimental CL group was 1.0, whereas in the control TL group it was 1.9, with a mean difference of 0.9, which was highly significant (*independent* t-test, t = 3.3, p. <.002). It was clear from the mean difference between post-test responses that the experimental CL group thought that the strategy of working with others was more important than the control TL group.

With regard to question 8 '*Working with other students is very important for me*', the mean of the single score for each student in the experimental CL group was 1.9, whereas in the control TL group it was 2.5, giving a mean difference of 0.6. The difference was not significant (*independent* t-test, t = 1.8, p. <.065).

Finally, as shown in Table 4.61, for question 18 '*Sharing my essay with my friends collaboratively is useful and beneficial*' the post-test mean in the experimental CL group was 1.7, whereas in the control TL group it was 2.5, with a mean difference of 0.8. This difference was highly significant (*independent* t-test, t = 2.8, p. <.007). This indicates that the experimental CL group thought that sharing essays with friends collaboratively was a more useful and beneficial strategy than the control TL group.

**Table 4.61 Comparing post-test responses of experimental CL and control TL groups concerning the importance of collaborative learning for writing essays**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q1)** | 21 | 0.9 | 1.9 | 0.9 | 2.8 | .007 |
| **Post-test: Control TL Group (Q1)** | 21 | 1.2 | 2.8 | | | |
| **Post-test: Exp. CL Group (Q2)** | 21 | 1.2 | 1.3 | 1.2 | 2.8 | .006 |
| **Post-test: Control TL Group (Q2)** | 21 | 1.3 | 2.5 | | | |
| **Post-test: Exp. CL Group (Q5)** | 21 | 0.6 | 1.0 | 0.9 | 3.3 | .002 |
| **Post-test: Control TL Group (Q5)** | 21 | 1.1 | 1.9 | | | |
| **Post-test: Exp. CL Group (Q8)** | 21 | 0.8 | 1.9 | 0.6 | 1.8 | .065 |
| **Post-test: Control TL Group (Q8)** | 21 | 1.0 | 2.5 | | | |
| **Post-test: Exp. CL Group (Q18)** | 21 | 0.6 | 1.7 | 0.8 | 2.8 | .007 |
| **Post-test: Control TL Group (Q18)** | 21 | 1.1 | 2.5 | | | |

The results for the fourth factor showed that the attitudes of students in the experimental CL group towards the importance of CL for writing essays had become more positive after completing the field study than the attitudes of those in the control TL group. Therefore, hypothesis 3.2.4 was confirmed.

**3.2.5 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in helping to get better scores at the post-test.**

Question 9 '*Writing in a group can help me to get better scores in my writing exams*' was the only question related to the fifth factor 'Benefits of CL in helping to get better scores'. The mean for the post-test in the experimental CL group was 2.0 and for the control TL group it was 2.3, with a mean difference of 0.3, as shown in Table 4.62. No significant difference was found (*independent* t-test, t =1.2, p. <.230). Therefore, hypothesis 3.2.5 was not confirmed.

**Table 4.62 Comparing post-test responses of experimental CL and control TL groups concerning benefits of CL in helping to get better scores in writing exams**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q9)** | 21 | 1.0 | 2.0 | 0.3 | 1.2 | .230 |
| **Post-test: Control TL Group (Q9)** | 21 | 0.9 | 2.3 | | | |

**3.2.6 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in providing comments on students' writing at the post-test.**

When comparing the post-test responses of students in the experimental CL group with those of control TL group concerning the sixth factor 'Benefits of CL in providing comments on students' writing', the result for question 10 showed that the mean for the experimental CL group was 1.9, and for the control TL group 2.3, a non-significant difference (*independent* t-test, t = 1.5, p. <.119). For question 11, '*I would like to get feedback from my friends on my*

*compositions*', the mean in the experimental CL group was 1.7, whereas in the control TL group it was 2.2, indicating no significant difference between the groups (t =1.9, p. <.061), as shown in Table 4.63. Therefore, hypothesis 3.2.6 was not confirmed.

**Table 4.63 Comparing post-test responses of experimental CL and control TL groups concerning benefits of CL in providing comments on students' writing**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q10)** | 21 | 0.9 | 1.9 | 0.4 | 1.5 | .119 |
| **Post-test: Control TL Group (Q10)** | 21 | 0.7 | 2.3 | | | |
| **Post-test: Exp. CL Group (Q11)** | 21 | 0.5 | 1.7 | 0.5 | 1.9 | .061 |
| **Post-test: Control TL Group (Q11)** | 21 | 0.9 | 2.2 | | | |

**3.2.7 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in increasing understanding of accountability at the post-test.**

Question 13 '*My experience of CL has increased my understanding of my own accountability*' was related to the factor 'Benefits of CL in increasing understanding of accountability'. The mean for the experimental CL group was 1.7, whereas in the control TL group it was 2.2, giving a mean difference of 0.5. The *independent* t-test found no significant difference between the scores for the two groups (t = 1.9, p. < .063), as shown in Table 4.64. As a result, hypothesis 3.2.7 was not confirmed.

**Table 4.64 Comparing post-test responses of experimental CL and control TL groups concerning benefits of CL in increasing understanding of accountability**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q13)** | 21 | 0.7 | 1.7 | 0.5 | 1.9 | .063 |
| **Post-test: Control TL Group (Q13)** | 21 | 0.6 | 2.2 | | | |

**3.2.8 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of reading and listening to other students' essays in groups at the post-test.**

Both questions 14 and 15 were related to the eighth factor 'Benefits of reading and listening to other students' essays in groups'. The mean for the experimental CL group for question 14 was 2.3, while for the control TL group it was 2.2. For question 15, the mean of the single score was 2.0 for the experimental CL group and 2.5 for the control TL group, as shown in Table 4.65. There were thus no significant differences found for either question between the post-test responses of the experimental CL group and those of the control TL group (*independent* t-test: Q14: t= .182, p. <.857; Q15: t = 1.8, p. <.069). Therefore, hypothesis 3.2.8 was not confirmed.

**Table 4.65 Comparing post-test responses of experimental CL and control TL groups concerning benefits of reading and listening to other students' essays in groups**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q14)** | 21 | 2.0 | 2.3 | 0.1 | .182 | .857 |
| **Post-test: Control TL Group (Q14)** | 21 | 0.7 | 2.2 | | | |
| **Post-test: Exp. CL Group (Q15)** | 21 | 0.8 | 2.0 | 0.5 | 1.8 | .069 |
| **Post-test: Control TL Group (Q15)** | 21 | 0.8 | 2.5 | | | |

**3.2.9 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in acquiring and using new vocabulary at the post-test.**

The ninth factor in the collaborative learning questionnaire was 'Benefits of CL in acquiring and using new vocabulary', which was covered by question 19 '*Collaborative writing helps me to acquire and use new vocabulary correctly*'. In the post-test the mean for the experimental CL group was 1.7, while that for the control TL group was 2.0, as shown in

Table 4.66. No significant difference was found between the experimental CL group and the control TL group (*independent* t-test, t = 1.3, p. <.198). As a result, hypothesis 3.2.9 was not confirmed.

**Table 4.66 Comparing post-test responses of experimental CL and control TL groups in terms of benefits of CL in acquiring and using new vocabulary**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q19)** | 21 | 0.9 | 1.7 | 0.3 | 1.3 | .198 |
| **Post-test: Control TL Group (Q19)** | 21 | 0.7 | 2.0 | | | |

**3.2.10 There will be significant differences between the perceptions of the students in the experimental CL group and those in the control TL group concerning the benefits of collaborative learning in increasing the satisfaction of students with their writing at the post-test.**

Questions 12 and 20 were related to the tenth factor, namely 'Benefits of CL in increasing the satisfaction of students in writing essays'. As shown in Table 4.67, the mean for question 12 in the experimental CL group was 2.1, whereas in the control TL group it was 2.4, with a mean difference of 0.3. For question 20, the mean was 1.9 in the experimental CL group and 2.6 in the control TL group, with a mean difference of 0.7. The *independent* t-test found no significant post-test difference between the experimental CL and control TL groups for either question (Q12: t = 1.0, p. <.304; Q20: t = 1.8, p. <.065). Therefore, hypothesis 3.2.10 was not confirmed.

**Table 4.67 Comparing post-test responses of experimental CL and control TL groups in terms of benefits of CL in increasing the satisfaction of students in writing essays**

| | N | SD | Mean | Mean Difference | T | P |
|---|---|---|---|---|---|---|
| **Post-test: Exp. CL Group (Q12)** | 21 | 0.9 | 2.1 | 0.3 | 1.0 | .304 |
| **Post-test: Control TL Group (Q12)** | 21 | 1.1 | 2.4 | | | |
| **Post-test: Exp. CL Group (Q20)** | 21 | 1.0 | 1.9 | 0.7 | 1.8 | .065 |
| **Post-test: Control TL Group (Q20)** | 21 | 1.2 | 2.6 | | | |

In summary, in order to compare the post-test attitudes and perceptions of the experimental CL and control TL groups concerning collaborative learning, the responses to questions 1-20 in the collaborative learning questionnaire were analysed. These questions were divided according to ten factors. All the results discussed above are summarized in Table 4.68 below, to make the organization by factors clearer.

**Table 4.68 Summary of results showing the post-test attitudes towards collaborative learning of students in the experimental CL and control TL groups**

| | **Factors:**<br>**ESL students' attitudes towards:** | **Question** | **Accepted** | **Significance by *independent* t-test** |
|---|---|---|---|---|
| 1 | **Collaboration during the pre-writing stage:**<br>1.1 The importance of planning a topic with friends. | 3 | Yes | sig p> .031 |
| | 1.2 The benefits of making an outline and collecting ideas with classmates. | 4 | Yes | sig p> .016 |
| | 1.3 The importance of talking with friends to facilitate finding ideas for the topic. | 17 | Yes | sig p> .007 |
| 2 | **Collaboration during the revision stage.** | 6 | Yes | sig p> .012 |
| | | 16 | Yes | sig p> .011 |
| 3 | **Collaboration during the editing stage.** | 7 | No | sig p> .058 |
| 4 | **The importance of collaborative learning for writing essays.** | 1 | Yes | sig p> .007 |
| | | 2 | Yes | sig p> .006 |
| | | 5 | Yes | sig p> .002 |
| | | 8 | No | sig p> .065 |
| | | 18 | Yes | sig p> .007 |
| 5 | **Benefits of CL in helping to get better scores.** | 9 | No | sig p> .230 |
| 6 | **Benefits of CL in providing comments on students' writing.** | 10 | No | sig p> .119 |
| | | 11 | No | sig p> .061 |
| 7 | **Benefits of CL in increasing understanding of accountability.** | 13 | No | sig p> .063 |
| 8 | **Benefits of reading and listening to other students' essays in groups.** | 14 | No | sig p> .857 |
| | | 15 | No | sig p> .069 |
| 9 | **Benefits of CL in acquiring and using new vocabulary.** | 19 | No | sig p> .198 |
| 10 | **Benefits of CL in increasing the satisfaction of students in writing essays.** | 12 | No | sig p> .304 |
| | | 20 | No | sig p> .065 |

Therefore, the hypotheses relating to factors 1 and 2 were fully confirmed, the hypothesis concerning factor 4 was partially confirmed and the hypotheses regarding factors 3, 5, 6, 7, 8, 9 and 10 were not confirmed.

## 4.6 The analysis of the general writing questionnaire

We now turn to the results of the other part of the questionnaire given to the students, which was concerned with student's attitudes towards writing skills in general. This section included 23 questions (see Chapter 3, p. 93). The students in both the experimental CL and control TL groups had been writing essays for three months, so it was appropriate to assess any changes in their attitudes and perceptions regarding writing skills. These questions were related to the second research question regarding whether or not the use of CL would affect students' attitudes towards learning writing skills.

Since the main section of the questionnaire investigated whether using collaborative learning was beneficial for learning writing skills, it was logical to begin the analysis with this section (as presented above) and to leave the general writing questionnaire to the end, since the aim of this part was to collect general information about the students' attitudes towards studying and learning writing skills (for details see Appendix B-1). A five-point Likert scale was used, according to which a number between 1 and 5 was assigned to each response, as follows: 'strongly agree' = 1, 'agree' = 2, 'undecided' = 3, 'disagree' = 4, and finally 'strongly disagree' = 5. The questions were written in English and were distributed to all students in both the experimental CL and the control TL groups, once before starting the course, and once after they had completed it.

For the purpose of calculating the mean scores, the questionnaire scores were out of 5, with 1 indicating the greatest or most positive improvement. For questions that were

expressed negatively (e.g. Q1 ‘difficult’), the mean score was changed to a positive value (i.e. ‘not difficult’= ‘easy’) in order to allow a consistent presentation of scores, as was done with the other parts of the questionnaire. After collecting the students’ responses, the results were analysed using the *paired* t-test to find the difference between pre- and post-tests for both the experimental CL and the control TL groups.

The general writing questionnaire was divided into four factors and sub-factors, as described on pages 90-92:

**1. Attitudes of students towards writing skills**

1.1 Ease and interest of writing skills.

1.2 The importance of writing skills.

1.3 The importance of the process approach to writing.

1.4 The priority of correcting grammatical and spelling mistakes.

1.5 Motivation for practising writing skills.

1.6 Opportunity for practising writing skills.

**2. Attitudes of students towards the pre-writing stage**

2.1 Taking enough time to understand the essay topic.

2.2 The difficulty of understanding the essay topic.

2.3 Planning for the topic mentally and physically.

2.4 Collecting and organizing ideas.

**3. Attitudes of students towards the drafting and revising stages**

3.1 Following the essay plan when starting writing.

3.2 Difficulty in starting to write the essay.

3.3 Making revisions before finishing the first draft of the essay.

3.4 Using the vocabulary supplied by the teacher.

**4. Attitudes of students towards the editing stage**

4.1 Finding appropriate vocabulary during editing stage.

4.2 Revising essays several times before submitting during editing stage.

4.3 Correcting grammatical and spelling mistakes during editing stage.

## Factor (1) Attitudes of students towards writing skills

The first factor included ten questions (1, 2, 3, 4, 5, 6, 7, 8, 16 and 18) and aimed to collect general information on certain aspects related to learning writing skills. This factor was divided into six sub-factors, as follows:

**1.1 Ease and interest of writing skills**

The first sub-factor included three questions (1, 5 and 8). As question 1 '*Writing an essay is very difficult for me*' was expressed negatively, the mean scores were reversed (i.e., 2.8 became 2.2). The pre-test mean for the experimental CL group was 2.2 and the post-test mean was 1.6, with a mean difference of 0.6. For the control TL group, the pre-test mean was 2.4 and the post-test 2.0, with a mean difference of 0.4. The differences between the scores for pre- and post-tests were significant for both groups (*paired* t-tests, two: experimental CL group t = 3.5, p. <.002; control TL group t = 2.6, p. <.017). To summarize the results for question 1, both the experimental CL and control TL groups felt that essay writing had become less difficult over the 11 weeks of the course.

For question 5, '*I find it interesting to practise and learn writing skills*', the mean for the experimental CL group in the pre-test was 2.2 and in the post-test 2.5. With regard to the control TL group, the pre-test mean was 2.5 and in the post-test it was 2.3, with a mean difference of 0.2. The *paired* t-test indicated a significant difference between the scores for the pre-test and the post-test for both groups (experimental CL group: t = 2.8, p. <.010; control TL group: t = 2.1, p. <.042). Thus, even though the students in the experimental CL group had spent eleven weeks practising writing in a collaborative learning environment,

they still tended to think that learning writing skills was not interesting. On the other hand, by the end of the course, students in the control TL group were more inclined to feel that practising writing skills was interesting, as shown in the mean difference, which was significant.

