Chapter One Introduction

CHAPTER ONE INTRODUCTION

1.0 An overview

This introductory chapter is an overview of the present study. First it includes the background about cooperative learning, statement of the problem, significance of the study, the objectives, the study questions, the hypotheses, and the methodology of the study. Finally, it's concluded by the limits of the study.

1.1 Background

This study aimed at investigating the effect of cooperative learning on improving the communication skills of learners of English as a foreign language. Throughout the years of development of the methods and techniques of teaching English language, the main target has never been other than the promotion of communication skills. This has always been built on two important factors: (a) the nature of language, and (b) the nature of language learning. In the few past decades language has been viewed as a tool for communication or a social activity and language learning has been seen as a process of active and meaningful interaction between learners in a community. Hence, is the link between the development of communication skills and cooperative learning?

Cooperative, according to the Advanced Learner's Dictionary is "involving doing something together or working together with others towards a shared aim. e.g., cooperative activity is essential to effective community work".

The expression 'cooperative learning' means every kind of activity, whereby students work together in small groups to achieve common goals. So, within the cooperative task, individuals seek outcomes that are beneficial to all of them. Olsen and Kagan (1992: 8) stated that cooperative learning is a group of learning activity organized, so that learning is dependent on the socially structured exchange of information among learners in groups with different size, in which each learner is considering his/her own learning, and is motivated to increase the learning of other students. So, considering this proposition, the idea of 'cooperative learning', generally, is regarded as one of the learnercentered approaches.

The study will take a student-centered cooperative approach to improve EFL communication skills as students perform actively together and lead the activities, tasks and games inside classrooms.

The study aims at providing an English communication environment where learners can enhance their oral production skillfully and in an enjoyable way.

Then, to improve communication skills of EFL learners, cooperative learning is chosen as an effective and a promising approach to realize an effective method of teaching.

Kessler and Fathman (1992) "Cooperative learning will trigger learners to practice language skills in various occasions". Also, cooperative learning provides learners the opportunities to perform individual accountability. In this case, the students could learn to take responsibility for learning and help each other to gain progress. The learning process might, therefore, become more impressive and meaningful to the language learners.

1.2 Statement of the study problem

The problem, which the present study attempts to investigate, is the importance of being able to communicate and interact effectively in

English language. So, from the researcher's own experience as a teacher in Kingdom of Saudi Arabia for three years, and through keeping close with his classmates during the time of the master program, there is a noticeable weakness and difficulty in communicating in English. Learners who have attained some reasonable level of linguistic competence lack the necessary communicative competence which enables them to clearly express their ideas and feelings or to communicate factual information at all levels. Many students have a satisfactory level of language mastery in terms of vocabulary, grammar and pronunciation. However, they lack the ability to successfully hold a thread of conversation for a reasonable period of time with ease and efficiency.

The reasons for learners' inability to speak well are many and varied. On the other hand, teachers of English language face difficulties in improving participation, interest, performance and creating a relaxed mood and confidence inside classrooms.

1.3 Significance of the Study

Many teachers bring into question the importance of investigating the influence of cooperative learning on EFL learners' communication skills. So, the research expected outcomes will shed light on benefits of using cooperative learning in developing communication skills.

Also, cooperative learning is useful and an inviting technique to be adopted by either teachers and practiced by learners and as to adopt the use of cooperative learning.

1.4 Objectives of the Study

The aim of this study is:

- 1. To investigate ways of and contribute to the improvement of learners' weak performance and poor production of English.
- 2. Focus on participation, interest and self-dependence through the idea of cooperative language learning, in order to speak well
- 3. Determine the effect of the cooperative language learning approach on students' achievements.
- 4. To better understand the necessity of applying small group work that can be utilized in improving the communication skills to Sudanese students at universities.
- 5. To emphasize the significance of increasing opportunities for students' communicating time.
- 6. To draw attention to some critical factors that can play a great role in improving communication skills such as self-assertion, building confidence, relaxation and creating cordial environment.

1.5 Study Questions

This study seeks to provide answers to the following questions:

- 1. To what extent can cooperative learning improve EFL learners' communication and social skills?
- 2. To what extent do teachers encourage students to practice the foreign language as required?

1.6 Study Hypotheses

- 1. Cooperative learning enhances the students' ability to communicate with ease and efficiency.
- 2. Cooperative learning enables teachers to encourage students to practice build up their communication skills in the foreign language.

1.7 Study Methodology

This study is partly experimental and partly descriptive.

In order to provide answer question one and to verify hypothesis one above, there will be two groups of students. One group (the experimental group) will be taught through the techniques of cooperative learning. The second one (the control group) will be taught in traditional manner. The two groups will have a pre-test which will be conducted before the experiment. Then, after the end of the experiment, they will sit a posttest. The experiment will take ten weeks of instructions. Relevant statistical significance of the difference in performance between the two groups.

In order to provide answer for question two, two instruments will be used to collect data:

- (a) A questionnaire for teachers, which will be administered to reliable referees i.e. the supervisors and some doctors of SUST.
- (b) An interview with some experts in the field.

The data collected will be analyzed in the light of the pre-mentioned hypotheses by designing relevant statements.

And the results will provide necessary evidence for the questions and the hypotheses.

Moreover, it insures the benefits and the positive effects of using cooperative learning in improving the EFL learners' communication skills. The study will be conducted through the related literature written on the use of cooperative learning, focusing on communication skills. Then giving recommendations and some applicable suggestions.

1.8 Limits of the study

The topic is "The Influence of Cooperative Learning on Improving EFL Learners' Communication Skills".

- First year university students as EFL Learners to be taught for whole semester, practicing the cooperative learning strategy.
- Some experts in the field of education.
- A questionnaire for some Sudanese university staff.

Chapter Two

Literature Review and Previous Studies

CHAPTER TWO

LITERATURE REVIEW AND PREVIOUS STUDIES

2.0 Introduction

In this chapter, the researcher underscores the idea of Cooperative Learning in the Holy Quran, in the honored Sunnah, and in the general sense. Also to review different points of views about, what is cooperative learning, theoretical view, exploring its historical base, types of cooperative learning, the elements of cooperative learning, the techniques, the ideal group size, in addition to some useful aspects of cooperative learning.

2.1 Definition of Cooperative Learning

Cooperative learning is a learner-centered instructional strategy, whereas the role of the instructor is to facilitate the process of learning. In this respect, all the members of the groups are practicing the language in an ample time. (Li, M. & Lam, B. H., 2003: 1)

"Cooperative learning is a student-centered facilitated instructional strategy, in which a small group of students is responsible for its own learning, and the learning of all group members. Students interact with each other in the same group to acquire and practice the elements of a subject matter in order to solve a problem, complete a task or achieve a goal".

Cooperative learning is not only having students sit side by side at the same table talking to each other while doing their assignments.

Cooperation is far more than social loafing, in which students just assign their names at the end of a report to a group of students, where one student does all the work and the others put their names on the paper as well. It involves much more than being physically beside each other, speaking, discussing material, helping themselves and sharing ideas with other students.

And here are different names have been given to this type of teaching, such as: shared learning, unified learning, peer learning, co-active learning, collective learning, joint learning, coordinate learning and collaborative learning.

However, though they look the same, there are some slight differences regarding their applications.

Alice Macpherson (2015:1)

"Collaborative learning is a part of a group of teaching/learning techniques, where students interact with each other to acquire and practice the elements of a subject matter, and to meet common learning goals. It is much more than just putting students in groups and hoping for the best".

McCormick and Donato (2000) look at cooperative learning as an instructional method that depends on the exchange of information among pairs and group members. Each learner carries responsibility for his\her own learning and responsible for the group as the idea of cooperative learning is simple. Class members are organized into small groups after receiving instructions from the teacher.

Philosophers and psychologists in 1930 up to 1950 such as Deutch et al. (1949), influenced positively the idea of cooperative learning practiced today. And their participation could be realized through developing the students' knowledge and social skills, even outside the class, establishing relationships between the group members; in order to successfully carry out and achieve the learning goals. This is what is called positive social interdependence, which means the idea of making the student responsible for contributing to group knowledge.

Then, Johnson and Johnson (1994), actively, have contributed to CL theory. They proved better communication, high acceptance and support, which increase in a variety of thinking strategies among individuals in the group.

So, all the above-mentioned scholars and educationalists come to a consensus that, no one group members will possess all information, skills, competence and the useful resources, are highly needed for the process of learning. However, it is a matter of sharing ideas and cooperation. It is seen creative in a sense that, it engages students to learn in groups, constituting and giving a sense of a new way, which resulted in an interesting and a unified method of teaching.

2.2 Historical Profile

Prior to World War II, Allport, Watson, Shaw and Mead as social theorists, started establishing cooperative learning theory, when they found that a group work was more active and efficient in quality, quantity and overall productivity, when comparing to working alone.

May and Doob (1937) concluded that, people who work together and cooperate in achieving shared goals, were more successful in realizing outcomes than those who strived independently to complete the same goals. Furthermore, they realized that, the individual achievers had a greater likelihood of showing competitive behaviors.

Late in 1994, (Johnson and Johnson) developed the theory by publishing the five elements of Cooperative Learning as follows (positive interdependence – individual accountability, face-to-face interaction, social skills and group processing). They consider these five elements as essential and crucial for group learning achievements.

2.3 Theoretical Framework

According to Johnson, D. W., the theoretical perspective of cooperative learning depends on what is called 'social interdependence theory'.

Social interdependence is realized when the results of individuals are influenced by their own and others' actions. So there are two types of social interdependence: positive, when the actions of individuals promote the achievements of joint goals, and a good example for that, is just like the four pillars that are standing to keep the roof safe.

The second one is a negative interdependence: when the actions of individuals obstruct the achievements of others' goals.

According to Slavin (1985) as cited in Babiker, there are two major theoretical perspectives related to cooperative learning: motivational and cognitive. The motivational theories of CL emphasize the students' incentives to do academic works while the cognitive theories emphasize the effects of working together.

In a study in which a course of nutrition was taught, the researcher concluded that CL was more effective method than individualistic one.

Also, in some other studies, the outcomes proved that more than 95% of elementary students enjoyed and enchanted by CL activities and had learnt lots about many sciences.

2.4 The Holy Quran and the Perspective of Cooperative Learning

The idea of cooperative cooperation is not a newly discovered term. On the contrary, it is an old one. And this has been explained obviously when Allah "the supreme being" says in the Holy Quran: (virtue, righteousness and piety, and do not cooperate in sin and aggression).

So, cooperation has a positive concept and a negative one. However, the researcher dealt only with former one, as ordered above to cooperate positively in all fields of life, concerning the good deeds in this world and the life hereafter.

2.4.1 Samples of Cooperation in the Holy Quran

Allah says in the Holy Quran: (24) (Go to pharaoh. For he has indeed transgressed all (30) also many verses of the Holy Quran support the idea of cooperation. So if we consider the word "minister" in Arabic is called "Wazeer", which means "refuge", and which is rooted back to the Latin, to mean "servant" we find that, the connotation of the word covers a spectrum-scale as follows:

- (a) The heavy burden.
- (b) The refuge or shelter.
- (c) To assist.

All that is just to realize a very important goal which indicates worshiping and remembering of Allah through cooperation and being together. And this is very clear in the verse (ALQasas) "And my brother Aaron-He is more eloquent in speech than I: so send him with me as a helper, to confirm (and strengthen) me: for I fear that they may accused me of falsehood." This Holy verse, also, emphasizes the idea of cooperation; because the Arabic word "Ridaa", which means "Aid", confirms and indicates cooperation.

Moreover, Sayednah Moses seeks a help from The Almighty to be supported by his brother "Aaron" And though, sayednah Moses is "one of those of determination and strong will", and in a high position of prophecy, he asked for help. That is only to ensure the idea of cooperation.

In the verse of Cave, Sayednah Moses said: that was what we were seeking after. So, they went back on their footsteps, following the path they come (65). So, they found one of our servants, on whom we had bestowed mercy from ourselves and whom we had taught knowledge from our presence. (66) Moses said to him: May I follow thee on the footing that thou teach me something of the 'Higher'' Truth which thou has been taught?

Sayednah Moses, his attendant and the servant of Allah form a group of learning process. Sayednah Moses has the ability to speak to Allah vocally without any revelation, i.e., mediation. Also, he could speak and receive the knowledge and whatever he wants directly from Allah.

Actually, he needs not to be assisted. But, he did so to teach us a lesson of high importance that, which is "cooperation is a necessity".

Moreover, the fruitful discussion among the three members resulted into positive and good results.

2.4.2 The Teaching and Learning through Discussion in the Holy Quran

The fruit of education requires the participation of the teacher in learning process in real and positive mode. The discussion encourages the learner

to interact and respond in the education of specific situation and debate. Moreover, the oral dialogue between the learner and the teacher will be culminated in positive and authentic aspect of learning.

This appears clearly in the Holy Quran, when the discussion that takes place between Sayednah Shu'aib and his people: (And to the debater and his brother Shu'aib said: O my people, serve Allah you from other god and not subtract weights and measures, I see you are safe (85) They said O Shu'aib Oslatk order to leave what our father worshipped (78) said O my people do you see that you are aware of my lord.

This interaction will foster and reinforce the process of learning. Also, the power of effective discussion will help provide greater impact on listeners and speakers.

2.5 The Idea of Cooperative Learning Process in the Honored Sunnah

The word 'Sunnah' literally means: a clear and well-trodden path. So, we are as Muslims have to believe that 'Sunnah' of Sayednah Mohamed 'peace and blessing be upon him' includes his specific words, habits, practices and silent approval. According to Muslims belief, Sayednah Mohamed is the best exemplar for Muslims, and his practices are to be adhered to in fulfilling the divine religions, carrying out religious rites, and molding life in accordance with the will of God.

In this respect, the researcher extracts some relevant wisdoms that commensurate with the idea of cooperation and as people know, we had in Messenger of Allah a good example; these are some invaluable wisdoms said by him:

(a) "And Allah helps his slave so long his slave helps his brother".

This is a serious fact, you are to cooperate.

- (b) Whoever helps ease someone in difficulty, Allah will make it easy for him.
- (c) Narrated Sayednah Anas ibn Malik: Allah Apostle said: Help your brother whether he is an oppressor or he is an oppressed one (24) the prophet Sayednah Mohamed "peace and blessing be upon him" said: by preventing him from oppressing others.
- (d) Sayednah Mohamed "peace and blessing be upon him" diversifies this unique methods of teaching. And this is very obvious when he "peace and blessing be upon him" asked his companions about a tree that its leaves never fall down and just like a Muslim. So, they start thinking together more and more in a brain storming session to generate a meaningful answer. And at the end, they come to conclusion that it is (a palm).
- (e) Sayednah Mohamed "peace and blessing be upon him" asked his companions: do you know who is a bankrupt? So, he "peace and blessing be upon him" did not give them the answer from the very scratch. But, skillfully, offered them an ample time to think to ensure and boost the process of thinking, and learning.

From what have been mentioned above, Sayednah Mohamed "peace and blessing be upon him" offering his companions a chance to think cooperatively and then answering the question later on.

2.6 The Common Sense and the Idea of Cooperation

This portion of the study is assigned to show the role of the worker bee in a 'Hive'.

Worker bees do a considerable amount of work, day in and day out, they work as a team. So, understanding their role deepens people's fascination and appreciation of these remarkable creatures. Considering the queen bee and according to her royal highness, she is unable to tend to herself most basic needs; some of the workers do these tasks for her. So, even those minute creatures embody the importance of cooperation and how nice life will be when it goes hand in hand towards cooperation.

2.6.1 The Cooperation of the Colony of Bees and its Organization

Honey bees are social insects, which mean that they live together in large well-organized family groups. These social insects are highly evolved insects that engage in a variety of complex tasks, not practiced by the multitude of solitary insects.

Communication, complex nest construction, defense, environmental control and division of labor, are just some of the behaviors that honey bees have developed to exist successfully in social colonies.

These fascinating behaviors make social insects, generally, and honey bees in particular, among the most fascinating creatures on earth.

A honey bee colony normally consists of three kinds of adult bees as follows, workers, drones and queen. Several thousand worker bees cooperate in nest building, food collection, and brood rearing as well.

2.7 A Comprehensive Survey of Cooperative Learning in Improving EFL Learners' Communication Skills

Students learn best when they are positively and actively involved in the process of learning, concerning the improvement of speaking. Students who work and interact in teams, usually like to learn more of what is taught and keep it longer than when the same content is been taught in either individualistic or competitive ways. Moreover, learners who work in groups seem to be pleased and more satisfied.

Cooperative learning accommodates structuring classes around small groups that cooperate together in such a way that each group members' success is dependent on the group's success.

Ross and Smythe (1995) describe successful cooperative learning tasks as intellectually demanding, creative, open-ended, and involve higher order thinking tasks.

And since CL is a necessity and increasing learners' motivation to gain a foreign language creatively, the needs for such instructional technique is highly required as effective and useful feature of communicative language.

According to Brant, *et al.*, (2002) as cited in Babikir (2013: 7) stated that cooperative learning refers to the instructional use of small groups, in which students work together to achieve meaningful school tasks.

The interaction among students in our Sudanese universities and schools become a neglected aspect of instruction. A considerable number of Sudanese instructors spend much time to speak inside the class, whereas less time is restricted or given to interact between teachers and students. But the interaction among students themselves is relatively an ignored aspect.

2.8 Types of Cooperative Learning

There are three types of CL which have been classified as follows:

2.8.1 Formal Cooperative Learning

This type of CL is formed, facilitated and monitored by the educator over time, and is used to achieve team goals in task work e.g., completing a unit. So, it is convenient to adapt a course material and assignment. The optimal group size can vary from 2 to 6 students enriched with discussions lasting from a few minutes up to a complete period. And there are some examples for this kind of learning such as:

- (a) The Jigsaw technique.
- (b) Laboratory and experiment assignments.
- (c) Peer review work, e.g., editing writing assignments.

(Jigsaw activities are wonderful; because the students assume the role of the teacher on a given topic and are in charge of teaching the topic to classmate). So, the idea is that, if the students can teach something, they have already understood the material well.

2.8.2 Informal Cooperative Learning

This type of learning includes group learning with passive teaching material through small groups during the lesson or through discussion at the end of the lesson. And (turn-to-your-partner discussions) is a good and convenient technique for this informality. However, what characterizes this pairing is that, these groups are often temporary and can be changed from one lesson to another. Unlike formal cooperative learning where two students may be lab partners throughout the entire semester, exchanging to one another's ideas and knowledge of a science.

2.8.3 Base Group Learning

This technique is very effective for learning complex subject matter throughout the whole semester and boosting supportive peer relationships, which – in turn – resulted in full motivation and strength among the students' commitment to the group education, besides developing self-esteem and self-assertion. The benefit of this base group approach also makes the students caring of educating their peer ones in the event that a member was absent. This is useful for both: individual learning, as well as social support.

2.9 Elements of Cooperative Learning

Johnson and Johnson (2009) have a remarkable contribution in the field of CL, and according to them; CL is doubtlessly a great way of learning. It is a great field of research and study as well.

It motivates students to work in groups and teams. The core aim of this group or team is to achieve a certain task-groups for collaborative purpose or for some specific activity.

According to Johnson and Johnson, there are five elements of CL, which are considered as pillars of cooperative learning.

Ibid posited five elements that mediate the effectiveness of cooperation. Also, Brown and Ciuffeklli Parker (2010) discussed these five basic and essential elements of cooperative learning:

1) Positive Interdependence:

- (a) Students must fully participate and put forth effort with their group.
- (b)Each group member has a task, role or responsibility, therefore must believe that they are responsible for their learning and that of their group.

2) Face-to-Face Promotive Interaction:

- (a) Members promote each other's success.
- (b) Students explain to one another what they have or are learning, and assist one another with understanding and completion of assignments.

3) Individual and Group Accountability:

(a) Each student must demonstrate mastery of content being studied.

- (b)Each student is accountable for their learning and work, therefore, eliminating social loafing.
- 4) Social Skills:
 - (a) Social skills that must be taught in order for successful cooperative learning to occur.
 - (b)Skills include effective communication, interpersonal and group skills which accommodates and realizes the followings:
 - 1. Leadership.
 - 2. Decision-making.
 - 3. Trust-building.
 - 4. Friendship-development.
 - 5. Communication. Conflict-management skills.

5) Group Processing:

- (a) Group processing occurs when group members: 1) reflect on which member actions were helpful and 2) make decision about which actions to continue or change.
- (b) The purpose of the group processing is to clarify and improve the effectiveness with which members carry out the processes necessary to achieve the group's goals.

In order for students' achievements to enhance noticeably, two characteristics must be presented.

- 1. When designing CL tasks and reward structures, individual responsibility and accountability must be identified. Individuals must know exactly what their responsibility is and that they are accountable to the group, in order to reach their goals.
- 2. All group members must be involved, in order for the group to complete the task. For this to occur, each member must have a

task that they are responsible for which cannot be completed by any other group member.

On the other hand Felder and Brent (2007) as cited in Babiker (2013) stated that according to Johnson and Johnson model cooperative learning is the instruction that involves students working in teams to accomplish a common goal, under conditions that include the following elements:

1) Positive Interdependence:

Team members are obliged to rely one on another to achieve the goal. If any team members fail to do their part, everyone suffers consequences.

2) Individual Accountability:

All students in a group are held accountable for doing their share of the work and for mastery of all of the material to be learned.

3) Face-to-Face Promotive Interaction:

Although some of the group work may be parceled out and done individually, some must be done interactively with group members, providing one another with feedback, challenging, reasoning and conclusions. And perhaps most importantly teaching and encouraging one another.

4) Appropriate use of Collaborative Skills:

Students are encouraged and helped to develop and practice trust-building, leadership, decision-making, communication and conflict-management skills.

5) Group Processing:

Team members set group goals, periodically assess what they are doing well as a team, and identify changes they will make to function more effectively in the future. So from what have been explained above Cooperative learning is not a synonym for students working in groups and collectively. But, it's only through realizing the above five fundamental elements, which can be thought as pieces in a puzzle. When all these elements present in a learning situation, the result is a cooperative learning group.

2.10 The Use of Cooperative Learning

Cooperative Learning sessions can be implemented simply as a five minutes in a class exercise or as complex as a project which crosses a whole class term. Cooperative learning can be applied across a wide range of classroom settings ranging from a small to a large lecture, and even in online classes. No matter what the setting is, cooperative learning involves five key steps which should be applied properly. Following these five steps is highly important and critical to ensuring that, the five key elements that differentiate cooperative learning from simply putting students into groups to work.

2.11 The Techniques

There are considerable numbers of cooperative learning techniques available.

According to Kagan (1994) some CL techniques utilize students pairing, while others utilize small groups of four or five students. Hundreds of techniques have been created in structures to use in any content area.

The scientists mentioned so many techniques, but the well-known cooperative techniques respectively are Jigsaw, Jigsaw II, and Reverse Jigsaw, in addition to the followings: Thinker pair share, inside and outside circle, Reciprocal Teaching, The Williams, STAD, Rally Table, and TGT.

2.11.1 Jigsaw Learning Techniques

Learners are interlocutors of two groups: home group and expert group. Heterogeneously in the home group, students of each assigned a different topic.

On identifying the topic, students leave the home group and group with other students with their assigned topic; learners in the new group learn the material together before turning to their home group. Once back in their home group, each learner is responsible for teaching his/her assigned topic.

Grades are based on individual examination performance. No certain reward for success or the use of cooperative skills. But, the winner is the whole group and all members in isolation as well.

2.11.2 Jigsaw II

According to Schul (2012): Jigsaw II is developed by Robert Slavin (1980) as he quotes the difference between Jigsaw one and Jigsaw II to the members of the home group, who are assigning the same material. But, focus on separate portions of the material.

Each member must become on expert on his or her assigned portion and teach the other members of the home group.

2.11.3 Reverse Jigsaw

This variation was invented by Timothy Hedeen (2003) unlike the original Jigsaw during the teaching portion of the activity. In this technique, students in the expert groups teach the whole class, not only teaching their home groups the content.