For question 8 '*I think learning writing skills is boring*', the pre-test mean for the experimental CL group was 3.0, compared with a post-test mean of 3.6, giving a mean difference of 0.6, which indicated that the students tended to agree less with the statement after their involvement in the collaborative learning settings. On the other hand, the pre-test mean for the control TL group was 3.2, compared with 2.8 in the post-test, with a mean difference of 0.4. The *paired* t-test found highly significant differences between the scores for the pre-test and the post-test for both groups (experimental CL group: t = 5.7, p. <.000; control TL group: t = 3.8, p. <.001). Summarizing the students' attitudes toward the statement '*I think learning writing skills is boring*', the mean difference in the experimental CL group indicated that after their involvement in the collaborative learning sessions the students had come to feel that learning writing skills was less boring, and the difference was highly significant. On the other hand, the difference in the mean scores in the control TL group was highly significant; indicating that the students felt that learning writing skills is boring.

**1.2 The importance of writing skills**

Question 2, '*I think that writing is an important skill*', was the only one related to the second sub-factor of 'The importance of writing skills'. The pre-test and post-test means for the experimental CL group were 1.3 and 1.4 respectively. The pre-test mean for the control TL group was 1.4 and 1.5 for the post-test. The *paired* t-test indicated no significant difference between the scores for the pre-test and the post-test for either group (experimental CL group: t = 1.4, p. <.162; control TL group: t = .810, p. <.428).

### 1.3 The importance of the process approach to writing

Question 3 was related to the third sub-factor 'The importance of the process approach to writing'. The pre-test mean for question 3, '*Writing isn't just completing a composition, but brainstorming, planning, drafting, revising and editing*', for the experimental CL group was 2.0, but after spending eleven weeks studying writing in collaborative learning classrooms, the mean was 1.7, with a mean difference of 0.3, which was a highly significant difference (*paired* t-test, t = 3.1, p. <.005). Clearly, the students in the experimental CL group thought that writing was not only a question of finishing an essay, but that it included activities and stages such as brainstorming, planning, drafting, revising and editing. On the other hand, the mean in the pre-test and the post-test for the control TL group was 2.2, which indicated no difference at all (t = .00, p. <.1.00).

### 1.4 The priority of correcting grammatical and spelling mistakes

Questions 4, 16 and 18 addressed the fourth sub-factor 'The priority of correcting grammatical and spelling mistakes'. With regard to question 4, '*I think that the most important aspect of the writing skill is grammar*', the mean for the experimental CL group was 1.4 for the pre-test and 1.8 for the post-test, with a mean difference of 0.4. For the control TL group, the mean in the pre-test was 1.7 and in the post-test was 2.0, with a mean difference of 0.3. The *paired* t-test indicated a significant difference between the pre-test and post-test scores for both groups (experimental CL group: t = 3.1, p. <.005; control TL group: t = 2.6, p. <.016). The mean differences showed that students in both the experimental CL and control TL groups thought that grammar was not the most important aspect of writing.

The students in both the experimental CL and control TL groups gave similar responses when answering question 16 '*When I start writing, my priority is to concentrate on grammatical and spelling errors*'; the mean in the pre-test was 2.1 for the experimental CL group and 2.2 for the control TL group, and the post-test mean for both groups was 3.0. The

*paired* t-test indicated a highly significant difference between the scores for the pre-test and the post-test for both groups (experimental CL group: t = 3.7, p. <.001; control TL group: t = 5.3, p. <.000). Therefore, the results indicated that the students in both experimental CL and control TL groups thought that attention should not be paid to grammatical and spelling errors when starting to write an essay, as shown in the mean differences, which were highly significant.

For question 18 '*When writing the first draft, no attention is paid to grammatical and spelling mistakes*', the mean scores for the tests were reversed in order to give a positive direction; thus, the pre-test mean for the experimental CL group was 1.5 and the post-test mean was 2.0, with a mean difference of 0.5. Similarly, the means for the control TL group were 1.3 in the pre-test and 1.8 in the post-test, with a mean difference of 0.5. The *paired* t-test found highly significant differences between the responses for pre-test and post-test in both groups (experimental CL group: t = 3.5, p. <.002; control TL group: t = 2.9, p. <.009). The results showed that the students in both groups did not think that they should pay attention to mistakes in grammar and spelling when writing the first draft, as shown in the mean differences, that were highly significant.

**1.5 Motivation for practising writing skills**

Question 6, '*I do not have the motivation to learn writing skills*' was worded negatively, so the mean scores were reversed to show a positive direction. This question addressed the fifth sub-factor, so the mean in the pre-test for the experimental CL group was 1.6 and in the post-test was 1.4, with a mean difference of 0.2, which the *paired* t-test found to be significant (t = 2.1, p. <.042). With regard to the control TL group, the pre-test mean was 1.8 and the post-test mean was 1.3, with a mean difference of 0.5, which was highly significant (t = 3.5, p. <.002). To summarize the results for question 6, by the end of the course, the students in both groups felt more motivated to learn writing skills.

### 1.6 Opportunity for practising writing skills

To test the sixth sub-factor 'Opportunity for practising writing skills', question 7 '*I get a lot of opportunities to practise writing in class*' was used; the pre-test mean for the experimental CL group was 2.9, compared with 2.1 in the post-test, with a mean difference of 0.8. The *paired* t-test found this difference to be highly significant (t = 5.8, p. <.000). On the other hand, the pre-test mean for the control TL group was 2.2, compared with 2.3 in the post-test, with a mean difference of 0.1, which was not significant (t = 0.43, p. <.666). Thus, students in the experimental CL group felt that they got a lot of opportunities to practise writing skills in class.

The results obtained for the first factor 'Attitudes of students towards writing skills' with its six sub-factors are summarized in Table 4.69 below.

**Table 4.69 Comparing pre-test and post-test responses of students in the experimental CL and control TL groups concerning the first factor 'Attitudes of students towards writing skills'**

| N | Sub-factors | Question | Group | Mean | | Accepted | paired t-test | |
|---|---|---|---|---|---|---|---|---|
| | | | | Pre-test | Post-test | | T | P |
| 1.1 | Ease and interest of writing skills | 1 | **CL** | 2.2 | 1.6 | Yes | 3.5 | .002 |
| | | | **TL** | 2.4 | 2.0 | Yes | 2.7 | .017 |
| | | 5 | **CL** | 2.2 | 2.5 | Yes | 2.8 | .010 |
| | | | **TL** | 2.5 | 2.3 | Yes | 2.1 | .042 |
| | | 8 | **CL** | 3.0 | 3.6 | Yes | 5.7 | .000 |
| | | | **TL** | 3.2 | 2.8 | Yes | 3.8 | .001 |
| 1.2 | The importance of writing skills | 2 | **CL** | 1.3 | 1.4 | No | 2.7 | .162 |
| | | | **TL** | 1.4 | 1.5 | No | 1.4 | .428 |
| 1.3 | The importance of the process approach to writing | 3 | **CL** | 2.0 | 1.7 | Yes | 3.1 | .005 |
| | | | **TL** | 2.2 | 2.2 | No | .00 | 1.00 |
| 1.4 | The priority of correcting grammatical and spelling mistakes | 4 | **CL** | 1.4 | 1.8 | Yes | 3.1 | .005 |
| | | | **TL** | 1.7 | 2.0 | Yes | 2.6 | .016 |
| | | 16 | **CL** | 2.1 | 3.0 | Yes | 3.7 | .001 |
| | | | **TL** | 2.2 | 3.0 | Yes | 5.3 | .000 |
| | | 18 | **CL** | 1.5 | 2.0 | Yes | 3.5 | .002 |
| | | | **TL** | 1.3 | 1.8 | Yes | 2.9 | .009 |
| 1.5 | Motivation for practising writing skills | 6 | **CL** | 1.6 | 1.4 | Yes | 2.1 | .042 |
| | | | **TL** | 1.8 | 1.3 | Yes | 3.5 | .002 |
| 1.6 | Opportunity for practising writing skills | 7 | **CL** | 2.9 | 2.1 | Yes | 5.8 | .000 |
| | | | **TL** | 2.2 | 2.3 | No | 0.43 | .666 |

Therefore, sub-factors 1.1, 1.4, and 1.5 were fully confirmed; sub-factors 1.3, and 1.6 were partially confirmed; whereas sub-factor 1.2 was not fully confirmed.

## Factor (2) Attitudes of students towards the pre-writing stage

The second factor covered in the general writing questionnaire included four sub-factors (questions 9, 10, 11, 12, 13 and 14) and concerned students' attitudes towards the pre-writing activities of the process approach to writing: namely, planning a topic for the essay, collecting ideas and vocabulary, making an outline, organizing ideas, and understanding the topic of the essays. The results are presented in Table 4.70. This factor was divided into four sub-factors as follows:

### 2.1 Taking enough time to understand the essay topic

Question 9 '*Before starting writing, I spend a lot of time trying to understand and familiarize myself with the topic*' was related to the first sub-factor 'Taking enough time to understand the essay topic'. The pre-test mean for the experimental CL group was 2.3 and in the post-test was 2.0, indicating a significant difference (*paired* t-test, t = 2.5, p. <.021). By contrast, the control TL group had a pre-test mean of 1.9 and a post-test mean of 2.0, which showed no significant difference (*paired* t-test, t = 1.8, p. <.083). To summarize the results for the first sub-factor, by the end of the course, students in the experimental CL group felt that they has started to spend a long time understanding the essay topic before becoming involved in writing.

### 2.2 The difficulty of understanding the essay topic

Question 14 '*Before I start writing, I have difficulty understanding the topic of the essay*' was expressed negatively (i.e., difficult should be easy), so the mean scores were reversed. This question addressed the second sub-factor 'The difficulty of understanding the essay topic'. The pre-test mean for the experimental CL group was 2.3 and the post-test mean was 2.2, which was not a significant difference (*paired* t-test, t = .69, p. <.493). On the other hand, the control TL group had a mean of 2.0 in the pre-test and 2.3 in the post-test, which was significant (*paired* t-test, t = 2.5, p. <.021).

By the end of the course, students in the control TL group felt that understanding the essay topic before starting to write was difficult for them, as shown in the mean difference, which was significant.

**2.3 Planning for the topic mentally and physically**

Questions 10 and 11 addressed the third sub-factor 'Planning for the topic mentally and physically'. The results obtained for statement 10, '*Before I start writing (pre-writing stage), I plan the topic mentally*', gave a pre-test mean for the experimental CL group of 2.2 and a post-test mean of 1.9, with a mean difference of 0.3. The control TL group, by contrast, had a mean of 1.8 in the pre-test and 2.3 in the post-test with a mean difference of 0.5. The *paired* t-test indicated that there was a significant difference between the scores for the pre-test and the post-test for both groups (experimental CL group: t = 2.3, p. <.031; control TL group: t = 2.6, p. <.014).

In summary, the analysis of the responses to question 10 showed that students in the experimental CL group thought that they planned their topic mentally before starting to write the essay, as shown in the mean difference, that was significant. Students in the control TL group, on the other hand, were more inclined to disagree with the statement that they plan their topic mentally as indicated in the mean difference, which was also significant.

The pre-test mean for question 11 '*Before I start writing (pre-writing stage), I plan my topic by making an outline and writing down my ideas*' for the experimental CL group was 2.4, and the post-test mean was 1.9, with a mean difference of 0.5. For the control TL group the mean in the pre-test was 2.7 and in the post-test 2.3, with a mean difference of 0.4. The *paired* t-test indicated significant differences between the pre-test and post-test attitudes of both groups (experimental CL group: t = 3.8, p. <.001; control TL group: t = 2.3, p. <.031).

To summarize the results for question 11, by the end of the course students in both groups thought that they preferred planning their essay topics by making an outline and writing down ideas before starting to write. The attitudes of students in both groups had thus changed for the better after involvement in both collaborative and traditional learning methods.

**2.4 Collecting and organizing ideas**

The scores for question 12 '*It is difficult for me to get new ideas for my writing topic*' were reversed (thus difficult became easy). The results indicated a pre-rest mean of 3.1 for the experimental CL group and a post-test mean of 2.6, with a mean difference of 0.5, which was highly significant (*paired* t-test, t = 5.1, p. <.000). By contrast, the control TL group had a mean of 2.7 in both the pre-test and post-test, which was not significant (*paired* t-test, t = .56, p. <.576).

To summarize the results for question 12, by the end of the course students in the experimental CL group felt that collecting and getting ideas for their essays was not difficult, as shown in the mean difference, which was highly significant.

Question 13 '*Organizing ideas is the most difficult part for me*' was expressed negatively (i.e., difficult should be easy), so the mean scores were reversed. The results obtained for the experimental CL group gave a pre-test mean of 2.9 and a post-test mean of 1.9, with a mean difference of 1.0, indicating a highly significant difference (t = 6.4, p. <.000). By contrast, the control TL group had a mean of 2.4 in the pre-test and 2.3 in the post-test, with a mean difference of 0.1, which was not significant (t =1.00, p. <.329).

In summary, the results for question 13 indicated that students in the experimental CL group thought that organizing ideas was an easy part of writing essays, as shown in the mean difference, which was highly significant.

The results obtained for the second factor 'Attitudes of students towards the pre-writing stage' with its four sub-factors are summarized in Table 4.70 below.

**Table 4.70 Comparing pre-test and post-test responses in experimental CL and control TL groups concerning the second factor 'Attitudes of students towards the pre-writing stage'**

| | Sub-factors | Questions | Group | Mean | | Accepted | *Paired* t-test | |
|---|---|---|---|---|---|---|---|---|
| | | | | Pre-test | Post-test | | T | P |
| 2.1 | Taking enough time to understand the essay topic | 9 | **CL** | 2.3 | 2.0 | Yes | 2.5 | .021 |
| | | | **TL** | 1.9 | 2.0 | No | 1.8 | .083 |
| 2.2 | The difficulty of understanding the essay topic | 14 | **CL** | 2.3 | 2.2 | No | .69 | .493 |
| | | | **TL** | 2.0 | 2.3 | Yes | 2.5 | .021 |
| 2.3 | Planning for the topic mentally and physically | 10 | **CL** | 2.2 | 1.9 | Yes | 2.3 | .031 |
| | | | **TL** | 1.8 | 2.3 | Yes | 2.6 | .014 |
| | | 11 | **CL** | 2.4 | 1.9 | Yes | 3.8 | .001 |
| | | | **TL** | 2.7 | 2.3 | Yes | 2.3 | .031 |
| 2.4 | Collecting and organizing ideas | 12 | **CL** | 3.1 | 2.6 | Yes | 5.1 | .000 |
| | | | **TL** | 2.7 | 2.7 | No | 0.56 | .576 |
| | | 13 | **CL** | 2.9 | 1.9 | Yes | 6.4 | .000 |
| | | | **TL** | 2.4 | 2.3 | No | 1.00 | .329 |

Therefore, sub-factor 2.3 was fully confirmed, sub-factors 2.1, 2.2, and 2.4 were partially confirmed.

## Factor (3) Attitudes of students towards the drafting and revising stages

Four questions (15, 17, 19 and 20) were related to the third factor in the general writing questionnaire 'Attitudes of students toward the drafting and revising stages'; this factor was divided into the following four sub-factors: following the plan that has been written before writing, doing revisions before finishing writing completely, and paying attention only to writing and postponing correcting grammatical and spelling mistakes to the end. The results are shown in Table 4.71 below.

### 3.1 Following the essay plan when starting writing

Question 15 '*During the writing stage, I usually follow the plan that I have written before starting to write'* addressed the first sub-factor 'Following the essay plan when starting writing'. The mean in the pre-test for the experimental CL group was 2.6 and in the post-test was 2.0, with a mean difference of 0.6, indicating a highly significant difference (*paired* t-test, t = 3.5, p. <.007). On the other hand, the mean in both the pre-test and post-test for the control TL group was 2.2, which was obviously not significant (*paired* t-test, t = .00, p. <1.00).

In summary, the attitudes of students in the experimental CL group towards the first sub-factor 'Following the essay plan when starting writing' had become positive by the post-test.