2.11.4 Think Pair Share

This method, originally, developed by Frank T. Lyman (1981) (27). It allows the students to contemplate a given question silently. The student

may write, discuss thoughts or – simply – brainstorm in his/her head. When prompted, the students pair up with a peer and discusses his or her ideas and then listens to the ideas of his/her partner. Being in pair dialogue, the teacher solicits responses from the whole group. In this simple technique, teachers do not have to worry about students not volunteering, because each student will already have an idea in their heads. Therefore, the instructor can call on whomever and promote discussion productivity.

2.11.5 Inside – Outside Circle

Students in this cooperative learning strategy form two concentric circles and take turns on rotation to face new partners for answering and discussing the teachers' question. Also, this method is useful for data collection, information gathering, generates new ideas and solves problems.

2.11.6 Reciprocal Teaching

This method is developed by Brown and Palniscar (1982): It is a cooperative method that allows for student pairs to participate in a dialogue about text. Partners ask and read mutually, and then receiving immediate feedback, such a method develops the students' meta-cognitive techniques such as clarifying, questioning, predicting and summarizing. It reinforces and promotes the idea that students can learn actively from each other.

2.11.7 The Williams

Students team-up together to try answering a big question. Each group has differentiated questions that increase in cognitive ability in order for students to progress and meet the learning objectives.

2.11.8 STAD "Student Team Achievements Division

According to Kevin Seifert and Rosemary Suffon (2009): In this method, students are to place in small groups. The entire class is exposed to a lesson and the learners are subsequently tested. Individuals are graded in the group's performance.

This method inspires students to learn together, though they are tested individually.

2.11.9 Rally Table

A process of cooperative learning. The students are divided into groups. The main target of this process is to encourage team work, team building and cooperative learning. This process is a written version of Robin Table.

2.11.10 TGT "Team Game Tournament"

Slavin Robert (2015): Students are ordered to form small groups to study and be ready to game. This motivates and gives students incentive to learn in amusing way. No one is to blame if a team loses; because the success and failure is the responsibility for all. Everyone succeeds when the group succeeds.

2.11.11 Round Table

According to Kagan (1989) in the round table model, each team member writes one answer on a piece of paper that is passed around the table. This technique is highly effective with creative writing and brainstorming activities. It encourages responsibility for the group and team building.

2.11.12 Round Robin

In this strategy, each learner turns sharing something new with the members of collaborative group. So it offers learners a good chance to express ideas and views, while learning more about their classmates.

2.11.13 Three-Stay, One-Stray:

Students working in groups can get great benefits from the feedback of additional peers. In this method, students cyclically take a break from their work, and send one group member to another group to describe their achievement. So, the role of the group is to receive information and the optional choices by listening and sharing. The number of times the group sends their ambassador to and fro depends on complexity level of the problem. This method can also be practiced to report out final solutions.

2.11.14 Send-a-problem

This is a cooperative learning technique by Spencer Kagan (1992:10-11). And according to Kagan, each student on a team constitute a problem and inscribes it down on a flashcard, teams pass their stack of review questions to another team. The team attempts to answer it. Then, "upon the return of the cards to the senders, there is opportunity to discuss and clarify any question".

This cooperative learning method has yet to be studied, and used as it's very interesting and useful.

2.11.15 Problem Solving

In a research done by mathematics educators Vidakovic (1997) and Martin et al. (2004): the results show that, the teams are able to solve problems more efficiently and accurately than individuals working alone.

2.12 The Group Size

The challenge that faces many teachers in large halls and classes is how to manage large classes with few materials. One of the most effective models is to divide the classroom students into small groups. This will be useful; because chaos is expected to take place in large classes. CL works best when group size is smaller. So, the smaller the group, the effective CL will be. And the ideal CL classroom as advised by some educationalists should be about 15 to 20 students.

Students are usually grouped in cliques of 3 to 5 ones. The larger the group, the more difficult to organize tasks, activities, manage different skills and eventually come to consensus by establishing rapport among students.

If the group is large, it is difficult to control the interaction. Therefore, the more influential kind of group will be as follows.

Johnson and Johnson (1991) claimed out that "the materials available or the nature of task may enjoin the group size. For example, a class of thirty learners may be split into groups of three, if only ten computers are available".

Many educational experts expressed their views clearly about the group size and what optimal size should be. For example, Richard and Bohlke (2011), Kagan and Kagan (2009) as cited in Rhodes (2013:29) stated that 'for several reasons, researchers and practitioners conclude that the ideal size of a group is four students'.

Considering the optimal group size, the educationalist agreed on the idea that, the larger the groups, the harder for all students to hear and participate, and at the same time, it becomes easier for a students to pull back from the group and let the other do most of the discussion.

Rhoades (2013: 29-30) stated that one reason I like group of four is that, if one student is absent, I still have a "group", rather than a pair. Students who were frequently absent, because of other responsibilities, I made

sure to put them in groups with four members; so that their absence had less impact on the remaining students.

2.13 Forming Groups

The physical set-up of classroom is highly important. So, arranging desks and stools inside classroom is very beneficial and help make the environment conducive to realize a good learning process.

Desks should be arranged in a way that teachers can move easily between groups and around the classroom to monitor them, while they are discussing or working. Then, to avoid wasting time and the noise of moving furniture, it is advisable to move desks and tables before the class begin. (Ibid: 1)

"My students are very good about putting the desks in groups of four. The desks and the students are often in place before I even get to the classroom. Another option, if it really is too troublesome to move desks, is to have teams sit in pairs with one pair directly in front of the other. In this way, the front pair only needs to swing around in their chairs to discuss with the other pairs in their team".

So, the second above mentioned option doesn't suit the Sudanese governmental classrooms, and Sudanese university halls and rooms, but it can work well with special kinds of private institutions and schools. So, for this reason, it is advisable to adopt the first technique.

After determining the effective group size, the second step is assigning learners to these groups. Educators need to be aware of what skills each group needs to complete the task.

2.13.1 Homogenous Group

A group that consists of students who share the same skills and are all of the same level. And what characterizes this group is that, there is less conflict, better coordination, advantage of cohesion and high satisfaction.

2.13.2 Heterogeneous Group

A group that consists of students that have different skill levels. This group, usually, work best once the differences in group members help a lot in making cooperative learning effective. It is so because the weaker can learn from the better. Also, it promotes diverse thinking.

2.14 Placing Learners into Groups

Alice Macpherson (2015) in her book (Cooperative Learning Group Activities for College Courses) explained that there are many ways, through which an instructors can place students into groups as follows:

(1) Instructors Assigned Groups:

Here, learners can be assigned to groups to confirm that the groups are heterogeneous. The instructors must consider the academic ability, ethnic background, gender, and the other factor that they feel it is important. The instructors try to make sure that the best friends and the worst enemies are not in same groups, it is so to ensure effective communication.

(2) Randomly Assigned Group:

The teachers can, simply, have learners to be numbered, then placing numerals that is not even in one group, whereas the even numbers in another one.

(3) Social Integration Groups:

Instructors can ask learners to choose learners they would like to work with, and every learner they would like to work with in groups.

(4) Subject-Matter Related Groups:

If the group of learners is interested in a particular topic, it is good and useful to offer them opportunity to present that topic to the rest of the class.

(5) Geographic Groups:

This kind of group suits learners who are living near each other and this characteristic enables them to meet and depart easily.

(6) Self-selected Group:

Learners can be asked to form their own group. A group consists of three or four learners to work together in one group. It suits "short-term group". But, it can be counter-productive if the participant always works only in the group.

Later, Alice Macpherson summed up the concept of grouping by stating out that: "The most effective groups are usually the instructors assigned groups, because they are more likely to be heterogeneous. Random groups and the others are very useful for short-term assignment projects, but should not be used all the time or learners miss out on a lot of time".

2.15 Numbering the Groups

Different leaders of students should be rotated to control the group. Kagan and Kagan (2009) as cited in Rhoades (2013: 31) stated out that "some instructors advocate assigning a specific person to be the spokesperson for the group. However, I feel it is more helpful to rotate speakers to ensure that all students are participating and contributing to the class. One way to organize this is known as (Numbered Heads Together)".

On the light of what have been explained above, it seems useful to offer a wide range of opportunities for students and to diversify the techniques of grouping for different levels of students to practice the language fairly and smoothly.

2.15.1 Rainbow Learning

Rhoades (2013: 31) invented a very creative and an inviting technique to number the group members by using colors not numbers.

"In my modified version of these cooperative techniques, I assigned a color to each person in a group. I preferred colors instead of numbers; because I think that, psychologically, having number one students in each group may identify that student as somehow, superior, even though for these purposes, it is just a number to organize the colors, which match a rainbow, one student in each group is RED, another is ORANGE, another is YELLOW, and the fourth is GREEN".

It is argued that the use of colors work well with students who are reluctant to speak voluntarily.

It, also, works well when a teacher has a few students to dominate the group, once they get their turn to speak. However, they also realize that they need the other "colors" have a chance.

Also, it is preferable for dominant students to encourage the shyer ones to speak and help them build up great confidence. Everyone in their group is in progress and improving. Ibid:

"I noticed one of my weaker students having a complete conversation in English with his teammates, while we were working on projects that did not necessarily require any conversation. I love observing him came out of his shell, especially when he had no idea I was even watching him".

So, by assigning students colors, it is not necessary for a teacher to learn the students' names. Also, it is found that, such color designations made it much easier for the teacher to get full participation from all his/her students, just by reminding the four colors is much easier than it is to memorize the forty names.

On the other hand, it is not advised to deal with colors throughout the entire term; to shun tedium and monotony. Hence, teachers should have other options to nominate, e.g., (North, South, East and West) or to make the situation more attractive, teachers should let the learners be the decision makers.

2.16 The Roles of Teachers and Learners

Teachers and learners play a great role in the process of Cooperative Learning Strategy.

2.16.1 Teachers' Roles

It's necessary to set the function of teachers in the activities of cooperative learning. Making students working in teams, in which they have to help each other, is not an excuse for literates to leave their jobs; due the fact that in cooperative learning activities, students are the main participants, while teachers are still the most important pillars of the class or hall.

Teachers are guides and facilitators. At the same time, they encourage students to be interdependent.

Larsen-freeman (1986) argued that teachers' role is more than teaching language, but also they teach cooperation. Beside this, they are seen as useful tools of guidance in making cooperative learning a successful method to be used in class, rather than seen like judges who distribute grades.

Other functions of teachers is to specify group size bearing in mind factors such as time limits, students' age, and students' experience working in group and accessible materials. Moreover, teachers are still decision makers and takers in forming homogenous and heterogeneous groups as well. They can intervene when their students need to improve their task or team work. Furthermore, they observe the interaction among the students and assess their level through the noticeable progress.

2.16.2 Learners' Role

Richards and Rodgers (2001) state that learners are aware and responsible for planning, monitoring and evaluating their own learning, bearing in mind that learning is a process that requires student's direct and active integration of group works and participation in the activities. Also, it's considered that pair grouping is the most typical cooperative learning format. This maximizes the learner's time to be spent and engaged on learning tasks. For instance, pair task, in which learners alternate roles, involving partners in the role of tutors, recorders, and information sharers.

Accordingly, students can discuss the material to be learned with their classmate, assisting and offering a hand to each other to gain a better understanding of topic proposed. Besides, encouraging their partners to work hard to achieve a common goal through integrating nexus of idea. Moreover, through the cooperative learning strategy, the students become directors and tutors of others. In this case, students feel relaxed and more comfortable; because the lessons are coming from their peers.

2.17 Anticipating Chaos

It is expected that, if the students are not used to doing group work, or they do not know each other very well, forming a group activity will, initially, cause chaos. However, teachers must not worry about that; because such noise will soon be disappeared.

2.18 Previous Studies

2.18.1 Local Studies

The First Study:

Mohammed, Y. (2017). The feasibility of Using Cooperative Learning in Teaching English at Elementary Schools. MA Thesis, Nile Valley University. The problem of this study according to the case study is that, the Ministry of Education of Saudi Arabia prescribed the English Language syllabus at elementary level focusing on learning the basics of English Language sentences such as letters, words, phrases, sentences and other skills. However, the expected results were not appearing as planned. On the contrary pupils are poor in English basics. He added that, the classroom environment should be activated to encourage pupils' participation, communication, besides creating positive attitudes towards English Learning for accomplishing shared goals. The study used qualitative method by applying pre and post tests on control and experimental groups. The main findings of this study showed that, it's unlike the results of the pre-test to the control and experimental groups; there are statistically significant differences between control and experimental groups concerning academic achievement. The study also revealed teachers' positive reaction towards cooperative learning.

The Second Study:

Babikir. (2013). The Impact of Using Cooperative Learning Strategy on EFL Learners Performance. PhD thesis, Sudan University of Science and Technology- Sudan. Stating out the problem of this study, the researcher expressed his own experience during his teaching and lecturing in Saudi Arabia. He believed that, there is a noticeable weakness in enhancing EFL Learners' performance. Therefore, most of EFL Learners and teachers face difficulties in improving participation, interest, attendance, performance and promoting comfort and confidence within the classroom. The methodology adopted to carry out this study was quantitative using pre and posttests applying the STAD technique on both control and experimental groups. The most important findings of this study are the followings: there is statistically significant difference in the performance of the students who were taught through cooperative method and those who were taught traditionally. Moreover, cooperative learning is the best option for all students as it demonstrates more positive students' outcomes in academic achievements. Furthermore, cooperative learning increases students' retention.

2.18.2 International Studies

The First Study:

Lin, M. (2009). Effects of cooperative learning on the oral proficiency of Chinese students in tertiary level EFL Classroom. PhD thesis, University of Leiceter, China. In this thesis, the researcher believed that enhancing the learners' oral skills facilitates other language learning skills such as listening, reading and writing. Also according to the researcher's own professional context, many of the students enter the university with poor English foundation. The study problem concluded that, there is a growing need to learn English in China. The methodology used in this study was pre and post tests before and after the intervention so as to measure the students' gains in oral proficiency. The quantitative results revealed that, there are null experimental effects on overall proficiency and on its components: grammar, vocabulary, pronunciation and the effect discourse management. However. on interactive communication was inconclusive. Moreover, conversational analysis showed that, experimental groups appeared to do somewhat better in interactional strategy use than the control groups.

The Second Study:

Soraya, B. (2010). Enhancing Students' Oral Proficiency through Cooperative Group Work. M.A thesis, Constantine University. In this study, the researcher observed that, EFL Learners have difficulties in communicating in English and the reasons for learners' inability to speak well are many and varied. The method used in this study is descriptive, aimed to describe two variables. The data were collected through Selfcompletion Questionnaire, administered to third year LMD Learners and to teachers who have taught oral expression at Department of English, Mentouri University, and Contantine. The summary findings of this study showed that, cooperative learning group work is the right technique for increasing learners' language use as well as classroom oral participation. Hence in turn affects learners' oral proficiency.

The Third Study:

Pattanpichet, F. (2011). The Effects of Using Collaborative Learning to enhance Students' English Speaking Achievement. Scientific Paper, Bangkok University. Thiland. The problem of this study is that, Thai students have been struggling to acquire English speaking skills due to several reasons such as limited exposure to the language been taught. Also students do not practice the language effectively because of the interference of native language. The study applied both quantitative and qualitative methods through the following procedures: an oral test with a scoring rubric, a scoring sheet, a questionnaire for students, students' diary and a semi-structured interview. The findings of this study support the use of collaborative learning in teaching English speaking. However, it's not the case that any way of doing it will be effective.

The Fourth Study:

Maldoado, et al. (2011). Role of cooperative learning Strategies in the Development of 5th Graders' Speaking Skills. MA thesis, George Washington School, USA. The problem of this study is that, on the contrary to the statement declared by Common European Framework in which a foreign language should be taught developing all skills, almost in simultaneous and equitable way. It's perceived that in this school the lead teacher of this grade gives priority to make students develop reading and writing skills rather than listening and speaking skills. Moreover, teachers focus on accuracy at the expense of fluency. Then the study followed a mixed approach using qualitative and quantitative methods. The main findings of this study are the followings, it's realized that, there is a noticeable improvement concerning students' speaking performance. The students demonstrate better domain of the language in terms of accuracy, fluency and pronunciation. Also, it's inferred that,

cooperative learning activities are helpful for students to develop their speech in a progressive manner through team work.

The Fifth Study:

Lopez, M. and Sonet, R. (2014). The impact of Oral Communicative Strategies through Cooperative Work Activities on EFL Beginner Learner. MA thesis, Universidad de la Sabana, Chia, Colombia. The study attributed the major issue that has challenged English language teachers, is the implementation of appropriate strategies that ensure the ongoing and gradual development of both learners' oral fluency and accuracy. Also, it is explained that it's not an easy task to help learners move from their comfort zone and encourage them to practice and improve through activities when they use the target language. Moreover, students are noticeably reluctant to speak in English language. And it's justified that; this could be attributed to variety of reasons such as lack of confidence or peer and group pressure, which specifically lead to uneasiness and stress in classroom. The data collected were analyzed and categorized based on Grounded theory in which a qualitative analysis and triangulation process of the instruments were applied. The summary findings reflect the implementation of that. communication compensatory strategies and cooperative work activities has a significant improvement on the learners' oral proficiency.

Chapter Three Research Methodology

CHAPTER THREE RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents the methodological issues in accordance with the study questions and hypotheses posed in chapter one. First, brief account about quantitative and qualitative approaches is displayed. This justifies the choice of the method adopted in this research. Then it's followed by full information about the study participants. Next, the research instruments, which include the oral pre-test and post-test applied at National Ribat University (NRU), are explained. To that questionnaire and interview are used.

Characteristics related to data collection, such as validity and reliability are also addressed. Then a detailed description of data collection procedure is provided. Finally, the chapter is concluded with a summary.

3.1 Research Design

The nature of this research advocates the necessity to derive its data from a genuine language classroom to gauge and reveal the influence of cooperative learning on group-work oral production. Therefore, the researcher followed a mixed approach, which means a research in which quantitative and qualitative techniques are mixed in a single study. A questionnaire and a test are used supported by a relevant interview with some experts in the field of education.

3.2 Quantitative and Qualitative Approaches

Quantitative research picks out large-scale instructional features of social life, while qualitative one compiles small-scale behavioral aspects.

According to (Bryman, 1992): "quantitative data are information about the world words in use of numbers, whereas, qualitative data are information about the world in use of words". Decombe (2003) drew a comparison between the two techniques. He stated out that the analysis of the quantitative data provides a solid foundation for description and analysis. On the other hand, qualitative analysis is better able to deal with the intricacies of a situation and, also, do justice to subtleties, i.e., tenderness of life.

3.3 Participants of the Study

The participants of this research consist of three groups as follows:

3.3.1 The Participants of the Test

Concerning the test as a main and experimental tool for this research, there are 48 students divided into two even groups, each of which consists of 24 students to form the control and the experimental group successively, study in the college of Anesthesia at National Ribat University as freshmen. They are chosen to be exposed to the application of cooperative learning technique extended to ten weeks which constitutes a whole semester, for finding out the enhancement of their communication skills. (The test has been validated by Dr. Bashoum, Dr. Hassan, and Ustaz Khawaja).

3.3.2 The Participants of the Questionnaire

Regarding the questionnaire, the sample population consists of (104) lecturers who have been chosen randomly from some of the teachers of different experiences. And their ideas and opinions are considered to be crucial in proving the effectiveness of cooperative learning strategy.

3.3.3 The Participants of the Interview

Considering the interview, the intended community that correlates to the research questions two, are five professional experts in the field of education and their thoughts are supposed to be needful in emphasizing the ideas of teachers.

3.4 Instruments

The data of this study is based on different types of instruments to achieve the objectives put forward in it. Some of them pertain to quantitative method, and others get on well with the qualitative method, which functioned well in collecting the major quantity of data that could be helpful for the later analysis of the outcomes, so the followings are the instruments that were applied.

3.4.1 Questionnaire

Questionnaire is probably the most widely used instrument for eliciting information from the target community sample, according to Cohen (2000).

A questionnaire is a written list of questions and answers, which are recorded by respondents. It is a useful technique for collecting data. And one of good characteristics of the questionnaire is that, the questions should be clear and easy to understand.

3.4.1.1 Description of the Questionnaire

An introduction of the research questionnaire has been written clearly, in which the respondents were informed about the aim of the research. The questionnaire includes ten statements which are designed in accordance with the terms and expressions used in the related literature review, and each of which is accompanied by the scaling options (always, usually, sometimes, rarely and never).

The first five statements are designed to correlate to the specific domain, which concerns, to what extent; do the students of EFL get benefit from the application of cooperative learning strategy?

Next is to find out the promotion of cooperative learning of speaking skill for low-ability students, and how it fosters positive attitudes for students to speak a foreign language. Also, it aims to know how homogeneous and heterogeneous groups enrich diverse thinking, demonstrating a high satisfaction and a better coordination among students. Then, the domain concludes in the students' deep understanding to the intended material and how it creates an active peer- interaction. Later, the second domain comprises five statements targeting teachers' community.

These five statements are designed, mainly, for teachers who are believed to be in a good position for providing primary data, relevant to the present study. In particular, the statements that indicate the effectiveness of practicing speaking at any account reflecting the importance of involving students in games to practice a language. Also, they show the necessity of exchanging ideas among students for the sake of promoting their both competence and performance in a foreign language. After that, teachers are asked to draw their attention to the essentiality of practicing the foreign language through the activity "Think Pair Share" which suits our Sudanese classes' physical set-up. Finally, the questionnaire is concluded with raising the teachers' awareness of the importance of team-work and group discussion to realize positive interdependence.

3.4.2 Test

Both testing and teaching are so closely interrelated in a sense that it's inevitably to work in either field without being constantly concerned with other. Heaton (1988): "Tests may be constructed primarily as devices to reinforce learning and to motivate the student, or primarily as a means of assessing the student's performance in the language."

A good language test is one that seeks to find out what candidate can do with language, provides a focus purposefully on every day communication activities. This type of test will have a more positive effect on the learning of a foreign language than a mechanical test of structure.

The most common use of language tests is to identify weaknesses and strengths in students' abilities. For example, test can help discover that a student has an excellent oral abilities however, a relatively low level of reading comprehension. Information detected from test also assists in deciding who should be allowed to participate in a specific course or program.

Furthermore, when testers are going to administer these instruments, they should keep in mind that after the application of the test always there must be a clear measurement, which provide information about the performance of each individual.

3.4.2.1 Diagnostic Test

Diagnostic test seeks to identify those language areas, in which a student needs further help.

Harris and McCann (1994: 29) points out that, where "other types of tests are based on success, diagnostic tests are based on failure." The obtained information through diagnostic tests is crucial for further syllabus activities and providing students with remediation.

Bearing in mind that diagnostic testing is frequently carried out for groups of students rather than for individuals. That means if only one or two students make a specific error, the instructor will not pay too much attention. However, if a great number or even many students make a certain error, the teacher will determine the area of failure and plan appropriate remedial teaching.

The case study of this present research is based on diagnostic test so as to check the students' spoken performance. Specifically, the purpose of this test is to measure the degree of students' language fluency, beside accuracy and pronunciation. Therefore, the researcher adopts the technique of oral test as experimental instrument for data collection, in order for checking whether there is a perceptible change before and after the implementation of cooperative learning strategy.

3.4.2.2 The Content of the Study Test

The present study's tests for EFL learners comprise two parts:

In the first part, the three questions are designed in form of (WH) questions, which is considered to be a soothing technique for availing a convenient atmosphere. Moreover, it helps students build self-confidence to respond simply with deep relaxation.

The questions of the second part of the test seem a little bit more difficult than the foresaid questions. And the main target for that is to assess the students' real degree of fluency and check their capability of holding a thread of conversation with ease and efficiency. Then test is concluded with the expression "Thank you", which requires correspondingly special kind of response.