### 3.2 Difficulty in starting to write the essay

Question 17 '*During the writing and drafting stage, I usually don't know how to start writing*' was expressed negatively, so the mean scores were reversed to show development. It addressed the second sub-factor 'Difficulty in starting to write the essay'. The experimental CL group had a mean of 2.4 in the pre-test and 2.3 in the post-test, whereas the mean in the control TL group was 2.4 in the pre-test and 2.2 in the post-test. The means for both groups therefore showed non-significant differences between pre and post-test responses after

involvement in writing essays for eleven weeks (experimental CL group: t = 1.3, p. <.186; control TL group: t = 1.1, p. <.267).

**3.3 Making revisions before finishing the first draft of the essay**

The responses to question 19 '*During writing, I normally do revisions before finishing my writing completely*' of students in both experimental CL and control TL groups were analysed. The means for the experimental CL group were 2.2 in the pre-test and 2.4 in the post-test, with a mean difference of 0.2, which was significant (*paired* t-test, t = 2.5, p. <.021). Similarly, the mean in the pre-test for the control TL group was 2.2 and 2.7 in the post-test, with a mean difference of 0.5 that indicated a highly significant difference (*paired* t-test, t = 3.9, p. <.001).

In summary, the mean differences found for the third sub-factor 'Making revisions before finishing the first draft of the essay' were significant for both the experimental CL and control TL groups, which showed that the students did not prefer to carry out revisions before finishing writing completely.

**3.4 Using the vocabulary supplied by the teacher**

With regard to question 20, '*During writing, I concentrate on using the vocabulary supplied by my teacher*', that addressed the fourth sub-factor 'Using the vocabulary supplied by the teacher', the pre-test mean for the experimental CL group was 3.0, while in the post-test it was 2.5, giving a mean difference of 0.5, which indicated a highly significant difference (*paired* t-test, t = 3.8, p. <.001). On the other hand, the mean for the control TL group was 2.9 in the pre-test and 2.6 in the post-test, with a mean difference of 0.3, which was not significant (*paired* t-test, t = 2.0, p. <.056).

To summarize the results for the sub-factor 'Using the vocabulary supplied by the teacher', the experimental CL students felt that by the end of the course they had become

more focused on using vocabulary supplied by their teacher during class, as shown in the mean difference, which was highly significant.

The results relating to the third factor 'Attitudes of students towards the drafting revising stages' are summarized in Table 4.71.

**Table 4.71 Comparing pre-test and post-test responses in experimental CL and control TL groups concerning the third factor 'Attitudes of students towards the drafting and revising stages'**

| N | Sub-factors | Questions | Group | Mean | | Accepted | *Paired* t-test | |
|---|---|---|---|---|---|---|---|---|
| | | | | Pre-test | Post-test | | T | P |
| 3.1 | Following the essay plan when starting writing | 15 | **CL** | 2.6 | 2.0 | Yes | 3.0 | .007 |
| | | | **TL** | 2.2 | 2.2 | No | .00 | 1.00 |
| 3.2 | Difficulty in starting to write the essay | 17 | **CL** | 2.4 | 2.3 | No | 1.3 | .186 |
| | | | **TL** | 2.4 | 2.2 | No | 1.1 | .267 |
| 3.3 | Making revisions before finishing the first draft of the essay | 19 | **CL** | 2.2 | 2.4 | Yes | 2.5 | .021 |
| | | | **TL** | 2.2 | 2.7 | Yes | 3.9 | .001 |
| 3.4 | Using the vocabulary supplied by the teacher | 20 | **CL** | 3.0 | 2.5 | Yes | 3.8 | .001 |
| | | | **TL** | 2.9 | 2.6 | No | 2.0 | .056 |

Therefore, sub-factor 3.3 was fully confirmed, sub-factors 3.1 and 3.4 were partially confirmed, while only sub-factor 3.2 was not confirmed.

## Factor (4) Attitudes of students towards the editing stage

Three questions (21, 22 and 23) addressed the fourth factor 'Attitudes of students towards the editing stage', which included the activities of concentrating on finding appropriate words

and vocabulary and correcting grammatical and spelling mistakes. The results are presented in Table 4.72 below. This factor was divided into three sub-factors as follows:

**4.1 Finding appropriate vocabulary during the editing stage**

Question 21 '*During the editing stage, I concentrate on finding appropriate words and vocabulary*' addressed the first sub-factor 'Finding appropriate vocabulary during the editing stage'. For this statement, the pre-test mean for the experimental CL group was 1.9 and the post-test mean was 2.0. Similarly, the pre-test mean of the control TL group was 2.3 and the post-test mean was 2.4. The *paired* t-test indicated that there was no significant difference between the responses of the two groups (experimental CL group: t = 1.4, p. <.162; control TL group: t = 1.00, p. <.329).

**4.2 Revising essays several times before submitting during the editing stage**

With regard to the second sub-factor 'Revising essays several times before submitting during the editing stage', the pre-test mean for the experimental CL group for question 22, '*During the editing stage, I make several revisions before submitting my final draft*', was 2.0 and the post-test mean was 2.1, giving a mean difference of 0.1, which was not significant (*paired* t-test, t = 1.8, p. <.083). On the other hand, the pre-test mean of the control TL group was 2.2 and the post-test mean was 2.6, giving a mean difference of 0.4, indicating a highly significant difference (*paired* t-test, t = 3.2, p. <.004).

The significant difference found in the post-test for the control TL group indicates that, according to the students, they did not revise their essays several times during the editing stage before submitting their final drafts.

**4.3 Correcting grammatical and spelling mistakes during the editing stage**

The third sub-factor was 'Correcting grammatical and spelling mistakes during the editing stage'. The responses of the students in the experimental CL group to question 23, '*During my editing stage, I must correct grammatical and spelling mistakes*', gave a pre-test mean of

1.7 and a post-test mean of 1.8. On the other hand, the mean in the pre-test for the control TL group was 2.1 and in the post-test was 2.2. The *paired* t-test found no significant difference between the pre-test and post-test attitudes of the two groups (experimental CL group: t = .43, P. <.666; control TL group: t = 1.00, p. <.329).

The results obtained for the fourth factor 'Attitudes of students towards the editing stage' are summarized in Table 4.72 below.

**Table 4.72 Comparing pre-test and post-test responses in the experimental CL and control TL groups concerning the fourth factor 'Attitudes of students towards the editing stage'**

| N | Sub-factors | Questions | Group | Mean | | Accepted | *Paired* t-test | |
|---|---|---|---|---|---|---|---|---|
| | | | | Pre-test | Post-test | | T | P |
| 4.1 | Finding appropriate vocabulary during editing stage | 21 | **CL** | 1.9 | 2.0 | No | 1.4 | .162 |
| | | | **TL** | 2.3 | 2.4 | No | 1.00 | .329 |
| 4.2 | Revising essays several times during editing stage before submitting | 22 | **CL** | 2.0 | 2.1 | No | 1.8 | .083 |
| | | | **TL** | 2.2 | 2.6 | No | 3.2 | .004 |
| 4.3 | Correcting grammatical and spelling mistakes during the editing stage | 23 | **CL** | 1.7 | 1.8 | Yes | .43 | .666 |
| | | | **TL** | 2.1 | 2.2 | Yes | 1.00 | .329 |

Therefore, sub-factor 4.2 was partially confirmed, while sub-factors 4.1 and 4.3 were not confirmed.

## 4.7 Interview Analysis and Findings

As indicated in the methodology chapter, the tests and the questionnaire instruments were considered central to the design of the study. Interviews were conducted in order to obtain either supportive or supplementary information about the students' attitudes towards and perceptions of collaborative learning. The interview was directed only at students in the experimental CL group because of their experience of using CL for eleven weeks. The rationale behind the random selection of four students from the experimental CL group after their involvement in the collaborative learning strategy is given on page 100. The students were carefully chosen on the basis of their scores in the previous term's writing course to represent all students in the class: i.e., student A was chosen from among those who scored 50-60, student B out of those who scored 60-70, student C from those who scored 70-80, and student D from those who scored 80-100. According to the university rules, scores between 50 to 70 were considered low scores, so students A and B represented low advanced students, whereas C and D represented high advanced students. Student D was selected as an expert who was the monitor for one of the collaborative learning groups. All questions in the interviews were used to explore students' attitudes towards particular points related to CL. The interviews were recorded and conducted in Arabic to enable the students to participate freely (for more details concerning the procedure, see Chapter 3, pages 98-103). The students' responses were then rationalized and translated into English. The interviews were based around the following questions:

**1- When do you think you learn better?**

This general question was designed to obtain background information about the students' attitudes towards the best ways of learning. For example, student A said, 'I learn better with a few students in small groups'; student B stated, 'Taking my time is the best way to learn better'; student C felt that he learned better when he studied alone, and student D thought that

learning in the early morning was much more productive than learning at the end of the day. The question was thus a general and exploratory question that was answered differently by each student. Student B thought that having enough time to learn was the best way of learning. Student A, who was considered the least advanced, preferred learning with others in small groups. However, student C, who was considered more proficient at writing than students A and B, but less proficient than student D, preferred learning individually. It is therefore evident that low advanced students preferred learning collaboratively, whereas high advanced students preferred learning individually.

**2- If you get stuck or face a problem while practising any English skill, what do you prefer to do?**

The issue of what the students did when they got stuck or were confronted with a problem when practising English language skills had not been researched in the quantitative section, so this question supplemented the other quantitative approaches. This was also a general and exploratory question that was concerned with appropriate methods to use when facing any difficulty or problems while learning English. Student A gave a general response, saying, 'ask someone'; student B said 'I prefer to ask people who are better than me, such as friends, classmates, or sometimes teachers and tutors'. Student C believed that checking resources such as books and asking friends could help to solve any problems he might have when practising his English. Student D stated, 'I try to solve it by myself, or I ask someone else for help'. Their answers to this question therefore showed a certain similarity.

All the interviewees thus answered this question similarly. Students A and B, who were low advanced students, preferred asking classmates who were better than them in terms of proficiency. Students C and D, who were high advanced, thought that asking others might help to solve their learning problems.

**3- Do you like learning English individually? Why?**

This was an exploratory question that aimed to determine whether or not the students liked individual learning. Students A and B said they sometimes liked learning English individually. Student C said, 'it is better to learn some skills individually such as reading, whereas some writing skills should be learned in groups, such as brainstorming'. By contrast, student D said, 'learning individually is much better for me than CL because it saves time'. He added, 'It takes up a lot of time listening to the other students in CL'.

To summarize the students' responses, student D, who was an expert, gave a different answer from the low advanced students A and B. He preferred individual learning to learning collaboratively. He thought that CL required a longer time as a result of discussing and listening to each other. On the other hand, the lower proficiency students (A and B) said that they liked individual learning only sometimes. It was thus evident that expert students might prefer individual learning more than low advanced students, which was a useful additional insight, supplementing the questionnaire results.

**4- Do you like learning English in a group? Why?**

Student A said, 'I used to think that collaborative learning was not useful but after involvement in CL, I found it a helpful and useful technique'. He added that CL is especially useful in getting new ideas and vocabulary. Student B answered the question in the affirmative without giving any reasons. In addition, student C said, 'It is important to discuss ideas with others, so collaborative learning could help a great deal with certain English skills such as writing'. He added, 'Before being involved in collaborative learning, I did not think that writing collaboratively could help me to improve my writing. I feel now that my writing has improved after involvement in collaborative learning. For example, collaborative writing helped me very much in getting ideas from others and changing some of my mistaken ideas'.

Student D did not give much detail, and said simply, ‘Learning collaboratively, for instance in sharing ideas, depends on the type of group’.

Students A, B and C therefore liked collaborative learning because they thought that it helped them to collect ideas and vocabulary. This supported the questionnaire results regarding the second sub-factor ‘The benefits of making an outline and collecting ideas with classmates’. However, the expert student D answered this question differently. He thought that sharing ideas with others collaboratively could be helpful or not depending on the members of the group.

**5- Did you enjoy learning writing skills before you were involved in the collaborative learning method?**

Students A and B mentioned that they had not enjoyed learning writing skills before, but that writing had become much easier after involvement in CL. Student C said, ‘I neither enjoyed nor did not enjoy writing before, but after practising the collaborative learning method I felt that I liked writing very much’. Student D said, ‘I like writing, but I feel that writing in a group takes longer, whereas writing individually is more proficient and faster than in groups’. In summary, students A, B and C felt happier about writing after their involvement in collaborative learning. This also supported the results for the tenth factor covered in the CL questionnaire ‘Benefits of CL in increasing the satisfaction of students in writing essays’. However, the new information that supplemented the data obtained from the quantitative methods was the response of the expert student D, which was different from those of the other interviewees. He preferred writing individually to writing collaboratively because he thought that it took a long time to finish writing essays using CL. He thought also that writing individually could help him to complete an essay quickly.

**6- What kind of difficulties do you normally encounter when you start writing?**

Although this question was to some extent similar to question 17 in the general writing questionnaire '*During the writing and drafting stage, I usually don't know how to start writing*', it aimed to explore the specific difficulties students encountered when starting to write an essay. Students A and B gave similar answers, saying, 'Getting new ideas and putting them in the essay are the most difficult when starting to write'. Student C stated, 'My difficulty when I start writing is how I'm going to complete my writing successfully'. Student D said, 'We are used to writing a lot in my first language, which is completely different from English, so I always try to translate from L1 to L2, and this sometimes forces me to think in L1 while writing in L2'.

Thus, both the low advanced students, A and B, agreed that collecting new ideas and using them in the essay were the most difficult aspects of writing. However, students C and D seemed to feel that other aspects were the most difficult: namely, finishing the whole essay without any mistakes and using L1 while writing in L2.

**7- Do you experience difficulties in finding the right vocabulary when you start writing?**

This question aimed to find out whether finding appropriate vocabulary was difficult for ESL students. The information might supplement that obtained for the factor 'ESL students' attitudes towards the benefits of CL in acquiring and using new vocabulary' in the collaborative learning questionnaire. The low advanced students A and B showed some agreement with this question. For example, student A answered, 'If I have difficulty finding the right vocabulary when I start writing, then I use a dictionary', whereas student B said he had difficulties 'only sometimes'. By contrast, both the high advanced students, C and D, claimed they had no difficulty finding vocabulary when they started writing.

**8- During pre-writing activities such as brainstorming and planning, do you think that you learn from working together with classmates to structure and plan your ideas? Can you explain in some detail?**

The responses to this question supplemented the results presented in Table 4.28 above. Both low and high advanced students gave similar answers. According to students A and B, they had learned a great deal from working with their classmates during the pre-writing stage. They said it helped them to get ideas, share their ideas with others and to acquire new vocabulary. Student C said, 'Doing pre-writing activities collaboratively helps me to exchange ideas with others and select the appropriate ideas for the essays'. Student D believed that pre-writing stage activities such as brainstorming, and collecting ideas and vocabulary are techniques that can best be practised collaboratively, rather than individually.

**9- During drafting activities, do you feel that you write better collaboratively than individually without any help from others?**

The quantitative results obtained from the questionnaire did not indicate whether the students thought that completing the drafting stage collaboratively would be better than individually, so this was considered a supplementary question that might give new information. Student A mentioned, 'When ideas and vocabulary are available, writing individually is much better than collaboratively'. Student B made no comment regarding this question, while student C said he thought he did not need to work collaboratively because all the ideas and vocabulary are gathered during the previous stage and the only thing to do is put them into the first draft. Student D said, 'Cooperation is not useful in the drafting stage because it takes a lot of time. Everyone has a different style of writing, so it is better for this stage to be done individually'.

In summary, most students thought that the drafting stage should be completed individually, since all ideas and vocabulary were collected during the previous stages and there was no need to write the essay collaboratively. The expert student D added an

additional justification, which was that each writer has his own style, so collaboration during this stage could not be of any possible benefit.