3.4.3 The Interview

Johnson and Christensen (2008: 207) defined interview as "in-depth information about a participant's thoughts, beliefs, knowledge, reasoning, motivations, and feelings about a topic". In academic research, interviews are used in a wide variety of ways. Interviews are usually used in qualitative research, in which a researcher tries to glean lucrative ideas from the interviewees. In the present study, the researcher adopts "a semi-structured interview" as a means of data collection. In this case, the data is collected by an interviewer rather than through a self-administered questionnaire. The questions of the interview are carefully prepared and modified by some referees, and mainly by the supervisor to be in accordance with the study objectives and to serve question two in particular.

3.4.3.1 Interview Questions

The content of the interview comprises six questions targeting, wellexperienced experts in the field of education. Initially, the first question concerns the objectives of the cooperative learning technique and what should be included when writing cooperative learning objectives. As for the second question, experts are asked about how to bring the situation under control when chaos occurs. The third and fourth questions focus on the effect of group-work and the expected positive roles that cooperative learning technique can play. Then, the experts were asked to shed light on the problems and the hindrance that impede the application of cooperative learning in tertiary level. Finally, the interview is concluded with this question "can cooperative learning be implemented in our classes"? In order for understanding, how much cooperative learning technique can be applied in our classes?

3.5 Validity

Succinctly, the validity of a test is the extent to which it measures what it is supposed to measure. Every test, whether it is a short, informal classroom test or a public examination, should be as valid as the constructor can make it.

3.5.1 Test Validity

The test has been conducted in a natural educational environment. And to ensure the validity of the test; it was validated and evaluated by some ELT experts who teach at SUST.

3.5.2 Questionnaire Validity

It is a measure used to identify the validity degree among the respondents according to their answers on a certain criterion. The validity is counted by a number of methods, among them is the validity using the square root of the reliability coefficient which is a part of SPSS program. In the present study the validity of the questionnaire measures its precise aim accurately as shown below:

$$validity = \sqrt{reliability}$$

i.e.

$$\sqrt{0.82} = 90$$

which is considered to be valid.

3.6 Reliability

According to Coombe and Hubley (1995): Reliability refers to "the consistency of exam results over repeated administrations and the degree to which the results of an assessment are dependable and consistently measure particular student knowledge or skills". On the other hand, Heaton (1988) stated out that "reliability is a necessary characteristic of any good test; for it to be valid at all, a test must, first, be reliable as a measuring instrument".

3.6.1 Test Reliability

The reliability of every test means to measure a degree of which a test gives consistent results, so if the test is valid it investigates what is to be investigated, i.e., the test will be reliable. To obtain the reliability of this test, the same from technique was adopted. Then the two separate tests (pre-test and post-test) were administered to the same groups (the control group and the experimental group) with a reasonable interval of time, so as to calculate the difference between the two tests' scores.

3.6.2 Questionnaire Reliability

Reliability is a necessary characteristic of any good test. It is defined as the degree of accuracy and consistency of data that the test measures. Likewise the present study adopts the seemingly most widely used statistical technique for calculating the reliability, which is called: the Alpha Cronbach Coefficient. So, the reliability has been calculated according to the foresaid measure and result shows $\sqrt{0.82}$.

3.7 Procedures of Data Collection

The researcher followed the following procedures in order to conduct this study. Initially, the students were asked to perform two speaking tasks. They sit a pre-test exam and a post-test one after a reasonable period of time. Then, the two quantitative data was collected to examine and investigate the influence of the use of cooperative learning on EFL learners' communication skills.

Quantitative data was obtained from the oral performance using a diagnostic test and the questionnaire survey. So, all of the participants were asked to take the oral test before and after the application of the course. Then, the results of the two tests, that is to say, (the pre-test and the post-test) were accurately compared together to show if there is a noticeable change concerning the students' level. Secondly, lecturers and teachers from SUST, U of K, NRU and some of the Sudanese educational institutes were asked to respond to the questionnaire so as to glean their positive ideas about the use of cooperative learning strategy. The obtained data from the questionnaire was analyzed using the SPSS and Alpha Cronbach program specifically with percentile.

On the other hand, the qualitative data was collected via the experts' interview, so that all the participants were politely asked to participate in the semi-structured interview. This type of interview will allow the experts to answer the questions confidently, and without the presence of the interviewer, i.e., the researcher. Furthermore, the received data from the interview was discussed and analyzed using the content analysis, which added an extra insight into the study.

3.8 Summary

This chapter discussed the study methodology and the tools used for data collection. It provides fully detailed description of all the stages and the procedures employed in each step, including instruments, population, study sample, validity and reliability for each tool.

Chapter Four

Data Analysis, Results and Discussion

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 Introduction

This chapter is devoted to data analysis, evaluation and discussion collected through the study tools including the questionnaire which is given to 104 participants who represent the teachers' community at some of the Sudanese universities, as well as the test, which is distributed among the students of the faculty of anesthesia as EFL Learners at National Ribat University. Then there is the interview for experts as a third tool. The results will be used to provide answers to the research questions, and verify its hypotheses.

4.1 Analysis of the Questionnaire

The researcher distributed the questionnaires to the determined study sample which includes (104) lecturers and teachers, then constructed the required tables for the collected data. This step consists of transformation of the qualitative (nominal) variables (always, usually, sometimes, rarely, and never) to quantitative variables (5, 4, 3, 2, 1) respectively, also the graphical representations were designed for this purpose.

Valid	Frequency	Percent
Always	54	51.9
usually	33	31.7
sometimes	12	11.5
rarely	1	1.1
never	4	3.8
Total	104	100

Table (4.1) Cooperative learning and promotion of speaking skills:

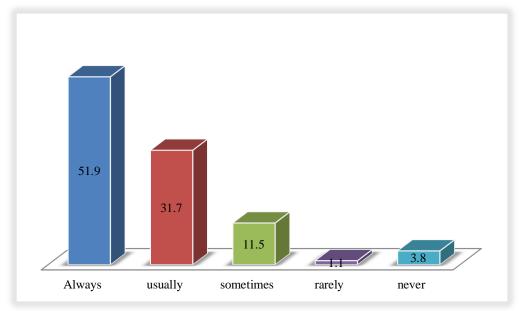


Fig. (4.1) Cooperative learning and promotion of the speaking skills

With reference to Table (4.1) and Fig. (4.1) and concerning the statement 'in my point of view, cooperative learning promotes speaking skill of low-ability students', it's clear that participants' responses to always is 51.7%, usually turned out to be 31.7%, sometimes is 11.5%, Rarely is 1.1%, whereas never is only 3.8%.

This indicates that, applying cooperative learning technique is effective and useful in promoting the level of oral production even the low-ability students can capitalize on this technique by practicing speaking skill.

Valid	Frequency	Percent
Always	49	47.1
usually	42	40.4
sometimes	7	6.7
rarely	2	1.9
never	4	3.8
Total	104	100

Table (4.2) Cooperative learning and students' positive attitude:

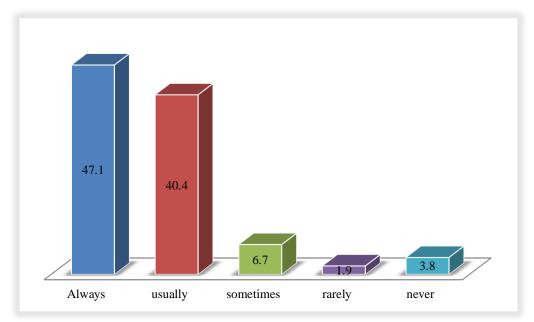


Fig. (4.2) Cooperative learning and positive students' attitude

With reference to Table (4.2) and Fig. (4.2) regarding the statement 'I think, using cooperative learning fosters positive students' attitudes to speak English'. It's seen that, participants' responses to always is 47.1%, usually is 40.4%, sometimes is 6.7%, whereas rarely is 1.9%, and only 3.8% for never.

This emphasizes the idea that, cooperative learning is of great benefit in fostering the students' positive attitude to speak English language.

Table (4.3) Heterogeneous groups and the diverse of thinking:

Valid	Frequency	Percent
Always	33	31.7
usually	26	25.0
sometimes	36	34.6
rarely	5	4.8
never	4	3.8
Total	104	100

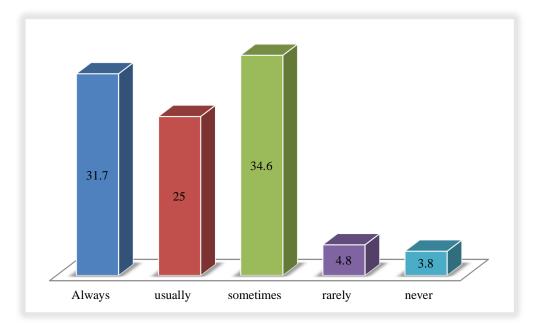


Fig. (4.3) Heterogeneous groups and the diverse of thinking

As illustrated in Table (4.3) and Fig. (4.3) and thinking about the statement, as far as I believe, heterogeneous groups enrich "diverse thinking" through the use of language, it's obvious that, the participants' answer to always is 31.7%, 25% is usually, sometimes is scoring the highest rate 34.6%, while rarely is 4.8% and only 3.8% is never. This emphasized the idea that, heterogeneous team work is very effective in enriching diverse thinking through language use.

Valid	Frequency	Percent
Always	28	26.9
usually	47	45.2
sometimes	24	23.1
rarely	1	1.1
Never	4	3.8
Total	104	100

Table (4.4) Homogenous groups and high satisfaction:

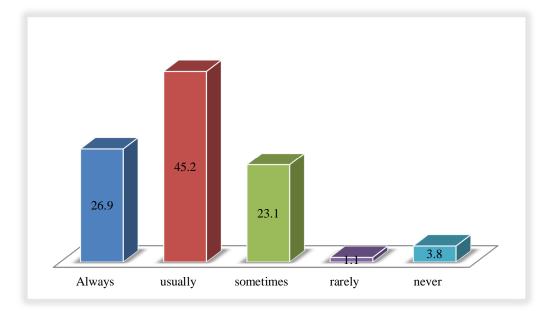


Fig. (4.4) Homogeneous groups and high satisfaction

According to Table (4.4) and Fig. (4.4) and focusing on the statement 'in my opinion, homogenous group students show a high satisfaction and a better coordination' it's clear that, participants' responses to always is 26.9%, usually turned out to be 45.2%, sometimes is 23.1%, rarely is 1.1% whereas, never is 3.8%.

This strengthens the view of that, homogeneous group students displaying the students' pleasure to work with great satisfaction and in a relaxed mood.

Valid	Frequency	Percent
Always	52	50.0
usually	42	40.4
sometimes	7	6.7
rarely	2	1.9
never	1	1.1
Total	104	100

 Table (4.5) Full material comprehension and active peer interaction:

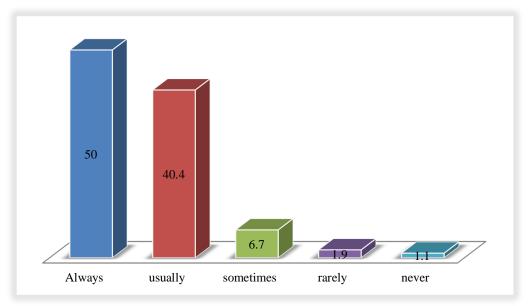


Fig. (4.5) Full material comprehension & active peer interaction

With reference to Table (4.5) and Fig. (4.5), and with regard to the statement 'I believe that, deep understanding of the material being taught creates active peer interaction'. It's clear that, participants' responses to always is 50%, and usually turned out to be 40.4%, sometimes is 6.7%, while 1.9% is rarely and only 1.1% is for never.

This indicates that, a carefully selected material to be taught is considered to be a decisive factor in creating a real peer interaction. And that means the first hypothesis is true.

Table (4.6) Encouraging students to speak English languageanyway:

Valid	Frequency	Percent
Always	58	55.8
usually	25	24.0
sometimes	11	10.6
rarely	8	7.7
never	2	1.9
Total	104	100

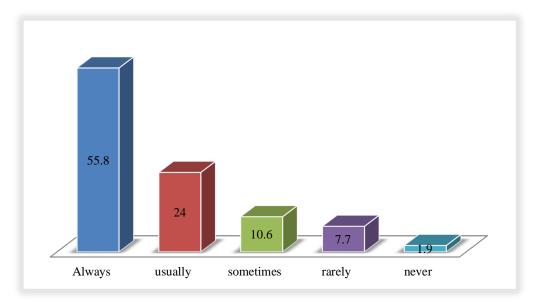


Fig. (4.6) Encouraging students to speak English language anyway

Concerning the Table (4.6) and Fig. (4.6) and with reference to the statement 'I encourage my students to practice speaking at any account', it's illustrated that, participants' responses to always is 55.8%, usually tuned out to be 24%, sometimes is 10.6%, while rarely is 7.7%, only 1.9% chose never.