**10- During the revising and editing stages, do you feel that working together can help you to overcome difficulties such as correcting mistakes, restructuring ideas, finding the right vocabulary and so on?**

The answers to this question supplemented the results shown in Table 4.28. All the interviewees thought that collaboration during the revising and editing stages was helpful to solve difficulties like correcting mistakes, rewriting inappropriate sentences and finding the right vocabulary. For example, student A mentioned, 'My uncompleted sentences could be completed through sharing with others during the revising stage and an expert student helped a lot to show me my mistakes'. Student B said, 'Collaborating during the revising stage helped me to re-write some inappropriate sentences, vocabulary and ideas. The same as during the editing stage - grammatical mistakes and spelling were corrected better collaboratively'. Student C believed that collaborating in the revision stage is useful because it helps to ensure that the ideas that were gathered during the pre-writing stage are used effectively. Student D stated, 'The revising and editing stages are much better done in groups than individually. I may be better at writing than my classmate but he may be better than me in grammar or spelling, so writing collaboratively is useful and beneficial'.

In summary, the students believed that collaboration during the revising and editing stages was beneficial for writing essays.

**11- When you read your essay in front of your classmates in the same group, do you feel that your writing can be better?**

The responses to this question supplemented the results presented in Table 4.28 for the factor 'ESL students' attitude toward benefits of reading and listening to other students' essays in groups'. According to student B, 'My classmates could help to correct some mistakes', while

student D mentioned, ‘After reading my essays in front of others, I may ask them if there are any mistakes in the essays so I can get some comments from them’. On the other hand, student C believed that exchanging essays with group members is much better than reading them aloud in front of the other members.

Most students thought that reading in front of others could help to improve their writing. However, student C suggested exchanging and swapping drafts with other members of the group.

To sum up the results of the interviews, the researcher found the following:

1- All students interviewed agreed that the best method to use when they got stuck or faced a problem when practising English language skills was to ask friends or classmates. The findings were very useful because they showed the importance of using an expert in collaborative learning to support less advanced students.

2- The collaborative learning strategy was a useful technique when collecting new ideas and vocabulary for writing. This supported the questionnaire data that showed the benefits of CL in gathering ideas and new vocabulary.

3- Students enjoyed learning writing skills after involvement in collaborative learning. This result was similar to the questionnaire data that showed the increased satisfaction of students after involvement in CL. However, the expert student D preferred individual learning to collaborative learning when writing an essay because with CL it took a long time to complete the essay.

4- Students A and B, who were considered low advanced, thought that gathering new ideas and writing about them in the essay was one of the main difficulties they faced when starting to write. Student D, who was considered an expert, said that thinking in L1 while writing in L2 was one of the difficulties he encountered when starting to write an essay.

5- The lower proficiency students, A and B, thought finding the right vocabulary when starting to write might be difficult. This result was different from the results obtained from the questionnaire, which showed no significant difference between the pre- and post-test responses of the experimental CL group concerning this item. However, the high advanced students did not notice any difficulty.

6- All the students, including the expert (D), believed that the pre-writing activities of collecting and choosing appropriate ideas, acquiring new vocabulary, and planning should be practised in collaborative groups rather than individually. This supported the results obtained from the questionnaire.

7- All the interviewees agreed that writing drafts should be completed individually rather than collaboratively. They thought that practising collaborative learning during the pre-writing stage helped them a great deal in collecting ideas and vocabulary, discussing with each other, planning and making an outline. Since this issue had not been covered in the questionnaire, this finding was useful and beneficial.

8- Collaborative learning was beneficial for students when practising both revising and editing stages. All the students interviewed thought that CL helped them to reorganize and re-write inappropriate sentences and to correct mistakes. This supplements the results presented in Table 4.28 that showed that collaboration during the revising stage was helpful. However, it differs from the finding concerning the editing stage obtained from the third factor of the questionnaire 'Collaboration during the editing stage', in which there was a non-significant difference between the pre- and post-test responses of the students.

9- Some interviewees thought that reading essays in front of the groups could help to produce better essays. This result contradicted the students' attitudes as shown in the questionnaire, however, where no significant difference was found between pre- and post-

test responses. However, one of the students thought that exchanging and swapping essays with each other could be better than reading aloud in front of the group.

## 4.8 Summing Up

The results presented in this chapter were based mainly on the analyses of quantitative data, which consisted of the students' scores for their written essays and their responses to the statements contained in the questionnaires. These data were supplemented by qualitative data obtained from the interview responses. The major findings indicated that those students who had been involved in collaborative learning had improved in all aspects of writing: organization, development, coherence, structure, vocabulary and mechanics. However, they had improved more in some aspects and categories than in others. The attitudes and perceptions of the students had also improved after their involvement in CL. The students in the control TL group had also improved in all six measured aspects of their writing; however, their attitudes had not changed for the better after being involved in the traditional learning method. In the next chapter, the findings of the study are discussed in some detail; implications and suggestions for ESL teachers and learners are highlighted, and recommendations for future research are put forward.

# Chapter 5

# Discussions, Implications, Recommendations for Future Research and Conclusions

In this chapter, the conclusions to the study are presented. The chapter is divided into the following sections: discussion of the results of the study, implications and suggestions for both ESL teachers and learners, recommendations for future research and conclusion.

## 5.1 Discussion of the study findings

The purpose of the study was to determine whether or not putting into practice the various stages of the process approach to writing (the pre-writing, drafting, revising and editing stages) through a collaborative learning strategy would be more effective for ESL learners in the English language department at Al Qassim University than practising them individually. Thus, the main research question for this study was 'Does collaborative writing benefit students?' In other words, will the writing ability of students improve if teachers encourage them to use a collaborative learning strategy? Two sub-questions were used to answer the main research questions, as follows: (1) Would students who are involved in collaborative writing settings produce better written and better organized essays than students working individually? (2) Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings? The two sub-questions were answered through the following questions:

- Is there a difference between the experimental CL group and the control TL group at pre-test?
- Does the experimental CL group change from pre-test to post-test?

- Does the control TL group change from pre-test to post-test?
- Is the experimental CL group different from the control TL group at post-test?

The study results were obtained from the students' scores for their written essays, and from their responses in questionnaires and interviews.

In the previous chapter the analysis of the findings with reference to both the above questions was presented. Various hypotheses were developed to answer the two sub-research questions, as shown in the tables in the preceding chapter (see Tables 4.9; 4.16; 4.17; 4.28; 4.29; 4.36; 4.48; 4.49; 4.56; 4.57; 4.68). The first research question included six factors: organization, development, cohesion, structure, vocabulary and mechanics, whereas the second research question included ten factors (see Chapter 3, pages 81 and 94). Each factor was organized under the relevant hypothesis for the purposes of the analysis and interpretations and conclusions derived from the results are presented in the following paragraphs.

### 5.1.1 Research Question One

***'Would students who are involved in collaborative writing settings produce better written and better organized essays than students working individually?'*** (See p.6)

Students in both the experimental (CL) and control (TL) groups wrote essays on a specific topic in the first week of the study as a pre-test and wrote about it again as a post-test, so the students' essay scores represented their performance. The findings presented in the previous chapter may be summarized and interpreted as follows:

**Pre-test and post-test scores of the experimental CL group**

The difference between the pre- and post-test scores concerning hypothesis 1.1 '*There will be significant differences in the essays of students in the experimental CL group before and after involvement in the collaborative learning strategy*' (p.73) was highly significant (see Chapter 4, Table 4.9); thus hypothesis 1.1 was confirmed. The participants in the experimental CL

group had become able to organize and develop their essays effectively. The collaborative activities had helped the students to learn how to produce coherent essays and avoid grammatical or spelling mistakes. They had also made it easier for the students to learn how to write and had resulted in changes in the participants' written products. The six factors of their writing measured in the rubric had been improved after involvement in the collaborative learning method and the differences between pre- and post-test scores were highly significant (see Chapter 4, Table 4.16 for more details). A comparison between the pre- and post-test essays of students in the experimental CL group in terms of the mean difference found that the most positive effect of involvement in the collaborative learning strategy was on essay structure, followed by development, cohesion, then organization and vocabulary, with mechanics being the category in which there was the least improvement. These findings suggest that there was less improvement in the editing stage of writing (checking mechanics) after involvement in the collaborative learning strategy than in the other stages. It could thus be suggested that students who engaged in collaborative writing need to focus more on mechanical mistakes. This result found that CL benefited the students a great deal in terms of the quality of their writing (development, cohesion and organization). By contrast, their involvement in CL did not help the students much in terms of the accuracy of their writing (mechanics). These findings are similar to those of other studies that have investigated the effect of CL in improving students' writing skills, such as that of Gooden-Jones (1996), who found that after students had been taught using the collaborative learning strategy for six weeks, 80% of them passed the written achievement test (WAT) administered by the college. An analysis of the students' essays indicated that the collaborative learning strategy had helped the students to improve their writing skills effectively.

**Pre-test and post-test scores of the control TL group**

The findings showed that the difference between pre- and post-test scores was highly significant (see Chapter 4, Table 4.29); thus hypothesis 2.1 '*There will be significant differences in the students' essays before and after involvement in the traditional learning method*' (page 75) was confirmed. The students in the control TL group had improved in all six aspects of their writing measured in the rubric after being involved in the traditional learning method (see Chapter 4, Table 4.36 for more details). The mean difference between the pre- and post-test essays of students in the control TL group in terms of writing factors revealed that the most positive effect of involvement in the traditional learning method was on essay vocabulary, followed by structure and mechanics, then cohesion, whereas development and organization were the least improved. The interpretation of this result could lead to the conclusion that individual learning was beneficial for students in improving their writing accuracy (vocabulary, structure, and mechanics). By contrast, their involvement in individual learning had not helped the students much in terms of writing quality, specifically development and organization.

**Post-test scores of the experimental CL and control TL groups**

The differences between the post-test scores of the experimental CL and control TL groups were significant (see Chapter 4, Table 4.49); thus, hypothesis 3.1'*There will be significant differences between the post-test essays written by students in the experimental CL group and those written by students in the control TL group*' (page 77) was confirmed. Generally, students in the experimental CL group had improved more than students in the control TL group. Three out of six factors of their writing measured in the rubric: namely, development, cohesion, and structure, were improved and the differences between the scores for the two groups were significant (See Chapter 4, Table 4.56 for more details). The results suggested that collaborative learning helped students a great deal to improve their writing skills, but

more in the areas of development, cohesion and structure than in mechanics, vocabulary and organization.

In summary, with regard to the findings for the first research question, this study has provided additional insights to those of other studies that have investigated the effectiveness of collaborative learning in improving students' writing skills (for a detailed account, please see the literature review in Chapter 2). For example, Suzuki (2008) assessed differences between self-revisions and peer revisions of written compositions among adult ESL learners and found that students using peer revisions paid more frequent attention to content and ideas, whereas those using self-revisions paid more attention to choosing words, correcting grammar and improving language form (see page 54 for more details). In addition, Shull's study (2001) showed that the writing skills of students involved in collaborative learning had improved more than those of students in the control TL group (see page 57 for more details).

After comparing the post-test essays of the experimental CL group with those of students in the control TL group, it was clear that the collaborative learning strategy had an influence on some stages of the process approach to writing: namely, pre-writing and revising, but that it had little effect on the editing stage. As mentioned in the literature review, the process approach to writing deals with writing skills such as planning, revising and drafting rather than with linguistic knowledge such as grammar, vocabulary, punctuation and spelling (Badger & White, 2000; Belinda, 2006). It could therefore be concluded that teaching the process approach to writing through a collaborative learning strategy does not help a great deal in improving some activities of the editing stage of writing, specifically, the mechanics factor. The basic mechanics were not improved, namely errors in spelling, capitalization and punctuation. These findings are in line with those of other researchers, such as Storch (2007), who investigated whether completing editing tasks in pairs would produce better results in terms of accuracy than completing them individually. Storch's results showed

that students who worked in pairs took longer to complete the editing tasks than students who worked individually. She found also that the difference between the two groups was not statistically significant. However, the findings of the current study differ from those of Storch's earlier study (1999), which examined the effectiveness of discussing grammar collaboratively in producing accurate written texts. In that study she found that the students' scores for overall grammatical accuracy increased after involvement in collaborative learning (see Chapter 2, page 51 for more details).

### 5.1.2 Research Question Two

***Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings?*** (page 6)

The attitudes and perceptions of the students in both the experimental CL and the control TL groups were investigated through a collaborative learning questionnaire (1-20), general writing questionnaire (1-23), and interviews.

#### 5.1.2.1 Collaborative learning questionnaire (Questions 1-20)

The results obtained from the collaborative learning questionnaire (1-20) may be summarized and interpreted as follows:

**Pre-test and post-test responses of the experimental CL group**

The results supported hypothesis 1.2 '*The pre- and post-test responses of students in the experimental CL group in the attitudes to collaborative learning questionnaire will be significantly different*' (page 73). The results indicated a highly significant difference between the pre- and post-test responses of the experimental CL group to all statements in the collaborative learning questionnaire (see Chapter 4, Table 4.17 for more details). This shows that the attitudes of students in the experimental CL group towards collaborative learning were more positive in the post-test than in the pre-test. This finding of the current study

supports those of previous studies, such as that of Mulryan (1994), who interviewed 48 fifth- and sixth-grade students in the USA to measure their attitudes toward working together cooperatively, and compared them to their teachers' perceptions. The results of Mulryan's study indicated that students' perceptions of CL were positive. They believed that CL helped them to minimize their mistakes by exchanging information and giving them complete freedom to solve their problems in a supportive atmosphere. In another study, Kask and Higgins (2001) found that CL affected learning positively (see p.58 for more details).

**Pre-test and post-test responses of the control TL group**

The findings did not support hypothesis 2.2 '*The pre- and post-test responses of students in the control TL group in the attitudes to collaborative learning questionnaire will be significantly different*' (page 76). The post-test attitudes of students in this group towards collaborative learning had not changed after involvement in the traditional learning method, as shown in the mean difference, which was not significant (see Chapter 4, Table 4.37 for more details).

**Post-test responses of the experimental CL and control TL groups**

The results supported hypothesis 3.2 '*There will be significant differences between the attitudes and perceptions of the students in the experimental CL group and those in the control TL group as tested by the collaborative learning questionnaire at the post-test*' (page 78). The mean difference, which was significant, indicated that the attitudes of students in the experimental CL group towards collaborative learning were better than those of students in the control TL group (see Chapter 4, Table 4.57 for more details). This may be interpreted as indicating that the opinions of students in the experimental CL group regarding the use of CL in writing classrooms had improved more than those of students in the control TL group.

As described on page 94, the collaborative learning questionnaire was divided into ten factors for the purposes of analysis, and the findings were summarized and interpreted as follows:

**Factor 1: Collaboration during the pre-writing stage** (statements 3, 4 and 17)

The attitudes of the students in the experimental CL group towards practising the pre-writing stage collaboratively had changed for the better. The analysis showed that the students thought that it was better to plan a topic, write down ideas, and draw up an outline in a collaborative setting than individually. A comparison between the pre-test and post-test responses of students in the experimental CL group, together with a comparison between the post-test responses of the experimental CL group and those of the control TL group revealed significant differences for all three statements concerning this factor (see Chapter 4, Tables 4.28 & 4.68 for more details). The students in the experimental CL group said they found collaboration during the pre-writing stage beneficial and helpful in planning a topic with friends, collecting ideas and making an outline with classmates, and talking with friends to facilitate finding ideas for the topic. The results are in line with those of other studies, such as those of Gebhardt (1980) and Storch (2002), who concluded that the effectiveness of collaborative writing was not limited to the final stages of writing but also applied to the beginning stages. Gebhardt stated, 'It seems to me that collaborative writing strategies should be applied to finding a promising topic, generating details on the topic, and locating the intended audience for a paper' (page 73). This result also confirmed that of Storch's study (2005), who interviewed some students after their involvement in a collaborative writing classroom and found that CW helped learners to find new ideas and use them effectively in different situations (see Chapter 2, page 52 for more details). Shi's study (1998), moreover, noticed that peer discussion was effective in helping students to discover various words and ideas for their essays (see Chapter 2, page 50 for more details).

**Factor 2: Collaboration during the revision stage** (statements 6 and 16)

Similarly, the majority of students in the experimental CL group adopted different attitudes and had changed their opinions for the better after revising their essays collaboratively. The results obtained for the two statements 6 and 16 that were concerned with the second factor 'Collaboration during the revision stage' indicated that the students in the experimental CL group found revising their essays with friends a helpful and effective strategy for improving their writing. Significant differences were found for both statements not only between the pre-test and post-test responses of the experimental CL group but also between the post-test responses of the experimental CL and the control TL groups (see Chapter 4, Tables 4.28 & 4.68 for more details). This is in line with the findings of other researchers (e.g., Mangelsdorf, 1992; Hedgcock & Lefkowitz, 1992; Hansen, 2005; Baker, 2009), who found that peer revisions encourage students to collaborate by making suggestions to each other in order to produce their final essay draft successfully. In another study, Suzuki (2008) indicated that students involved in peer revisions changed their written texts less than other students who used self-revisions. Students who engaged in peer revisions focused on meta-talk, essay content and ideas, whereas those who engaged in self-revisions concentrated on linguistic knowledge such as correcting grammatical mistakes (see Chapter 2, page 54 for more details).

**Factor 3: Collaboration during the editing stage** (Statement 7)

As shown in Tables 4.28, 4.48 and 4.68 in the previous chapter, the attitudes of students in both the experimental CL and the control TL groups towards the third factor 'Collaboration during the editing stage' had not changed for the better. It could thus be inferred that collaboration during the editing stage did not help students in the experimental CL group to correct mechanical and grammatical mistakes to the same extent as it helped them in the activities of other stages such as pre-writing and revising.

**Factor 4: The importance of collaborative learning for writing essays** (statements 1, 2, 5, 8 and 18)

A comparison between the pre- and post-test perceptions of students in the experimental CL group showed significant differences for four statements (1, 2, 5 and 18) relating to the fourth factor 'The importance of collaborative learning for writing essays'. Similarly, significant differences were found between the post-test responses of the experimental CL and control TL groups (see Chapter 4, Tables 4.28 & 4.68 for more details). This suggests that collaborative learning was a useful, important and beneficial strategy that helped students to write effectively. This result is in line with Phipps, Kask and Higgins (2001), who found that students thought that collaborative learning was a useful and effective strategy that positively motivated them to learn effectively (see Chapter 2, page 58 for more details).

**Factor 5: Benefits of CL in helping to get better scores** (statement 9)

The responses of students in the experimental CL group concerning the fifth factor 'Benefits of CL in helping to get better scores' had not changed much even though they had spent a long time writing essays collaboratively. Thus, no significant differences were found between the pre-test and post-test responses of students in either the experimental CL or the control TL groups, nor in a comparison between the post-test responses of both groups.

**Factor 6: Benefits of CL in providing comments on students' writing** (statements 10 and 11)

With regard to the sixth factor 'Benefits of CL in providing comments on students' writing', based on statements 10 and 11, no significant differences were found between the pre- and post-test responses of either the experimental CL or the control TL group. Similarly, a comparison between the post-test responses of the experimental CL group and the control TL group showed no significant difference.

**Factor 7: Benefits of CL in increasing understanding of accountability** (statement 13)

The difference between the pre-test and post-test responses of the experimental CL group to seventh factor 'Benefits of CL in increasing understanding of accountability' was highly significant (see Chapter 4, Table 4.28). This result suggests that the collaborative learning strategy can help students to increase their understanding of accountability. Individual accountability is considered one of the elements of successful cooperative learning that helps students to improve (Smith, 1998; Johnson & Johnson, 1999; Graham, 2005; Wang, 2009). This finding is in line with those of other researchers, namely Higgins (2001), Storch (2002) and Wang (2009), who found that collaborative learning had a positive effect on students' sense of individual accountability.

**Factor 8: Benefits of reading and listening to other students' essays in groups** (statements 14 and 15)

A comparison between the pre- and post-test responses of both the experimental CL and the control TL groups and also the comparison between the post-test responses of both groups revealed no significant differences for either of the statements.

**Factor 9: Benefits of CL in acquiring and using new vocabulary** (statement 19)

As shown in Chapter 4, Table 4.46, the responses of students in the control TL group concerning the ninth factor 'Benefits of CL in acquiring and using new vocabulary' conflicted with their responses to question 19 '*Collaborative writing helps me to acquire and use new vocabulary correctly*', the mean difference between pre-test and post-test being significant indicated that the individual learning method helped students to acquire and use new vocabulary better than the collaborative learning method. This result suggests that collaborative learning might not help students to acquire new vocabulary. This is consistent with Suzuki's (2008) finding that self-revision was beneficial for choosing words and correcting grammar (see Chapter 2, page 54 for more details).

**Factor 10: Benefits of CL in increasing the satisfaction of students in writing essays** (statements 12 and 20)

With regard to the final factor 'Benefits of CL in increasing the satisfaction of students in writing essays', it was clear that students in the experimental CL group were more satisfied and happier about writing their essays in groups than writing them individually. A comparison between the pre-test and post-test revealed a highly significant difference for both questions 12 and 20. According to Min (2006), students who were trained to be peer reviewers appreciated this training and their attitudes were changed for the better.

The findings obtained from the collaborative learning questionnaire (questions 1-20) may be summarized as follows:

**First: Experimental CL group**

- Collaboration during the pre-writing stage, that is, in planning a topic with friends, collecting ideas and making an outline with classmates, and talking with friends to facilitate finding ideas for the topic, was found to be beneficial. This finding is in agreement with Shi (1998), Gebhardt (1980) and Storch (2002).
- Collaboration during the revising stage helped students to write effectively. This confirms the findings of Mangelsdorf (1992), Hedgcock and Lefkowitz (1992), Hansen (2005), Suzuki (2008) and Baker (2009).
- The students' responses concerning the fourth factor 'The importance of collaborative learning for writing essays' suggest that collaborative learning is a useful, important and beneficial strategy that helps students to write effectively. This is in line with Phipps, Kask and Higgins (2001).
- Collaborative learning was found to be effective in increasing understanding of accountability. This result is supported by the findings of other researchers such as Higgins (2001), Storch (2002) and Wang (2009).

- Collaborative learning was found to be beneficial in increasing the satisfaction of students in writing essays. This finding is in agreement with Min (2005).

**Second: Control TL group**

The students in this group did not agree with the statement concerning the 'Benefits of CL in acquiring and using new vocabulary', and the difference between pre- and post-tests was significant, meaning that their level of disagreement had increased by the post-test. This suggests that individual learning might be better for acquiring new vocabulary than collaborative learning. This echoes Suzuki (2008).

### 5.1.2.2 General writing questionnaire (Questions 1-23)

The general writing questionnaire (questions 1-23) was divided into four factors including sub-factors for the purposes of analysis, as described on pages 90-92; the results may be summarized and interpreted as follows:

**Factor 1: Attitudes of students towards writing skills**

**1.1 Ease and interest of writing skills** (statements 1, 5 and 8)

By the end of the course, learning writing skills was perceived to be less difficult and had become more interesting for all students in both the experimental CL and the control TL groups. As shown in Table 4.69 in the previous chapter, significant differences were found for all the three statements related to this factor (1, 5 and 8). Because the students in both the experimental CL and control TL groups had been taught the process approach to writing for three months, writing essays had become easier and more interesting.

**1.2 The importance of writing skills**

The attitudes of students in both the experimental CL and control TL groups towards the importance of writing skills had not changed for the better by the end of the course, as shown

in the mean differences, which were not significant (see Chapter 4, Table 4.69 for more details).

**1.3 The importance of the process approach to writing**

All the students were trained to practise stages and activities of the process approach to writing: namely, pre-writing, drafting, revising and editing. However, only the attitudes of students in the experimental CL group had changed positively after involvement in CL. They thought that writing essays should include activities and stages such as brainstorming, planning, collecting and organizing ideas, drafting, revising and editing. A significant difference was found between the pre-test and post-test of the experimental CL group (see Chapter 4, Table 4.69 for more details). According to Kroll (2003) and Williams (2003), the activities and stages of the process approach (pre-writing, drafting, revising and editing) are important. This result was in line with Wasson (1993), who showed that students' writing quality had improved and their perceptions had changed for the better after practising the stages and activities of writing collaboratively.

**1.4 The priority of correcting grammatical and spelling mistakes**

After the course, checking grammatical and spelling mistakes when writing the first draft of the essay were seen as unimportant and unnecessary for students in both the experimental CL group and the control TL group. The differences between pre-test and post-test scores were significant for both groups (see Chapter 4, Table 4.69 for more details). The students had been taught that correcting grammatical and spelling mistakes should be done in the final draft. According to Elbow (1973) and King and Chapman (2003), writers should keep writing their essay without stopping and postpone correcting grammatical and spelling mistakes to the editing stage.

### 1.5 Motivation for practising writing skills

The motivation of students in both the experimental CL and control TL groups had improved after involvement in practising writing essays in both collaborative and individual learning settings. It was clear that the students' motivation towards learning writing had increased after they had been taught the writing process approach for three months and had completed writing all essays both collaboratively and individually.

This result appears to confirm Gillies and Ashman's (2003) finding that using the cooperative learning strategy had a useful effect on a great number of dependent variables such as achievement, productivity, motivation, good relationships with participants, and higher self-esteem.

### 1.6 Opportunity for practising writing skills

The highly significant difference that was found between the pre- and post-test responses of the experimental CL group for the sub-factor 'Opportunity for practising writing skills' suggests that collaborative learning was beneficial in giving the students the opportunity to practise writing skills in the classroom. Since there was no difference between the pre-test and post-test responses of the control TL group to this question, it appears that CL gives students greater opportunities to practise writing in class than traditional learning methods.

## Factor 2: Attitudes of students towards the pre-writing stage

### 2.1 Taking enough time to understand the essay topic

The attitudes of students in the experimental CL group towards the sub-factor 'Taking enough time to understand the essay topic' were significantly different after their involvement in the course (see Chapter 4, Table 4.70). However, the opinions of students in the control TL group had not changed after their involvement in individual learning. This suggests that collaborative learning was more effective than learning individually in encouraging students to take time to understand the topic of the essay before starting to write.

**2.2 The difficulty of understanding the essay topic**

The responses of students in the control TL group regarding this factor indicated that they still thought that it was difficult to understand the essay topic by the end of the course, as shown in the mean difference, which was significant.

**2.3 Planning for the topic mentally and physically**

The responses of students in both the experimental CL and control TL groups concerning the third sub-factor 'Planning for the topic mentally and physically' indicated a much greater awareness of the importance of planning after they had been involved in the writing course. All the students' attitudes and perceptions regarding the necessity for planning and outlining essay ideas either mentally or physically before starting writing had improved. This suggests that the process approach to writing helped the students to plan, outline and write down ideas before writing the first draft of the essay. According to Peacock (1986), planning before involvement in writing essays is helpful for organization and for writing successfully.

**2.4 Collecting and organizing ideas**

The responses of students in the experimental CL group after they had been involved in the collaborative learning setting to the sub-factor 'Collecting and organizing ideas' indicated a much greater improvement than those of students in the control TL group. As shown in Table 4.70 in the previous chapter, highly significant differences were found for the two statements related to this factor (12 and 13). It was apparent that CL was a useful strategy in facilitating the collection of ideas for a writing topic. This confirms the findings of other studies, such as that of Storch (2005), who found that CL was an effective strategy for discovering ideas.

**3) Attitudes of students towards the drafting and revising stages**

**3.1 Following the essay plan when starting writing**

The students in both the experimental CL and control TL groups were taught to follow the plan they had written during the pre-writing stage when starting to write their essays.

However, the only significant difference was found in the pre-test and post-test responses of students in the experimental CL group. This suggests that collaborative learning helps students to follow the plan and outline they have devised effectively. According to Williams (2003), King and Chapman, (2003) and Tribble (1996; 2003), writing the first draft should come after finishing pre-writing activities such as gathering ideas, planning, making an outline etc.

**3.2 Difficulty in starting to write the essay**

Although both the experimental CL and the control TL groups had been taught and had practised the process approach to writing for eleven weeks, there were no significant differences between their pre- and post-test responses regarding the second sub-factor 'Difficulty in starting to write the essay'.

**3.3 Making revisions before finishing the first draft of the essay**

The students' responses showed that they did not think that they should do revisions before finishing writing the first draft of the essay. This result was based on the mean differences found between pre-test and post-test responses in the experimental CL and control TL groups, which were significant (see Chapter 4, Table 4.71 for more details). The students had been taught when writing the first draft to focus only on writing and to postpone revising and editing to the end. According to Gebhard (2000), during the drafting stage, it is important to keep writing from beginning to end without stopping.

**3.4 Using the vocabulary supplied by the teacher**

Concentrating on using the vocabulary supplied by the teacher was seen as important for students in the experimental CL group. As shown in Table 4.71, a significant difference was found between the pre- and post-test responses of this group for the sub-factor 'Using the vocabulary supplied by the teacher'. This suggests that those students who had been involved

in collaborative learning felt that they had become more focused on using vocabulary supplied by their teacher during class.

**4) Attitudes of students towards the editing stage**

**4.1 Finding appropriate vocabulary during the editing stage**

The pre- and post-test responses of students in both the experimental CL and control TL groups regarding the sub-factor 'Finding appropriate vocabulary during the editing stage' were not significantly different.

**4.2 Revising essays several times before submitting during the editing stage**

The pre- and post-test mean scores in the control TL group for the sub-factor 'Revising essays several times before submitting during the editing stage' showed a highly significant difference. The mean difference revealed that by the end of the course students in the control TL group were even more convinced that they did not need to make several revisions before submitting their final drafts (see Chapter 4, Table 4.72 for more details). This suggests that students in the control TL group preferred to submit their final drafts without doing any revisions. The reason could be that students normally produce the first draft after finishing the pre-writing stage, the second draft after completing the revision stage and the third after the editing stage, so there may be no need for any further revisions at the end. Therefore, producing several drafts could help students to write accurately and effectively. Storch (1999) found in her study that the reconstruction of texts resulted in an increase in accuracy from 63% in the first draft to 86% in the second. The number of errors had decreased to 7.75% in the second version of the essay compared to 13.65% in the first draft (see Chapter 2, page 51 for more details).

**4.3 Correcting grammatical and spelling mistakes during the editing stage**

Although both the experimental CL and the control TL groups had been taught and trained to correct grammatical and spelling mistakes during the editing stage, there were no significant

differences between the pre- and post-test responses for either group regarding the sub-factor 'Correcting grammatical and spelling mistakes during the editing stage'.

### 5.1.2.3 Interview

The collaborative learning questionnaire, discussed in the previous section, was considered the central instrument employed in this study to answer the second research question: 'Are students' attitudes and perceptions positively affected by involvement in collaborative learning settings?' As stated earlier, interviews were used in this research to provide either supportive or supplementary information regarding students' attitudes and perceptions concerning collaborative learning in the form of collaborative writing.

The eleven questions devised for the interview (see p.101) aimed to investigate whether the use of the collaborative learning strategy had improved the ESL students' writing proficiency. This would provide valuable additional insights into the main quantitative results discussed so far. The results may be summarized and interpreted as follows:

- Question 2 was used to investigate the students' views on the best ways to solve learning problems. All the interviewees thought that asking people who may be better than they were, such as classmates or their tutor, could be an appropriate way of solving learning problems. For example, student B said '*I prefer to ask people who are better than me, such as friends, classmates, or sometimes teachers and tutors*'. This suggests that the presence of an expert may be vital to help students in solving problems when they are practising English language skills. It means that learners should conduct activities under the supervision of expert people such as advanced classmates or their teacher. This supports Vygotsky's concept of the ZPD (see Chapter 2, pages 22-26) that concerns the collaboration of less advanced students with experts such as classmates or teachers. Villamil and Guerrro (2000) found that using scaffolding and the theory of the ZPD helped students to manage their conversation,

understand grammatical rules, and write critical and analytical texts (see Chapter 2, page 56 for more details). According to Gabriele (2007) and Schmitz and Winskel (2008), the effect of using more advanced peers to improve less advanced students was better than having students collaborate with each other.