This reflects the important role played by instructors in order for encouraging their students to speak English Language even the recluse and shyer ones.

 Table (4.7) Involving the students in games to practice the foreign language:

Valid	Frequency	Percent
Always	19	18.3
usually	33	31.7
sometimes	29	27.9
rarely	19	18.3
never	4	3.8
Total	104	100

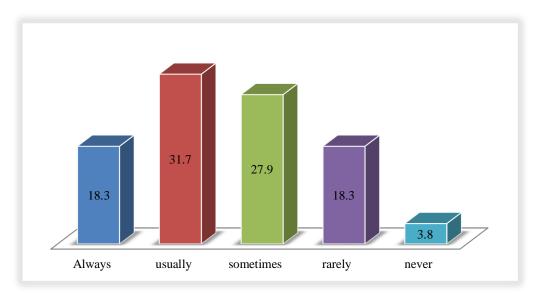


Fig. (4.7) Involving the students in games to practice the foreign language

With reference to the above Table (4.7) and Fig. (4.7), and regarding the statement 'I involve my students in game to practice the foreign language'. It's shown that, the participants' responses to always is 18.3%, usually is turned out to be 31.7%, sometimes is 27.9, whereas 18.3 percentage of rarely, and only 3.8% is for never.

This real experience practiced by teachers is very useful in weeding out tension and stress. Approximately a third of the respondents use this technique sometimes, fifth of them scarcely applies it. While, only four ones don't try it at all.

 Table (4.8) Encouraging the exchange of ideas for discussion:

Valid	Frequency	Percent
Always	30	28.8
usually	25	24.0
sometimes	37	35.6
rarely	4	3.8
never	8	7.7
Total	104	100

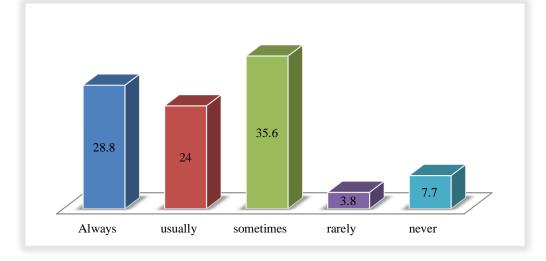


Fig. (4.8) Encouraging the exchange of ideas for discussion

The Table (4.8) and Fig. (4.8), and with regard to the statement 'I encourage the students of a foreign language to exchange ideas for discussion'. Shows that, the participants' responses to always is 28.8%, respondents' answer with percentage 24% is usually. Sometimes is 35.6%. Also only 3.8% is rarely whereas, participants with percentage 7.7% are never.

This indicates that, the majority of teachers encourage their students to practice a foreign language through bilaterally idea exchange which makes the atmosphere inside the classroom conducive and very inviting to utter out even brief expressions.

Valid	Frequency	Percent
Always	29	27.9
usually	30	28.8
sometimes	38	36.5
rarely	6	5.8
never	1	1.1
Total	104	100

 Table (4.9) Interaction through "Think Pair Share":

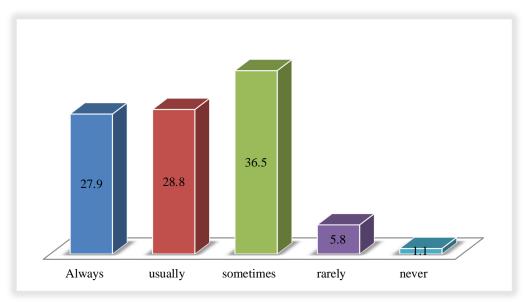


Fig. (4.9) Interaction through "Think Pair Share"

With reference to Table (4.9) and Fig. (4.9), it's seen that, participants' responses to always is 27.9%, usually turned out to be 28.8%, sometimes is 36.5%, while 5.8% is rarely, and only 1.1 is never.

This proved that, the majority of the of the respondents use the technique 'Think Pair Share' which is proved to be effective in enriching the discussion and helps spread the knowledge.

Valid	Frequency	Percent
Always	46	44.2
usually	35	33.7
sometimes	8	7.7
rarely	14	13.5
never	1	1.1
Total	104	100

 Table (4.10) Group discussion and positive interdependence:

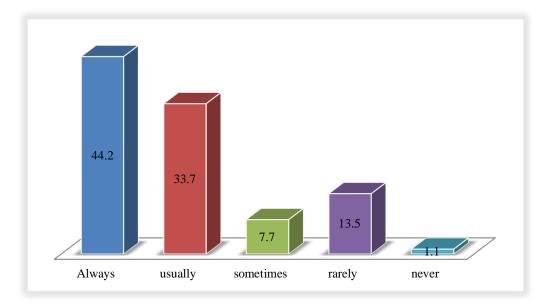


Fig. (4.10) Group discussion and positive interdependence

According to Table (4.10) and Fig. (4.10), it's illustrated that, participants' responses with percentage 44.2% is always, usually is 33.7%, sometimes is 7.7%, while rarely is 13.5%, and only 1.1% is never.

This indicates that, working in groups is highly important to the extent that it eliminates social loafing and instills a sense of cooperation correspondingly.

4.2 Test of the Study Hypotheses

To answer the study questions and check its hypotheses, the mean and standard deviation will be computed for each question from the questionnaire shows the opinions of the study respondents about the problem. To do that, it's given five degrees for each answer "always", four degrees for each answer "usually", three degrees for each answer" sometimes", two degrees with each answer rarely" and one degree for each answer with "never". This means, in accordance with the statistical analysis requirements, transformation of nominal variables to quantitative variables is practicable. After that, the non-parametric chi-square test is used to know if there are statistical differences amongst the respondents' answers about hypotheses of the study.

No.	Statement	mean	SD	Chi	p-value
				square	
1	In my point of view, cooperative	2.8	1.8	31	0.000
	learning promoted speaking skill				
	of low-ability students.				
2	I think, using cooperative learning	2.7	1.5	23	0.000
	fosters positive students' attitude				
	to speak English.				
3	As far as I believe, heterogeneous	2.6	0.7	33	0.000
	groups enrich "diverse thinking"				
	through the use of languages.				
4	In my opinion, homogeneous	2.9	0.6	22	0.000
	group students, show high				
	satisfaction and better				
	coordination.				
5	I believe that, deep understanding	3.0	3.5	32	0.001
	of the material being taught creates				
	active peer interaction.				

 Table (4.11) Testing the first hypothesis of the study:

Source: The researcher from applied study, SPSS 24

- The calculated value of chi-square for the significance of the differences for the respondents' answers in the statement No (1) was (31), which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.8) which are greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "In my point of view cooperative learning promotes speaking skill of low-ability students".
- The calculated value of chi-square for the significance of the differences for the respondents' answers in the statement No. (2) was (23) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.7) which are greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "I think using cooperative learning fosters positive students' attitude to speak English".
- The calculated value of chi-square for the significance of the differences for the respondents' answers in the statement No. (3) was (33) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.6) which are

greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "As far as I believe, heterogeneous groups enrich "diverse thinking" through the use of language".

- The calculated value of chi-square for the significance of the differences for the respondents' answers in the statement No. (4) was (22) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.9), which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "In my opinion, homogeneous groups' students show high satisfaction and better coordination".
- The calculated value of chi-square for the significance of the differences for the respondents' answers in the statement No. (5) was (32) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (3) which are greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "I believe that, deep understanding of the material being taught creates active peer interaction".

The previous results indicate that the first hypothesis is accepted and it's true that cooperative learning enhances the students' ability to communicate with ease and efficiency.

No.	Statement	mean SD	SD	Chi	р-
110.			50	square	value
1	I encourage my students to practice	2.6	1.6	24	0.000
	speaking at any account.				
2	I involve my student in games to	2.7	1.3	26	0.000
	practice the foreign language.				
3	I encourage students of foreign	2.9	2.7	33	0.000
	languages to exchange the ideas for				
	discussion.				
4	I make my students believe "it's	3.0	0.6	27	0.000
	good to interact through "Think				
	Pair Share".				
5	I focused on group discussion to	2.7	3.5	31	0.001
	realize positive interdependence.				

 Table (4.12) Testing the second hypothesis of the study:

Source: The researcher from applied study, SPSS 24

- The calculated value of chi-square for the significance of the differences to the respondents' answers in the statement No. (1) was (24) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.6) which are greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "I encourage my students to practice speaking at any account".
- The calculated value of chi-square for the significance of the differences for the respondents' answers in the statement No. (2)

was (26) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also, the calculated mean is (2.7) which are greater than the hypothesized mean (2.3), which supports the respondents who agreed with the statement "I involve my student in games to practice the foreign language".

- The calculated value of chi-square for the significance of the differences to the respondents' answers in the statement No. (3) was (33) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.9) which are greater than the hypothesized mean (2.3), which support the respondents who agreed with the statement "I encourage students of foreign languages to exchange the ideas for discussion".
- The calculated value of chi-square for the significance of the differences for the respondents' answers in the statement No. (4) was (27), which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (3), which is greater than the hypothesized mean (2.3), which support the respondents who agreed with the statement "I make my students believe it's good to interact through (Think Pair Share)".

The calculated value of chi-square for the significance of the differences for the respondents' answers in the statement No (5) was (31) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (15.2). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.7) which are greater than the hypothesized mean (2.3) which supports the respondents who agreed with the statement "I focus on group discussion to realize positive interdependence".

The previous results indicate that our second hypothesis is accepted and it's true that cooperative Learning enables teachers to encourage students to practice build up their communication skills in the foreign language.

4.3 Experimental Group

Table (4.13)The frequency distribution of pre-posttests inexperimental according to the fluency:

Fluency	Pre	Post	diff
High	8	12	+4
Low	16	12	-4
Total	24	24	0

According to table (4.13) and figure (4.11) for the experimental group, it's shown that the number of students with high fluency at pretest was (8) but it increased at the post test and becomes (12). Also, the number of students with low level of fluency is decreased, it was (16) at pretest and become (12) at posttest. This indicates the existence of statistically differences between pre and posttests at the experimental groups.

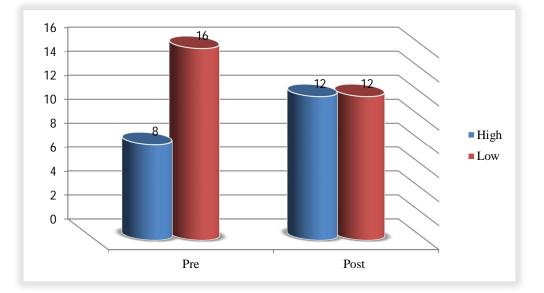


Fig. (4.11) The frequency distribution of pre–posttests in experimental according to the fluency

accuracy	Pre	Post	diff
Deep	2	9	+7
Shallow	22	15	-7
Total	24	24	0

Table (4.14) The frequency distribution of pre-posttests inexperimental according to the accuracy:

According to table (4.14) and figure (4.12) for the experimental group it's shown that the number of students with deep accuracy at pretest was (2) but it increased at the post test and becomes (9). Also the number of students with shallow level of accuracy is decreased, it was (22) at pretest and becomes (15) at posttest. This indicates the existence of statistically differences at the experimental groups.