- Question 4 concerned whether the students liked collaborative learning or not; most of the four interviewees found CL a beneficial strategy that helped them to collect new ideas and vocabulary more than doing so individually. For example, student A, who scored between 50 and 60, said '*CL is especially useful in getting new ideas and vocabulary*'. This confirms the findings of a few other studies, such as those of Storch (2005) and Shi (1998), who found that the use of a collaborative learning strategy enabled students to discover ideas and words (see Chapter 2, pages 50 and 52 for more details). In addition, the expert student thought that sharing ideas with others would be beneficial when the group members were active and helpful.
- Question 5 was concerned with the benefits of CL in increasing the satisfaction of students in writing essays. Most of the interviewees stated that engaging in the collaborative learning strategy had made practising writing skills more enjoyable and satisfying. For instance, student C mentioned that '*I neither enjoyed nor did not enjoy writing before, but after practising the collaborative learning method I felt that I liked writing very much*'. This supported the results obtained from the questionnaire that lead us to say that involving students in collaborative learning classrooms might help them feel more satisfied and more enjoyment about learning writing skills. According to Min (2006), the students in his study appreciated peer reviewing, and their opinions had changed for the better after involvement in this training.
- Student D, who was selected as an expert, thought writing collaboratively meant it took longer to finish writing essays than writing individually. He said, '*I like writing, but I feel*

*that writing in a group takes longer, whereas writing individually is more proficient and faster than in groups*'. He gave a similar response when answering question 3. For example, he said, '*learning individually is much better for me than CL because it saves time*'. He added, '*It takes up a lot of time listening to the other students in CL*'. This might be because collaborative learning includes interaction and some talking during the pre-writing, revising and editing stages. According to Storch (1999; 2005), pairs take longer to write essays because they spend time talking. Moreover, it is possible that the expert did not prefer CL because he was able to write essays by himself without any problems or difficulties and he might not need any help from his classmates because they were considered less proficient than he was.

- According to Harris (1993) and Hedge (2000), getting started on writing an essay is difficult because it requires a great deal of attention, application and concentration. Question 6 aimed to supplement the other quantitative approaches used in this study by obtaining further information about the difficulties encountered by students when starting to write their essays. The low advanced students thought that collecting ideas and putting them in the context was the most difficult part of writing the essay. The use of teaching methods such as collaborative learning might help to solve this problem (Shi, 1998; Storch, 2005). On the other hand, the high advanced students did not feel that collecting ideas and using them in the context was difficult. It seemed that their difficulties were associated with how to finish the whole essay successfully and how to avoid thinking in L1 while writing in L2.
- Only the low advanced students thought they might have difficulty finding appropriate vocabulary when starting to write the essay. For instance, student A mentioned, '*If I have difficulty finding the right vocabulary when I start writing, then I use a dictionary*', and student B said 'only sometimes'. However, the high advanced students did not feel that finding vocabulary when starting to write an essay was difficult.

- With regard to collaboration during the pre-writing stage, question 8 showed that all interviewees thought that this had helped them to acquire new vocabulary and share ideas with each other effectively. Student C said, '*Doing pre-writing activities collaboratively helps me to exchange ideas with others and select the appropriate ideas for the essays*'. Student D, who was considered an expert, believed that pre-writing activities such as brainstorming, collecting ideas and finding appropriate vocabulary are techniques that can be practised collaboratively, rather than individually. This confirmed the finding discussed above that CL was more helpful for collecting ideas and vocabulary than doing so individually. This finding is in agreement with Shi (1998), Gebhardt (1980) and Storch (2002).
- With regard to collaboration during the drafting stage, the interviewees believed that this stage should be completed individually rather than collaboratively, because they thought that all the tools of writing, such as collecting ideas, getting vocabulary and planning for the topic, had already been assembled collaboratively. For example, student A said, '*When ideas and vocabulary are available, writing individually is much better than collaboratively*'. The students thus might not need any further help from classmates and would be able to write the first draft individually. Moreover, everyone has his or her own writing style, so drafting collaboratively could deprive students of the opportunity to express themselves in their own styles. For instance, student D mentioned, '*Everyone has a different style of writing, so it is better for this stage to be done individually*'.
- All the interviewees agreed that collaboration during the revising and editing stages was much better than working individually. For example, student B said, '*Collaborating during the revising stage helped me to re-write some inappropriate sentences, vocabulary and ideas. The same as during the editing stage - grammatical mistakes and spelling were corrected better collaboratively*'. As student D mentioned, '*The revising and editing stages are much*

*better done in groups than individually. I may be better at writing than my classmate but he may be better than me in grammar or spelling, so writing collaboratively is useful and beneficial*'. Thus, being good at writing organization or development does not necessarily mean being good at structure or mechanics, and vice versa, so working in groups may make it possible to get help from members who are strong in the accuracy of their writing, while others could be more helpful in terms of quality of writing.

To summarize these conclusions in terms of their relevance to the rest of the research, the qualitative results from the interviews not only supported the quantitative data obtained from essay scores and the attitudes to collaborative learning questionnaire, but also produced additional findings, as follows:

- The interview data confirmed that pre-writing, which is considered a stage in the process approach to writing, included activities such as collecting and choosing appropriate ideas, acquiring new vocabulary, and planning, as shown in question 8. Those activities were more helpful and beneficial when carried out collaboratively than when conducted individually.
- The qualitative data supported the finding from the quantitative data that collaboration during the revising stage was helpful and beneficial: namely, in re-writing inappropriate sentences, vocabulary and ideas, as shown in question 10.
- Although the quantitative data obtained from the students' essay scores and the attitudes to CL questionnaire indicated that the editing stage was not beneficial when completed collaboratively, the qualitative data showed that using CL in the editing stage could be helpful in overcoming certain difficulties, for instance, in correcting grammatical and spelling mistakes, as shown also in question 10.

- The interview results were similar to the questionnaire data in shedding light on the benefits of CL in increasing the satisfaction of students in writing essays, as shown in question 5.
- The interview data suggested that reading essays in front of groups might be helpful in producing better essays. Additional information obtained from the interviews revealed that some students thought that exchanging and swapping essays with each other was better than reading them aloud in front of each other. However, the questionnaire results indicated no significant differences between pre- and post-test responses.
- The qualitative data confirmed the students' view that the drafting stage should be completed individually rather than collaboratively. The responses to question 9 clarified their opinion that collaboration during the drafting stage takes longer than working individually.

## 5.2 Implications and suggestions for ESL teachers and learners

According to Vygotsky's theory, students can only perform tasks individually if they first collaborate with more capable people who can scaffold them. This formed the theoretical background for this study (see pages 22-26). The underlying assumption is the existence of the zone of proximal development (ZPD): '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, p.86). According to the ZPD, advanced individuals can scaffold, develop and create an inner voice in other individuals who are not so advanced (Vanderburg, 2006). This idea was developed in the discussion on pages 22-26. The instantiation of the ZPD in the research questions and hypotheses was then through the Vygotsky-based definition of collaborative learning as involving an expert and non-experts rather than equal

peers. The ZPD thus forms the theoretical basis for this research because of the existence of the expert. The procedure for the activities and tasks used in the research involved distributing the sample into small groups of four or five members or in pairs and selecting students who had obtained high scores in their writing exams in the previous term to be experts, guides and monitors for these groups. As mentioned in Chapter 2, the ZPD establishes two levels of development: the actual level, which is determined through the ability of the learner to do something individually, and the possible level, which is determined by the ability of the learner to do it with the help of an adult or a more advanced and capable classmate, so one of the study procedures was to have students working collaboratively, which was the possible level, then working individually at the end of the study, which was the actual level.

The results of the current study showed that the use of a collaborative learning strategy benefited ESL learners in enabling them to solve their writing problems effectively. Eleven weeks' collaboration with more able classmates had helped the students to write more successfully. The findings of this research were obtained from written essays, questionnaires and interviews. For instance, the written essays proved that after involvement in collaborative learning, the ESL learners had become able to write better than students who had been taught using a traditional learning method. It was therefore concluded that collaborative learning had helped ESL students to improve and develop their writing skills.

However, the pre-test and post-test analyses and discussion of the results suggested that collaborative learning might not be useful and beneficial in all stages of the process approach to writing. For example, the pre-writing and revising stages were carried out effectively when students worked collaboratively. This was not, however, the case with the editing stage.

The following suggestions for students and teachers are made on the basis of the findings from this study and from certain aspects of the review of the relevant literature:

- Collaborative learning in the experimental CL group was based on placing an expert student in each group. Through comparisons between their pre- and post-test results and between their results and those of students in the control TL group, the research findings showed improvements in the students' work and attitudes after involvement in CL. The researcher found that the expert students played essential roles during the writing process: the presence of an expert resulted in improvements for less able students. One of the suggestions for ESL teachers is therefore that they make a similar use of experts in their classrooms. This interesting idea goes back to the ZPD concept that is based on two levels of development, as outlined on page 23: one level is called 'the inter-mental plane', on which the learning process is distributed between a student and an expert person, and the second level is called 'the intra-mental plane', on which the learning process is accomplished by the individual (Lantolf, 2006).

- The method of marking the students' essays in this study was to use a version of Paulus's rubric (1999). This rubric was found to be an interesting and useful tool that could be recommended to ESL teachers to rate and mark essays. It gives not only an overall assessment of the essay but also a full description of the different aspects of writing: organization, development, cohesion, structure, vocabulary and mechanics.

- The analysis of the students' attitudes and perceptions in the experimental CL group showed the importance of using collaborative learning in the pre-writing and revising stages and to a lesser extent in the editing stage of writing, while it appeared to have made no difference at all in the drafting stage. One of the implications and suggestions for ESL teachers is thus that they train their students to focus on collaborating only during the pre-

writing and revising stages, and to a lesser extent in the editing stage. According to Storch (2002), collaborative learning is beneficial to improve pre-writing activities: namely, collecting new ideas and using them appropriately. Gebhardt (1980) thought that finding new topics and generating details on them could be done through using collaborative learning strategies. Moreover, collaborative revisions help students to make suggestions to each other and produce final drafts of essays effectively (Hansen, 2005; Baker, 2009; Mangelsdorf, 1992). The study found that CL does not help students to improve their editing activities: namely, correcting grammatical, spelling and punctuation mistakes, as much as it helps them in other stages such as pre-writing and revising. This result supports those of previous studies (Suzuki, 2008; Storch, 2007), which found that peer revisions concentrate on content and ideas rather than on correcting grammatical mistakes (see Chapter 2, pages 53-54 for more details).

- The analysis of the essay scores of students in the control TL group in terms of writing factors indicated the effectiveness of the traditional method in learning vocabulary, structure and mechanics, that are considered editing stage activities, whereas development and organization, which are activities of the pre-writing and revising stages, received the least improvement. One implication of this is that teachers using the traditional learning method to teach writing skills should concentrate on the editing stage more than on the pre-writing and revising stages.

- Students need to be trained how to work collaboratively in groups. Without training, collaborative learning will not be beneficial. Students would not be able to share with each other in groups if their teachers did not give them practical training in how to work collaboratively. Teachers should therefore train their students to work in groups and also explain to them the importance and benefits of the collaborative learning strategy. Students should understand that collaborative learning means encouraging each other,

sharing responsibility with each other, and communicating with and trusting each other. This suggestion supports Min's study (2006), which investigated the effect of training students to become better peer reviewers. The results showed that training helped students to improve their performance in peer review, build their confidence, and increase their ability to comment on global issues such as the development and organization of ideas, and to help them acquire and use vocabulary correctly. All trainees were more satisfied and happier about this training because it helped them to develop their linguistic, cognitive, psychological and methodological skills effectively. As stated in Min (2008, p.301) 'Novice ESL/EFL writers usually encounter difficulty in providing concrete and useful feedback without appropriate training and need teachers' intervention' (Leki, 1990; Tsui & Ng, 2000).

- Some EFL teachers may be unwilling to correct and give feedback on students' essays because of the large numbers in their classes and the length of time it may take to correct and discuss their mistakes. Integrating the process approach to writing with collaborative learning could train the students themselves to correct and give feedback to each other. Peer feedback helps students to become more self-aware, to engage in self-reflection, self-expression and to contribute to decision making (Storch, 2004; Ferris, 2003).

## 5.3 Implications for further research

The findings of this study provide a basis for other researchers to investigate and research further the effectiveness of using a collaborative learning strategy to improve ESL writing skills. The results also give rise to several points that other researchers should take into consideration when planning to study the effects of CL on learning writing skills:

- The duration of this study was only eleven weeks, so it would be beneficial if similar studies were carried out for longer periods: say, an entire academic year, in order to obtain more conclusive results regarding the use of CL.
- The only people available for this study were male ESL students. Other researchers could therefore conduct similar studies on the effectiveness of CL with either female ESL students or younger learners, to see whether using more heterogeneous groups could give different results from homogenous ones.
- This study used a quantitative method as the main data collection instrument. Findings would be more accurate and convincing if a combination of qualitative and quantitative methods were employed. For example, qualitative research methods such as observation and diary writing might be helpful to obtain deeper insights into the perceptions and attitudes of ESL students regarding using CL to improve their writing skills. Moreover, longitudinal studies that could be conducted over a long time period may obtain more reliable and generalizable results. Conducting a study over a longer period of time might also help students to become more used to practising and adopting the process approach to writing through collaboration.
- The aim of this study was to determine whether CL could improve L2 writing skills. Further research could study the effectiveness of CL in improving L1 writing skills. Alternatively, other studies could compare the effects of CL on improving both L1 and L2 writing skills and see which was the most positively affected in terms of accuracy, communication, organization and so on. For example, 'Does CL improve L2 writing learners better than L1 writing learners?

## 5.4 General contribution of the study

Previous studies on CL have concentrated on the impact of CL in developing certain aspects and categories of writing skills, as we saw in Chapter 2. For example, Shi (1998) investigated whether peer-talk could develop writing skills better than teacher-led discussions; Berg (1999) and Shull (2001) investigated the influence of peer response on revision and quality of writing; Storch (1999, 2007) wanted to find out whether studying grammar collaboratively helps students to be more accurate in their writing than working individually; Storch (2002; 2005) also investigated the nature of the writing processes evident in pair talk; Storch and Wigglesworth (2007; 2009) compared essays written collaboratively with others written individually in order to examine specific aspects of writing: namely, accuracy, fluency and complexity; Suzuki (2008) compared self-revisions with peer revisions in written essays (see pages 54-55 for more details).

The importance of this study, however, lies in its contribution to the teaching and learning of writing skills, through investigating the effectiveness of using collaborative learning to improve the writing skills of students of English as a second language on the specific elements in the rubric, namely organization, development, coherence, structure, vocabulary and mechanics, comparing the results of students using this method with those of other students writing individually. In addition, the aim was also to see whether engaging in collaborative learning had a positive effect on the attitudes and perceptions of learners. The selection of the study sample and context (Saudi male students) was also considered to be another contribution to research in the field of writing skills, since no previous studies have examined the writing skills of Saudi students of English, who represent a significant proportion of the learners of English worldwide.

## 5.6 Conclusion

This research is one of the first studies to have investigated the impact of using collaborative learning as a strategy to improve the English writing skills of ESL students. This study adopted as a theoretical basis Vygotsky's theory of the ZPD, which emphasizes the role of experts in developing the skills of less advanced individuals through collaboration. This model was found useful and effective in teaching and learning writing skills. The results showed that CL was beneficial for the pre-writing and revising stages of writing and less effective in the editing stage, which is concerned mainly with structure and mechanics. The attitudes and perceptions of students had also developed after their involvement in CL.

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# APPENDIX A

# Writing Prompts

## Pre-test and Post-test

Write in English about the following topic. You will have only 60 minutes to finish the composition. Some vocabularies will be provided to help you to complete your essay successfully.