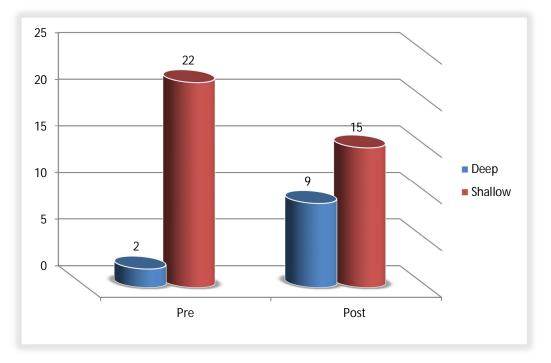


Fig (4.12) The frequency distribution of pre–posttests in experimental according to the accuracy

Pronunciation	Pre	Post	diff
Correct	12	16	+4
Incorrect	12	8	-4
Total	24	24	0

Table (4.15) The frequency distribution of pre-posttests inexperimental according to Pronunciation:

According to table (4.15) and figure (4.13) for the experimental group it's shown that the number of students who have the correct pronunciation at pretest was (12) but it increased at the post test and becomes (16). Also the number of students who have the incorrect answers in pronunciation is decreased, it was (12) at pretest and become (8) at posttest. This indicates that there is an existence of statistically differences at the experimental groups.

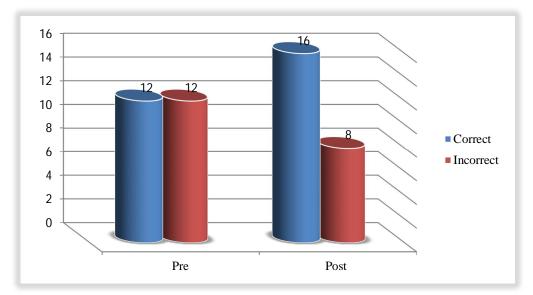


Fig. (4.13) The frequency distribution of pre–posttests in experimental according to Pronunciation

4.4 Control Group

Table (4.16) The frequency distribution of pre –post tests in controlgroup according to Fluency:

Fluency	Pre	Post	diff
High	5	6	+1
Low	19	18	-1
Total	24	24	0

According to the above table (4.16) and figure (4.14) for the control group it's shown that, the number of students with high fluency at pretest was (5) however, it increased at the post- test and becomes (6). Also, the number of students with low level of fluency is decreased, it was (19) at pre- test and become (18) at the post-test. This indicates that, there is no statistically difference between pre and posttests at the control group in the fluency.

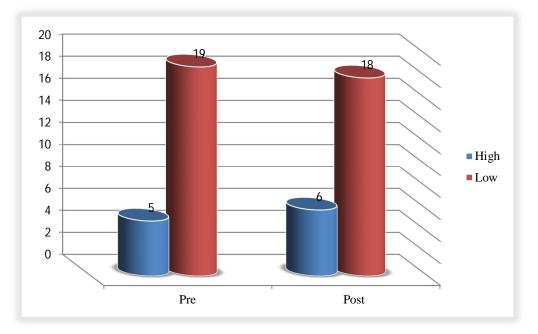


Fig (4.14) The frequency distribution of pre –post tests in control group according to Fluency

Table (4.17) The frequency distribution of pre-posttests in controlgroup according to accuracy:

accuracy	Pre	Post	diff
Deep	4	6	+2
Shallow	20	18	-2
Total	24	24	0

According to the above table (4.17) and figure (4.15) for the control group it's shown that, the number of students with deep accuracy at pretest was (4) however, it increased at the post-test and becomes (6). Also the number of students with Shallow level of accuracy is decreased, it was (20) at pre-test and becomes (18) at post-test. This indicates that there is no statistically difference between pre and posttests at control group.

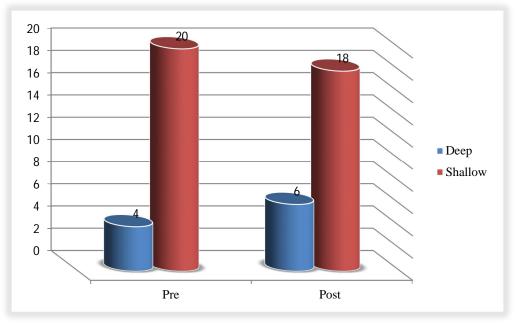


Fig. (4.15) The frequency distribution of pre–posttests in control group according to accuracy

Table (4.18) the frequency distribution of pre-posttests in controlgroup according to Pronunciation:

Pronunciation	Pre	Post	diff
Correct	9	11	+2
Incorrect	15	13	-2
Total	24	24	0

According to the above table (4.18) and figure (4.16) for the control group it's shown that, the number of students who have the correct pronunciation at pre- test was (9) but it increased at the post-test and becomes (11). Also, the number of students who have the incorrect answers in pronunciation is decreased, it was (15) at pre-test and becomes (13) at post-test. This indicates that there is existence of statistically differences at the pre and posttests at control group.

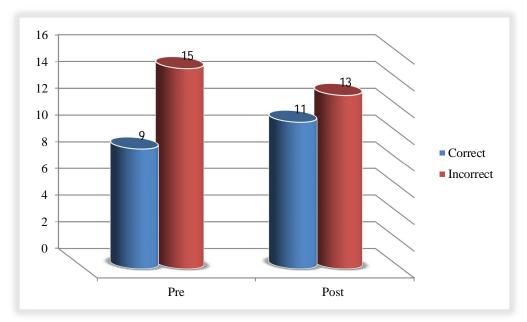


Fig. (4.16) The frequency distribution of pre–posttests in control group according to pronunciation

4.5 Hypotheses Testing for the Pre-test

Table (4.19) One sample	T-test for	(High-Low	Fluency) for	· pre-
test:				

Groups	X	SD	DF	p- value	t- value	critical	sig
Experimental	13.2	1.54	23	0.231	2.4	2.03	0.05
Control	14.2	2.33		0.201	2	2100	0.00

Concerning the scores gained from the pre-test (of fluency), the mean value was calculated. Mean for the control group was (14.2) and for the experimental group it was (13.2). Moreover, a T-test was employed on these scores for hypothesis testing purposes. As the result of T-test suggests (P-value 0.231) is being greater than (0.05), the null hypothesis is accepted since there is no application in the intended strategy. So there is no significant difference between the two groups.

Table (4.20) One sample T-test for (Deep-Shallow Accuracy) forpretest:

Groups	X	SD	DF	p- value	t- value	critical	sig
Experimental	11.3	1.4	23	0.131	3.1	2.03	0.05
Control	11.5	2.53		0.131	5.1	2.05	0.00

Concerning the scores gained from the pre-test (of Accuracy), the mean value was calculated. Mean for the control group was (11.5) and for the experimental group it was (11.3). Moreover, a T-test was employed on these scores for hypothesis testing purposes. As for the result of T-test suggests (P-value 0.131) is being greater than (0.05), the null hypothesis

is accepted since there is no application in the intended strategy. There is no significant difference between the two groups in accuracy.

Table (4.21)One sampleT-testfor (Correct-IncorrectPronunciation) for pre- test:

Groups	\overline{X}	SD	DF	p- value	t- value	critical	sig
Experimental	13.4	2.01	23	0.076	6.03	2.03	0.05
Control	12.1	1.32		0.070	0.00	2:00	0.00

Regarding the scores gained from the pre-test (of pronunciation), the mean value was calculated. Mean for the control group was (12.1) and for the experimental group was (13.4). Moreover, a T-test was employed on these scores for hypothesis testing purposes. As the result of T-test suggests (P-value 0.076 being greater than 0.05), the null hypothesis is accepted since there is no application the intended strategy. There is no significant difference between two the groups in pronunciation.

4.6 Hypotheses Testing for the Post-test

Groups	X	SD	DF	p- value	t- value	critical	sig
Experimental	16.4	3.01	23	0.002	4.6	2.03	0.05
Control	13.1	1.32	1	0.002		2.00	0.00

Table (4.22) One sample T-test for (High–Low Fluency) for posttest:

According to the scores gained from the post test (a valid test taken by the researcher), the mean value was calculated. Mean for the control group was (13.1) and for the experimental group was (16.4). Moreover, a T-test was employed on these scores for hypothesis testing purposes. As the result of T-test which suggests (P-value 0.002 being less than 0.05), there is a noticeable difference between two groups. Therefore, the null hypothesis is rejected and the alternative hypothesis stating that "cooperative learning enhances the students' communication skills" is accepted.

 Table (4.23) One sample T-test for (Deep-Shallow Accuracy) for

 posttest:

Groups	X	SD	DF	p- value	t- value	critical	sig
Experimental	15.3	2.01	23	0.001	2.53	2.03	0.05
Control	11.1	1.34		0.001	2.00	2.00	0.00

For the scores gained from the post-test (a valid test taken by the researcher), the mean value was calculated. Mean for the control group was (11.1) and for the experimental group was (15.3). Moreover, a T-test was employed on these scores for hypothesis testing purposes. As the

result of T-test suggests (P-value 0.001 being less than 0.05), there is a noticeable difference between two groups. Therefore, the null hypothesis is rejected and the alternative hypothesis stating that "cooperative learning enhances the students' ability to communicate with ease and efficiency" is accepted.

Table (4.24) One sample T-test for (Correct-IncorrectPronunciation) for post test

Groups	\overline{X}	SD	DF	p- value	t- value	critical	sig
Experimental	13.7	4.01	23	0.023	4.06	2.03	0.05
Control	11.1	2.34		0.020	1.00	2.05	0.00

As for the scores gained from the post-test (a valid test taken by the researcher), the mean value was calculated. Mean for the control group was (11.1) and for the experimental group was (13.7). Moreover a T-test was employed on these scores for hypothesis testing purposes. As the result of T-test suggests (P-value 0.023 being less than 0.05), there is a noticeable difference between two groups. Therefore, the null hypothesis is rejected and the alternative hypothesis stating that "cooperative learning enhances the students' ability to communicate with ease and efficiency" is accepted.

4.7 The Interview Analysis

This is a five interviewee opinion. The researcher interviewed this clique of experts who have experience in the field of teaching methodology. The ideas of the interviewees are explained and discussed successively in details.

The responses of the interviewees to the six questions are the followings: In response to the first question (what do you think, should be included when writing learning objectives in cooperative learning classroom?) The first respondent stated out that the points that work in integration when writing learning objectives in cooperative learning classroom are the followings:

- Learners should be stimulated to cooperate among themselves.
- Learners should be encouraged to stick to team work.
- Teachers of English language should focus on the fact that, the material presented by learners is to be authentic and relevant to the topic being discussed.
- The individual differences among learners can be addressed by working in groups.

The second respondent outlined his ideas in only two points as follows: The first one concerning allocating time activity. In addition to specifying student- student role, thinking that, this method is mainly concerning the interactivity among the learners.

Regarding the third interviewee, he answered by drawing the attention to the necessity of including lucrative materials and all sort of incentives however, he didn't offer a full details about the foresaid motivators.

On the other hand, the fourth one thinks that, only "learning materials" should be included when writing learning objectives. In this respect he partially, agreed with all of them.

Eventually, the last respondent disregarded the first question of the interview without providing any justification for doing so.

Regarding the second question which implies (chaos is expected in cooperative learning classroom, so what is your own technique to bring the situation under control?)

The responses are the followings:

The first interviewee emphasized his ideas by saying; it's the accountability of teachers to intervene personally using the power- if the situation becomes chaotic so as to bring the situation under control. And he added that, this should be done before starting the session and delivering the topic.

The second and the third ones shared a common nexus of ideas believing that, it's crucial to involve all the students in extra work overloading them with many tasks and assignments. Lately, one of them added that it's important to focus on group works providing the students with formal and informal activities.

The fourth respondent pointed out three main and accurate points which are organized as follows:

Rubrics should be clear and this will help in making everyone get the instructions and respond positively. Moreover, direct monitoring from teachers should be of great importance. Furthermore, it's useful to select very motivating tasks and activities.

Finally, the fifth respondent believed that, a well-organized classroom is highly important, in addition to the necessity of pointing a leader for each group to minimize the expected chaos.

Concerning the third question, (Is team-work? if so, what makes group-work works?).

The first respondent believed that, team-work is vitally important in cooperative learning classroom however, he attributed the effectiveness of the team-work to the following factors:

- The spirit of competition among the groups should be high.
- Careful selection of the topic being presented and discussed.
- The harmony and full coordination among the members of each team, but he thinks that, teacher's presence is considered to be the most conclusive factor of all the foresaid ones.
- The second respondent briefly summarized his view in three main points concerning teachers, classrooms, and learners, successively.
- Good monitoring to classroom and this is the responsibility of teachers. Seating of the classrooms and this is the responsibility of the educational authority.
- Finally, the accurate dividing of students regarding the individual differences that suit learner-centered approach.