**‘'Describe the different reasons you have for coming to university?’**

The following words may help you in writing your essay:

*Attend, common, prepare, experience, increase, knowledge, career, primary reason, job, competitive, opportunities, Information, technology, expected, decision, expand, recommend.*

# APPENDIX B-1

## Questionnaire to collect students' attitudes towards writing skills

| N | Questions |
|---|---|
| 1 | Writing an essay is very difficult for me. |
| 2 | I think that writing is an important skill |
| 3 | Writing isn't just completing a composition, but planning, drafting, revising and editing. |
| 4 | I think that the most important aspect of the skill of writing is grammar. |
| 5 | I find it interesting to practise and learn writing skills. |
| 6 | I do not have the motivation to learn writing skills. |
| 7 | I get a lot of opportunities to practise writing in class. |
| 8 | I think learning writing skills is boring. |
| 9 | Before starting writing, I spend a lot of time trying to understand and familiarize myself with the topic. |
| 10 | Before I start writing (pre-writing stage), I plan the topic mentally. |
| 11 | Before I start writing, I plan my topic by making an outline and writing down my ideas. |
| 12 | It is difficult for me to get new ideas for my writing topic. |
| 13 | Organizing ideas is the most difficult part for me. |
| 14 | Before I start writing, I have difficulty understanding the topic of the essay. |
| 15 | During the writing stage, I usually follow the plan that I have written before starting to write. |
| 16 | When I start writing, my priority is to concentrate on grammatical and spelling errors. |
| 17 | During the writing and drafting stages, I usually don't know how to start writing. |
| 18 | When writing the first draft, no attention is paid to grammatical and spelling mistakes. |
| 19 | During writing, I normally do revisions before finishing my writing completely. |
| 20 | During writing, I concentrate on using the vocabulary supplied by my teacher. |
| 21 | During the editing stage, I concentrate on finding appropriate words and vocabulary. |
| 22 | During the editing stage, I make several revisions before submitting my final draft. |
| 23 | During my editing stage, I must correct grammatical and spelling mistakes. |

# APPENDIX B-2

## Questionnaire to collect students' attitudes towards collaborative learning

| N | Questions |
|---|---|
| 1 | Working together in groups is a good strategy that helps me to write effectively. |
| 2 | Writing about something with my friends is not suitable for me. |
| 3 | Before starting writing (pre-writing stage), planning a topic with friends is much better than individually. |
| 4 | Before I start writing (pre-writing stage), making an outline and writing down ideas with classmates are not good methods. |
| 5 | Working by myself without help from others is very important for me. |
| 6 | Working and writing in groups helps me to know how to revise my essay effectively. |
| 7 | I prefer editing and proofreading my activities and tasks in a group rather than individually. |
| 8 | Working with other students is very important for me. |
| 9 | Writing in a group can help me to get better scores in my writing exams. |
| 10 | Colleagues in my group are able to give comments on my writing. |
| 11 | I would like to get feedback from my friends on my compositions. |
| 12 | I would like to see students involved in more collaborative writing. |
| 13 | My experience of CL has increased my understanding of my own accountability. |
| 14 | I like reading the essays of my classmates and I understand what they write. |
| 15 | I understand and learn from listening to students when they read their essays in front of others. |
| 16 | Revising my essay with classmates many times can improve it effectively. |
| 17 | At the pre-writing stage, talking with my friends can facilitate finding ideas for my topic. |
| 18 | Sharing my essay with my friends collaboratively is useful and beneficial. |
| 19 | Collaborative writing helps me to acquire and use new vocabulary correctly. |
| 20 | I feel more satisfied with my writing when I work in small groups than when I work individually. |

# APPENDIX C

## Interview questions to collect students' attitudes towards collaborative learning

1- When do you think you learn better?

2- If you get stuck or face a problem while practicing any English's skill, what do you prefer to do?

3- Do you like learning English individually? Why?

4- Do you like learning English in a group? Why?

5- Did you like writing skill before you were involved in collaborative learning method?

6- What kind of difficulty do you face normally when you start writing?

7- Do you feel difficulty finding the right vocabulary when you start writing?

8- During prewriting activities such as brainstorming and planning, do you think that you learn from working together with classmates to structure and plan your ideas? Can you explain in some details?

9- During drafting activities, do you feel that you write better collaboratively rather than individually without any help from others?

10- During revising and editing stages, do you feel that working together can overcome your difficulties such as correcting mistakes, restructuring ideas, finding right vocabularies, and so on?

11- When you read your essay in front of your classmates in the same group, do you feel that your writing can be better?

# APPENDIX D

## Essay-scoring rubric (Paulus, 1999)

| | Organization | Development | Cohesion | Structure | Vocabulary | Mechanics |
|---|---|---|---|---|---|---|
| 1 | No organization evident; ideas random, related to each other but not to task; no paragraphing; no thesis; no unity | No development | Not coherent; no relationship of ideas evident | Attempted simple sentences; serious, recurring, unsystematic grammatical errors obliterate meaning; non-English patterns predominate | Meaning obliterated; extremely limited range; incorrect/unsystematic inflectional, derivational morpheme use; little to no knowledge of appropriate word use regarding meaning and syntax | Little or no command of spelling, punctuation, paragraphing capitalization |
| 2 | Suggestion of organization; no clear thesis; ideas listed or numbered, often not in sentence form; no paragraphing/grouping; no unity | Development severely limited; examples random, if given. | Not coherent; ideas random/ unconnected; attempt at transitions may be present, but ineffective; few or unclear referential ties; reader is lost. | Uses simple sentences; some attempts at various verb tenses; serious unsystematic errors, occasional clarity; possibly uses coordination; meaning often obliterated; unsuccessful attempts at embedding may be evident | Meaning severely inhibited; very limited range; relies on repetition of common words; inflectional/derivational morphemes incorrect, unsystematic; very limited command of common words; seldom idiomatic; reader greatly distracted | Some evidence of command of basic mechanical features; error-ridden and unsystematic |

| | Organization | Development | Cohesion | Structure | Vocabulary | Mechanics |
|---|---|---|---|---|---|---|
| 3 | Some organization; relationship between ideas not evident; attempted thesis, but unclear; no paragraphing/ grouping; no hierarchy of ideas; suggestion of unity of ideas | Lacks content at abstract and concrete levels; few examples | Partially coherent; attempt at relationship, relevancy and progression of some ideas, but inconsistent or ineffective; limited use of transitions; relationship within and between ideas unclear/non-existent; may occasionally use appropriate simple referential ties such as coordinating conjunctions | Meaning not impeded by use of simple sentences, despite errors; attempts at complicated sentences inhibit meaning; possibly uses coordination successfully; embedding may be evident; non-English patterns evident; non-parallel and inconsistent structures | Meaning inhibited; limited range; some patterns of errors may be evident; limited command of usage; much repetition; reader distracted at time | Evidence of developing command of basic mechanical features; frequent, unsystematic errors |
| 4 | Organization present; ideas show grouping; may have general thesis, though not for persuasion; beginning of hierarchy of ideas; lacks overall persuasive focus and unity | Underdeveloped; lacks concreteness; examples may be inappropriate, too general; may use main points as support for each other. | Partially coherent, main purpose somewhat clear to reader; relationship, relevancy, and progression of ideas may be apparent; may begin to use logical connectors between/ within ideas/paragraphs effectively; relationship between/ within ideas not evident; personal pronoun references exist, may be clear, but lacks command of demonstrative pronouns and other referential ties; repetition of key vocabulary not used successfully | Relies on simple structures; limited command of morpho-syntactic system; attempts at embedding may be evident in simple structures without consistent success; non-English patterns evident | Meaning inhibited by somewhat limited range and variety; often uses inappropriately informal lexical items; systematic errors in morpheme usage; somewhat limited command of word usage; occasionally idiomatic; frequent use of circumlocution; reader distracted | May have paragraph format; some systematic errors in spelling, capitalization, basic punctuation |

| | Organization | Development | Cohesion | Structure | Vocabulary | Mechanics |
|---|---|---|---|---|---|---|
| 5 | Possible attempted introduction, body, conclusion; obvious, general thesis with some attempt to follow it; ideas grouped appropriately; some persuasive focus, unclear at times; hierarchy of ideas may exist, without reflecting importance; some unity | Underdeveloped; some sections may have concreteness; some may be supported while others are not; some examples may be appropriate supporting evidence for a persuasive essay, others may be logical fallacies, unsupported generalizations | Partially coherent; shows attempt to relate ideas, still ineffective at times; some effective use of logical connectors between/within groups of ideas/paragraphs; command of personal pronoun reference; partial command of demonstratives, deictics, determiners | Systematic consistent grammatical errors; some successful attempts at complex structures, but limited variety; clause construction occasionally successful, meaning occasionally disrupted by use of complex or non-English patterns; some nonparallel, inconsistent structures | Meaning occasionally inhibited; some range and variety; morpheme usage generally under control; command awkward or uneven; sometimes informal, unidiomatic, distracting; some use of circumlocution. | Paragraph format evident; basic punctuation, simple spelling, capitalization, formatting under control; systematic errors |
| 6 | Clear introduction, body, conclusion; beginning control over essay format, focused topic sentences; narrowed thesis approaching position statement; some supporting evidence, yet ineffective at times; hierarchy of ideas present without always reflecting idea importance; may digress from topic. | Partially underdeveloped, concreteness present, but inconsistent; logic flaws may be evident; some supporting proof and evidence used to develop thesis; some sections still under supported and generalized. | Basically coherent in purpose and focus; mostly effective use of logical connectors, used to progress ideas; pronoun references mostly clear; referential/anaphoric reference may be present; command of demonstratives; beginning appropriate use of transitions | Some variety of complex structures evident, limited pattern of error; meaning usually clear; clause construction and placement somewhat under control; finer distinction in morpho-syntactic system evident; non-English patterns may occasionally inhibit meaning | Meaning seldom inhibited; adequate range, variety; appropriately academic, formal in lexical choices; successfully avoids the first person; infrequent errors in morpheme usage; beginning to use some idiomatic expressions successfully; general command of usage; rarely distracting | Basic mechanics under control; sometimes successful attempts at sophistication, such as semi-colons, colons |

| | Organization | Development | Cohesion | Structure | Vocabulary | Mechanics |
|---|---|---|---|---|---|---|
| 7 | Essay format under control; appropriate paragraphing and topic sentences; hierarchy of ideas present; main points include persuasive evidence; position statement/thesis narrowed and directs essay; may occasionally digress from topic; basically unified; follows standard persuasive organizational patterns | Acceptable level of development; concreteness present and somewhat consistent; logic evident, makes sense, mostly adequate supporting proof; may be repetitive | Mostly coherent in persuasive focus and purpose, progression of ideas facilitates reader understanding; successful attempts to use logical connectors, lexical repetition, synonyms, collocation; cohesive devices may still be inconsistent/ ineffective at times; may show creativity; possibly still some irrelevancy | Meaning generally clear; increasing distinctions in morpho-syntactic system; sentence variety evident; frequent successful attempts at complex structures; non-English patterns do not inhibit meaning; parallel and consistent structures used | Meaning not inhibited; adequate range, variety; basically idiomatic; infrequent errors in usage; some attention to style; mistakes rarely distracting; little use of circumlocution | Occasional mistakes in basic mechanics; increasingly successful attempts at sophisticated punctuation; may have systematic spelling errors |
| 8 | Definite control of organization; may show some creativity; may attempt implied thesis; content clearly relevant, convincing; unified; sophisticated; uses organizational control to further express ideas; conclusion may serve specific function | Each point clearly developed with a variety of convincing types of supporting evidence; ideas supported effectively; may show originality in presentation of support; clear logical and persuasive/convincing progression of ideas | Coherent; clear persuasive purpose and focus; ideas relevant to topic; consistency and sophistication in use of transitions/ referential ties; effective use of lexical repetition, derivations, synonyms; transitional devices appropriate/ effective; cohesive devices used to further the progression of ideas in a manner clearly relevant to the overall meaning. | Manipulates syntax with attention to style; generally error-free sentence variety; meaning clear; non-English patterns rarely evident | Meaning clear; fairly sophisticated range and variety; word usage under control; occasionally unidiomatic; attempts at original, appropriate choices; may use some language nuance | Uses mechanical devices to further meaning; generally error-free |

| | Organization | Development | Cohesion | Structure | Vocabulary | Mechanics |
|---|---|---|---|---|---|---|
| 9 | Highly effective organizational pattern for convincing, persuasive essay; unified with clear position statement; content relevant and effective | Well-developed with concrete, logical, appropriate supporting examples, evidence and details; highly effective/convincing; possibly creative use of support | Coherent and convincing to reader; uses transitional devices/referential ties/logical connectors to create and further a particular style | Mostly error-free; frequent success in using language to stylistic advantage; idiomatic syntax; non-English patterns not evident | Meaning clear; sophisticated range, variety; often idiomatic; often original, appropriate choices; may have distinctions in nuance for accuracy, clarity | Uses mechanical devices for stylistic purposes; may be error-free |
| 10 | Appropriate native-like standard written English | Appropriate native-like standard written English | Appropriate native-like standard written English | Appropriate native-like standard written English | Appropriate native-like standard written English | Appropriate native-like standard written English |

# APPENDIX F-1

## Pre and post-test scores of the students' essays in the experimental CL group

| name | Pre-test | | | Post-test | | |
|---|---|---|---|---|---|---|
| | First maker | Second marker | Mean score | first maker | second maker | Mean score |
| 1 | 23 | 24 | 23.5 | 45 | 27 | 36 |
| 2 | 21 | 21 | 21 | 46 | 48 | 47 |
| 3 | 19 | 19 | 19 | 32 | 27 | 29.5 |
| 4 | 14 | 14 | 14 | 29 | 29 | 29 |
| 5 | 15 | 15 | 15 | 32 | 29 | 30.5 |
| 6 | 23 | 24 | 23.5 | 47 | 48 | 47.5 |
| 7 | 13 | 11 | 12 | 42 | 14 | 28 |
| 8 | 15 | 6 | 10.5 | 27 | 27 | 27 |
| 9 | 5 | 7 | 6 | 17 | 6 | 11.5 |
| 10 | 19 | 13 | 16 | 26 | 24 | 25 |
| 11 | 19 | 15 | 17 | 21 | 23 | 22 |
| 12 | 21 | 11 | 16 | 42 | 24 | 33 |
| 13 | 22 | 17 | 19.5 | 35 | 35 | 35 |
| 14 | 14 | 11 | 12.5 | 20 | 23 | 21.5 |
| 15 | 16 | 14 | 15 | 28 | 25 | 26.5 |
| 16 | 22 | 17 | 19.5 | 29 | 27 | 28 |
| 17 | 18 | 14 | 16 | 33 | 15 | 24 |
| 18 | 14 | 12 | 13 | 27 | 19 | 23 |
| 19 | 21 | 24 | 22.5 | 32 | 27 | 29.5 |
| 20 | 19 | 14 | 16.5 | 44 | 40 | 42 |
| 21 | 18 | 12 | 15 | 24 | 28 | 26 |
| 22 | 17 | 19 | 18 | 27 | 27 | 27 |
| 23 | 13 | 11 | 12 | 32 | 24 | 28 |

# APPENDIX F-2

## Pre and post-test scores of the students' essays in the control TL group

| Name | Pre-test | | | Post-test | | |
|---|---|---|---|---|---|---|
| | First maker | Second maker | Mean score | First maker | Second maker | Mean score |
| 1 | 16 | 36 | 26 | 19 | 17 | 18 |
| 2 | 19 | 18 | 18.5 | 26 | 23 | 24.5 |
| 3 | 21 | 24 | 22.5 | 19 | 18 | 18.5 |
| 4 | 19 | 24 | 21.5 | 22 | 18 | 20 |
| 5 | 12 | 12 | 12 | 24 | 23 | 23.5 |
| 6 | 22 | 25 | 23.5 | 36 | 30 | 33 |
| 7 | 33 | 36 | 34.5 | 45 | 47 | 46 |
| 8 | 24 | 36 | 30 | 32 | 34 | 33 |
| 9 | 20 | 24 | 22 | 22 | 29 | 25.5 |
| 10 | 13 | 15 | 14 | 14 | 13 | 13.5 |
| 11 | 16 | 12 | 14 | 22 | 20 | 21 |
| 12 | 14 | 14 | 14 | 31 | 27 | 29 |
| 13 | 13 | 15 | 14 | 22 | 21 | 21.5 |
| 14 | 19 | 16 | 17.5 | 27 | 25 | 26 |
| 15 | 34 | 42 | 38 | 39 | 40 | 39.5 |
| 16 | 20 | 25 | 22.5 | 32 | 34 | 33 |
| 17 | 18 | 14 | 16 | 23 | 21 | 22 |
| 18 | 17 | 14 | 15.5 | 26 | 24 | 25 |
| 19 | 6 | 6 | 6 | 19 | 16 | 17.5 |
| 20 | 16 | 14 | 15 | 26 | 25 | 25.5 |
| 21 | 10 | 12 | 11 | 19 | 18 | 18.5 |
| 22 | 13 | 13 | 13 | 24 | 16 | 20 |
| 23 | 18 | 18 | 18 | 21 | 22 | 21.5 |
| 24 | 12 | 15 | 13.5 | 21 | 22 | 21.5 |
| 25 | 19 | 7 | 13 | 27 | 20 | 23.5 |

# APPENDIX G

## First Marker: Group one

| Names: | organization | | Development | | Cohesion | | Structure | | Vocab. | | Mechanics | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post Test |
| 1 | 4 | 7 | 4 | 7 | 4 | 8 | 3 | 8 | 4 | 8 | 4 | 7 | 23 | 45 |
| 2 | 4 | 7 | 3 | 8 | 3 | 7 | 4 | 8 | 3 | 8 | 4 | 8 | 21 | 46 |
| 3 | 3 | 5 | 3 | 5 | 4 | 5 | 3 | 6 | 3 | 5 | 3 | 6 | 19 | 32 |
| 4 | 2 | 5 | 2 | 5 | 3 | 5 | 2 | 5 | 3 | 4 | 2 | 5 | 14 | 29 |
| 5 | 2 | 5 | 2 | 5 | 3 | 6 | 3 | 5 | 3 | 5 | 2 | 6 | 15 | 32 |
| 6 | 4 | 8 | 3 | 8 | 4 | 8 | 4 | 7 | 3 | 8 | 5 | 8 | 23 | 47 |
| 7 | 2 | 7 | 3 | 7 | 2 | 7 | 2 | 6 | 2 | 7 | 2 | 8 | 13 | 42 |
| 8 | 2 | 4 | 2 | 5 | 3 | 5 | 3 | 5 | 2 | 4 | 3 | 4 | 15 | 27 |
| 9 | 1 | 3 | 0 | 3 | 1 | 3 | 1 | 2 | 1 | 3 | 1 | 3 | 5 | 17 |
| 10 | 3 | 4 | 3 | 3 | 3 | 5 | 3 | 5 | 4 | 5 | 3 | 4 | 19 | 26 |
| 11 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 2 | 3 | 3 | 3 | 19 | 21 |
| 12 | 4 | 7 | 3 | 7 | 3 | 8 | 4 | 7 | 3 | 7 | 4 | 6 | 21 | 42 |
| 13 | 4 | 6 | 4 | 6 | 3 | 6 | 3 | 5 | 4 | 6 | 4 | 6 | 22 | 35 |
| 14 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 4 | 3 | 4 | 2 | 3 | 14 | 20 |
| 15 | 3 | 5 | 3 | 4 | 3 | 5 | 3 | 5 | 2 | 5 | 2 | 4 | 16 | 28 |
| 16 | 4 | 5 | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 5 | 3 | 6 | 22 | 29 |
| 17 | 3 | 5 | 3 | 5 | 3 | 6 | 3 | 5 | 3 | 6 | 3 | 6 | 18 | 33 |
| 18 | 2 | 4 | 2 | 4 | 3 | 5 | 3 | 4 | 2 | 4 | 2 | 6 | 14 | 27 |
| 19 | 4 | 5 | 3 | 6 | 3 | 6 | 4 | 5 | 4 | 5 | 3 | 5 | 21 | 32 |
| 20 | 3 | 7 | 3 | 8 | 4 | 8 | 3 | 8 | 3 | 7 | 3 | 6 | 19 | 44 |
| 21 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 2 | 4 | 4 | 5 | 18 | 24 |
| 22 | 3 | 5 | 2 | 4 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 | 17 | 27 |
| 23 | 1 | 5 | 2 | 5 | 2 | 5 | 3 | 6 | 2 | 5 | 3 | 6 | 13 | 32 |

## First Marker: Group two

| Names | organization | | Development | | Cohesion | | Structure | | Vocab. | | Mechanics | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | post test |
| 1 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 16 | 19 |
| 2 | 4 | 3 | 3 | 4 | 3 | 5 | 3 | 4 | 3 | 5 | 3 | 5 | 19 | 26 |
| 3 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 21 | 19 |
| 4 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 19 | 22 |
| 5 | 2 | 5 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 3 | 2 | 4 | 12 | 24 |
| 6 | 4 | 6 | 4 | 6 | 4 | 6 | 3 | 5 | 3 | 6 | 4 | 7 | 22 | 36 |
| 7 | 6 | 7 | 6 | 7 | 5 | 8 | 5 | 7 | 6 | 8 | 5 | 8 | 33 | 45 |
| 8 | 5 | 6 | 4 | 6 | 4 | 5 | 4 | 5 | 4 | 5 | 3 | 5 | 24 | 32 |
| 9 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 20 | 22 |
| 10 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 13 | 14 |
| 11 | 2 | 3 | 3 | 4 | 2 | 3 | 3 | 4 | 3 | 4 | 3 | 4 | 16 | 22 |
| 12 | 3 | 5 | 3 | 5 | 2 | 4 | 2 | 6 | 2 | 5 | 2 | 6 | 14 | 31 |
| 13 | 2 | 3 | 2 | 3 | 3 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 13 | 22 |
| 14 | 3 | 4 | 3 | 4 | 4 | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 19 | 27 |
| 15 | 6 | 7 | 6 | 6 | 5 | 6 | 6 | 7 | 6 | 6 | 5 | 7 | 34 | 39 |
| 16 | 4 | 6 | 3 | 5 | 3 | 6 | 3 | 5 | 4 | 5 | 3 | 6 | 20 | 32 |
| 17 | 4 | 5 | 3 | 5 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 18 | 23 |
| 18 | 3 | 4 | 3 | 4 | 2 | 5 | 3 | 5 | 3 | 4 | 3 | 4 | 17 | 26 |
| 19 | 1 | 3 | 1 | 3 | 1 | 4 | 1 | 3 | 1 | 3 | 1 | 3 | 6 | 19 |
| 20 | 2 | 4 | 3 | 5 | 3 | 5 | 3 | 4 | 2 | 4 | 3 | 4 | 16 | 26 |
| 21 | 1 | 3 | 2 | 3 | 2 | 3 | 2 | 4 | 1 | 3 | 2 | 3 | 10 | 19 |
| 22 | 2 | 4 | 2 | 4 | 2 | 5 | 2 | 5 | 3 | 3 | 2 | 3 | 13 | 24 |
| 23 | 3 | 4 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 18 | 21 |
| 24 | 2 | 3 | 2 | 3 | 2 | 5 | 2 | 3 | 2 | 4 | 2 | 3 | 12 | 21 |
| 25 | 3 | 4 | 4 | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 3 | 5 | 19 | 27 |

## Second Marker: Group one

| Names: | organization | | Development | | Cohesion | | Structure | | Vocab. | | Mechanics | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post Test |
| 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 24 | 27 |
| 2 | 4 | 8 | 3 | 8 | 3 | 8 | 4 | 8 | 3 | 8 | 4 | 8 | 21 | 48 |
| 3 | 3 | 4 | 3 | 4 | 4 | 5 | 3 | 5 | 3 | 4 | 3 | 5 | 19 | 27 |
| 4 | 2 | 4 | 2 | 4 | 3 | 5 | 2 | 5 | 3 | 4 | 2 | 5 | 14 | 29 |
| 5 | 2 | 4 | 2 | 4 | 3 | 5 | 3 | 6 | 3 | 6 | 2 | 4 | 15 | 29 |
| 6 | 4 | 9 | 3 | 8 | 4 | 8 | 4 | 7 | 4 | 8 | 5 | 8 | 24 | 48 |
| 7 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 4 | 3 | 2 | 3 | 2 | 11 | 14 |
| 8 | 1 | 4 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 4 | 1 | 4 | 6 | 27 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 7 | 6 |
| 10 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 3 | 4 | 2 | 4 | 13 | 24 |
| 11 | 3 | 5 | 3 | 5 | 3 | 4 | 2 | 3 | 2 | 3 | 2 | 3 | 15 | 23 |
| 12 | 2 | 4 | 2 | 5 | 1 | 5 | 2 | 4 | 2 | 4 | 2 | 2 | 11 | 24 |
| 13 | 2 | 7 | 3 | 6 | 3 | 7 | 3 | 5 | 3 | 5 | 3 | 5 | 17 | 35 |
| 14 | 2 | 4 | 2 | 4 | 3 | 3 | 1 | 4 | 1 | 4 | 2 | 4 | 11 | 23 |
| 15 | 2 | 5 | 2 | 5 | 2 | 4 | 2 | 4 | 3 | 4 | 3 | 3 | 14 | 25 |
| 16 | 3 | 4 | 3 | 4 | 3 | 4 | 2 | 5 | 3 | 5 | 3 | 5 | 17 | 27 |
| 17 | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 14 | 15 |
| 18 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 4 | 2 | 3 | 2 | 3 | 12 | 19 |
| 19 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 24 | 27 |
| 20 | 3 | 6 | 2 | 7 | 2 | 7 | 2 | 7 | 2 | 6 | 3 | 7 | 14 | 40 |
| 21 | 2 | 5 | 2 | 4 | 2 | 4 | 2 | 5 | 2 | 5 | 2 | 5 | 12 | 28 |
| 22 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 19 | 27 |
| 23 | 1 | 3 | 1 | 3 | 1 | 3 | 3 | 4 | 2 | 4 | 3 | 4 | 11 | 24 |

## Second Marker: Group Two

| Names | organization | | Development | | Cohesion | | Structure | | Vocab. | | Mechanics | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test | Pre test | Post test |
| 1 | 6 | 2 | 6 | 2 | 6 | 3 | 6 | 4 | 6 | 3 | 6 | 3 | 36 | 17 |
| 2 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 5 | 18 | 23 |
| 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 24 | 18 |
| 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 24 | 18 |
| 5 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 3 | 2 | 4 | 12 | 23 |
| 6 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 25 | 30 |
| 7 | 6 | 8 | 6 | 8 | 6 | 8 | 6 | 7 | 6 | 8 | 6 | 8 | 36 | 47 |
| 8 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 5 | 36 | 34 |
| 9 | 4 | 6 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 24 | 29 |
| 10 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 15 | 13 |
| 11 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 4 | 1 | 3 | 2 | 4 | 12 | 20 |
| 12 | 3 | 4 | 3 | 4 | 3 | 4 | 1 | 5 | 2 | 5 | 2 | 5 | 14 | 27 |
| 13 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 4 | 2 | 4 | 2 | 4 | 15 | 21 |
| 14 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 2 | 5 | 2 | 4 | 16 | 25 |
| 15 | 7 | 8 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 42 | 40 |
| 16 | 5 | 5 | 4 | 5 | 4 | 5 | 3 | 7 | 5 | 6 | 4 | 6 | 25 | 34 |
| 17 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 3 | 2 | 3 | 3 | 3 | 14 | 21 |
| 18 | 2 | 4 | 2 | 4 | 2 | 4 | 3 | 4 | 2 | 4 | 3 | 4 | 14 | 24 |
| 19 | 1 | 2 | 1 | 2 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | 6 | 16 |
| 20 | 2 | 4 | 2 | 4 | 2 | 4 | 3 | 5 | 2 | 4 | 3 | 4 | 14 | 25 |
| 21 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 12 | 18 |
| 22 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 13 | 16 |
| 23 | 3 | 4 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 18 | 22 |
| 24 | 2 | 3 | 2 | 3 | 2 | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 15 | 21 |
| 25 | 1 | 3 | 1 | 3 | 2 | 4 | 1 | 2 | 1 | 4 | 1 | 4 | 7 | 20 |

# APPENDIX K

## Distinguishing the researcher's study from previous studies (e.g. Grami, 2010)

Even though that this study is similar to some previous studies namely Grami (2010), there are some differences which are summarized in the following table.

| Category | Grami's study | The researcher's study |
|---|---|---|
| **Aim of the study** | Evaluating the success of integrating peer feedback into ESL writing classes in terms of developing writing and social skills. | Investigating whether using collaborative learning in one class could help ESL students to produce better written texts in terms of organization, development, coherence, vocabulary, structure and mechanics |
| **The sample** | The population were not equal. 61.6% of the students were in both first and second year, whereas the remaining was in third and fourth year. | The population were equal. All students were in the second year in the English language department at Al-Qassim University in Saudi Arabia. |
| **Methods of data collections** | Semi structured questionnaires | the questionnaire items were in closed formats |
| **Writing class divisions** | The treatment group trained to use peer feedback beside to teacher-written feedback; whereas a control group received only teacher-written feedback. | The treatment group trained to practice writing process approach though collaboration, whereas the control group trained to practice writing process approach to writing individually with help from teacher. |
| **Students' training** | Training students in the treatment group to act as both giver and receiver of the feedback. | Collaborative learning in the experimental group was based on placing an expert student in each group who plays essential roles during the writing process. |

# APPENDIX M

## Presenting experimental CL and control TL group equally in terms of proficiency before start of study

| | N | Mean | Mean difference | T | Sig. (2-tailed) |
|---|---|---|---|---|---|
| Experimental CL group | 30 | 68.6 | 0.9 | 287 | 0.77 |
| Control TL group | 34 | 69.5 | | | |

# APPENDIX N

## Letter to support lack of bias in favouring one group unconsciously during teaching experimental and control groups

بسم الله الرحمن الرحيم

Kingdom of Saudi Arabia
Ministry of Higher Education
Qassim University
VICE PRESIDENT'S OFFICE
College of Arabic Language & Social Studies

المملكة العربية السعودية
وزارة التعليم العالي
جامعة القصيم
كلية اللغة العربية والدراسات الاجتماعية

Qassim University جامعة القصيم

الرقم :  التاريخ : / / ١٤٣ هـ

المرفقات :  الموضوع :

**To Whom It May Concern**

The letter is to confirm that Mr. Albesher had obtained permission to teach male students studying in the second year in the English Language and Translation Department at Qasssim University. He aimed to investigate the influence of collaborative learning to develop Students' writing skill. Mr. Albesher taught two groups writing skill through stages and activities namely pre-writing, drafting, revising and editing: the experimental group that were taught by collaborative learning and the control group that were taught by a traditional learning method. As the head of the English Language and Translation Department, I confirm that all students are taught similarly without favouring any specific ones and without any differences. This is based on my supervising and observing all classes throughout the semester.

If you have any queries regarding this matter, please do not hesitate to contact me through my email: faljumah@qu.edu.sa

*Fahad AlJumah, Ph.D.*

*Assistant Professor of English*
*Head of the English Language and Translation Department*
*College Of Arabic Language and Social Studies*
*Qassim University*
*25/06/2009*

كلية اللغة العربية والدراسات الاجتماعية Qassim University جامعة القصيم COLLEGE OF ARABIC LANGUAGE & SOCIAL STUDIES

P.O.Box: 6611 - Buraidah: - Tel: (06)3220271 - Fax: (06)3220112

ص.ب: ٦٦١١ - بريدة: - هاتف: ٣٢٢٠٢٧١ (٠٦) - فاكس: ٣٢٢٠١١٢ (٠٦)