The third respondent agreed with the first and second ones in elevating the spirit of rivalry, in addition to the importance of avoiding errors and endeavoring to keep away from mistakes, because they are inevitable in their occurrence.

On the other hand, the fourth respondent justifies his beliefs by saying that, "group-work is very important, because the students can exchange their ideas through full and active interaction".

Eventually, the fifth respondent believed that, each group should be controlled well to minimize the expected chaos by appointing a leader for each group.

The fourth question is considered to be the most essential one; as it tackles directly the role of cooperative learning approach in enhancing

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and promoting speaking skills. The question is (what are the some of the positive roles, do you believe, cooperative learning plays?). In this respect, almost all the respondents agreed upon the fact that, one of the most positive roles cooperative learning can play is the noticeable promotion of oral production. However, the first respondent elaborates in this concept by mentioning the followings:

- It enhances learning process.
- It promotes learners' dependence on each other, positively.
- It is a real confidence building mechanism that can work well among learners and it should be encouraged by teachers.

The second respondent thinks that, cooperative learning actually can develop the communicative competence, Moreover, it works well in motivating the classroom, and furthermore, it leads directly to real classroom interaction.

The third one draws the attention to a very striking point by emphasizing the role of cooperative learning in the shunning and avoidance of shyness and fear.

Also, it encourages, improves those who are poor in academic levels.

The fourth respondent believes that, cooperative learning plays a great role in developing students' confidence and improves their thinking to a high degree.

Lately, the last respondent thinks that, learners share strengthening their abilities; also they develop their interpersonal skills.

Discussing the fifth question, (what do you think, are the problems that hinder cooperative learning in tertiary level?).

Three out of five agreed upon the idea that, the main impediments which hinder cooperative learning is the physical set-up and environment of the classrooms. Whereas, one of them attributed the cause to the spirit of aspiration with a group of students versus to the spirit of defeatism and failure with other groups. The third of them opined that, unclear objectives, large classrooms besides the individual differences of students, are the main hindrance of cooperative technique.

Reviewing the other respondents' views one of them expressed his ideas by stating that, some learners lack self-confidence when they are encountered by learner-learner technique. Moreover, he believed that, chaos in cooperative learning setting can be attributed to the poor management of classrooms by teachers. Likewise, large and crowded classrooms are not suitable this technique because, it's too difficult to control large classes with few materials. Yet, some of them reckoned that, the seating of students is considered to be the main obstacles behind. Also they believed that, most teachers are untrained and the approach itself is unfamiliar for the students, in addition to the students' preparation for that technique is not as required.

Finally, the last interviewee agreed with them all in their opinions, that concerns large classes, different level of students and the unclear objectives. And she thinks that, these are the main barriers of the application of cooperative learning technique.

In response to question six, (to what extent, do you think, cooperative learning can be implemented in our classes?)

Almost all the interviewees share the same response; however, each one has his/her own justifications.

The first respondent opined that, cooperative learning can easily be implemented in tertiary level specifically as classes and halls are manageable. He added that- reflecting his own experience- this is proved to be successful with his MA students both in ELT and in Applied Linguistics programs because almost all students have shown their readiness and enthusiasm to pursue the technique of cooperative learning. The second respondent thinks that, it can be implemented if the educational authorities were convinced about this special situation however, he didn't explain what is meant by the word situation. Then, he concluded that, this would be reflected in teaching methodology and ways of assessment.

The third one summed up his reply by saying that, to a high scale.

As for the fourth interviewee, he justifies his situation saying that, yes, it can be implemented, only when we either reduce the number of students or change our classrooms' seats.

Ultimately, the last respondent rationalized her opinion by stating that; yes cooperative learning strategy can be implemented if the physical setup of classrooms is modified.

4.8 Summary

This chapter is covered the data analysis of this study, The Effects of Cooperative Learning on Improving EFL Learners' Communication Skills. This is applied through the implemented tools. Moreover, it demonstrates tables and figures. Discussions were made for the collected data. Finally, the results of the study are stated and discussed. **Chapter Five**

Main Findings, Conclusions, Recommendations and Suggestions for Further Studies

CHAPTER FIVE

MAIN FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND SUGESSTIONS FOR FURTHER STUDIES

5.0 Introduction

This chapter presents the conclusion of the study. It relates the analysis and discussion of data to the study questions and hypotheses. It will, also, offer recommendations and suggestions for further studies.

5.1 Summary Findings

From the use of SPSS alpha Cronbach program in chapter four, the results of the questionnaire revealed that:

- CL promotes speaking skills of low-ability students and helps the incompetent ones to practice the language a little bit.
- It is also found that CL fosters positive students' attitudes to speak English language.
- Another result of this study is that heterogeneous groups enrich students' diverse thinking through the use of language and exchanging different lucrative ideas.
- Homogeneous groups are also proved to be necessary as it bring to the light a high satisfaction and a better coordination among the students.
- The technique of "Think pair share" was found to be indispensable as it involves all students in learning process. Consequently, it eliminates social loafing and no one is left alone.
- Involving students in games through the formation of group discussion is of beneficial and useful for all EFL learners

regardless to their cultural background, ethnicity and their level of intelligence.

- Generally, it's indicated that the deep comprehension to the material being taught creates active peer interaction and boosts their speaking skills.
- Also, it's found that the focus on group discussion realize positive interdependence among students.

It's clear that cooperative learning strategy has had a positive influence on EFL learners' communication skills.

The statistical analysis in chapter four shows that there is advancement in speaking skills of students as the means of the post-tests are higher than those of pre-tests. And the results of the pre and post tests indicated that:

- Students-students interaction enables even the shyer ones get out of their shells and speak.
- It's observed that, cooperative learning improves the students' communication skills through participation, and realizing positive interdependence face to face interaction, accountability besides building up self-confidence.
- Another finding showed that the application of team work harmonizes working together and try talking at any account.
- It's also noticed that during the application of cooperative learning strategy when the students club up and work in teams, it helps develop social life and gives a sense of unity.
- On the other hand, it's proved to be the dominance of teachercentered technique is the main cause of the students' inability to use the foreign language properly.

- Likewise the individualistic method demotivates the majority of the students and become passive and part of them are entirely frustrated.

In conclusion, it can be said that: based on the results of the study, it can be seen that the CL method is of great role in promoting the students' communication skills and creating positive atmosphere due to several reasons. Collaboration among the students, students' interaction in a foreign language will have a positive effect on EFL learners.

5.2 Conclusion

The study stated out that, most of the Sudanese students at tertiary level are unable to communicate factual information or even conveying a meaningful expression with ease and efficiency. And the reasons for that are many and varied. The relevant -like reviewed that Cooperative Learning is a very effective instrumental technique, however, it's proved that, not every collective work can be considered as Cooperative Learning unless the five elements are to be realized.

Also, Cooperative Learning provides the substantiality of student-student interaction without neglecting the role of teachers. Moreover, the experiences proved that the best way to learn a language is to use it.

Also, some important and relevant features were illustrated and mentioned. The data is collected through the pre and posttests for the EFL learners at university level. A questionnaire for EFL teachers and carefully eclectic questions for professional experts were designed. All the collected data are analyzed and tabulated computationally.

The responses of the experts were analyzed due to 'content analysis', then it's presented and discussed. The study is concluded by showing the results, conclusion, recommendations and suggestions for further studies.

5.3 Recommendations

In the light of the results of the study, the followings are recommended:

- Teachers are advised and should understand the importance of group works to establish close rapport among students through considering the individual differences.
- The difficulty of forming students into groups is not an excuse for teachers to keep a loaf. However, they should practice CL strategy through "Think pair share" technique.
- Teachers should encourage their students to practice a foreign language in small groups in and out classrooms to make substantial link with everyday language.
- It's beneficial to provide teachers with more training and workshops; in order to raise their awareness of the necessity of using cooperative learning strategy.
- Educational authority should consider the necessity of physical set-up of classrooms and halls that suit some CL activities.
- Chaos is expected in the classrooms, while forming the groups. Therefore, teachers shouldn't be worried about that as it is a spontaneous behavior and such noise soon will be out of scene.

5.4 Suggestions for Further Studies

Cooperative stills an inviting area in the field of learning process strategies of a foreign language. So, the researcher would like to advice future researchers, not only to focus on the influence of cooperative learning strategy on communication skills, but in a parallel way to study how this effective technique could motivate learners to write a wellconstructed paragraphs. Moreover, CL technique is needed to be generalized and more researches should be done to cover broad spectrum of other language skills such as listening and reading.

Bibliography

The Holy Quran.

The Honored Sunnah- Sahih Bukhari.

The Honored Sunnah-Sahih Muslim.

Advanced Learner's Dictionary, Oxford, New 8th Edition.

- Alice Macpherson. (2015). Cooperative Learning Group Activities for College Courses. Kwantlen University College. KORA: Kwantlen Open Resource Access.
- Babikir. B. A. (2013). The Impact of using Cooperative Learning Strategy on EFL Learners' Performance, Sudan University of Science & Technology. College of Graduate Studies. A Ph.D. thesis.
- Baker, J. & West up, H. (2000). How to teach large classes with few resources: The English language teachers' hand book: Continuum International Pres.
- Brandt, M. et al. (2002). Improving students' Social Skills through the use of cooperative learning, problem solving and direct constructions. M.A. thesis, Faculty of Education, St. Xavier University.
- Brown, H., Ciuffetelli, D.C (Eds.). (2009). Foundational methods: Understanding teaching and learning. Toronto: Pearson Education.
- Bryman, A. (1992). Quantitative and Qualitative Research: Further Reflections on their integration. In Brannen, J. (Ed.), Mixing methods: Quantitative and Qualitative Research, P.57-78. Sydney: Ashgate.

- Byrd, A. H. (2009). Learning to learn cooperatively, English Teaching Forum: United States Department of State for Teachers of English.
- Classroom Management, California Resource Guide. (2000). Los Angeles County office of education.
- Cohen, et al. (2000). Research Methods in Education. (1st Ed.)London: Routledge Falmer.
- Coombe, C. & Hubley, N. (1999). Fundamentals of language assessment manual.
- Decombe, M. (2003). The good research guide for small-scale social research project (ended), Maidenhead/Pheladelphia: Open University Press.
- Descombe, M. (2003). The Research Guide for Small-scale Research Project, (2nd Ed.). Maidenhead/Philadelphia: Open University Press.
- Deutch, et al. (1949). A theory of cooperation and competition. Human relations. 2-129-152.
- Fedler, R. M., Brent, R. (2007). Effective strategies for cooperative learning, J. Cooperation and collaboration. Raleigh. NC.
- Hamer, J. (2001). The practice of English language teaching. Harlow Pearson Education Ltd.
- Harris, M. & McCann, P. (1994). Handbook for the English classroom Heinemann English language teaching, Heinemann.
- Heaton J. B. (1988). Writing English Language Tests. Long man Group. UK Limited.

- Heeden, T. (2003). The reverse Jigsaw:: A process of cooperative learning and discussion. Teaching sociology.
- Jack, C. Richards and David Bohlke. (2011). Four Corners: Workbook. Cambridge University Press.
- Johnson, B. and Christensen, L. (2000). Educational research: Quantitative and Qualitative Approach. Boston: Alyn and Bacon.
- Johnson, D. Jonson, R. (1994). Learning together and alone, cooperative, competitive, and individualist. Needham Heights, M A: Prentice Hall.
- Johnson, D. W & Johnson, R. T. (1996). Meaningful and manageable assessment through cooperative learning.
- Johnson, D. W. & Johnson, R. T. (1994). Cooperative learning in the classroom, Association for Supervision and curriculum Development. Michigan Unversity, U.S.A.
- Johnson, D. W. & Johnson, R.T. (1995). Cooperation in the classroom, Edina.
- Johnson, D. W., Johnson, R., & Holubec, E. (2002). Circles of learning (5th Edition) Edina, MN: Interaction Book Company.
- Johnson, D. W., Johnson, R., and Holubec, E. (2002). Circles of learning. (5th edition), Edino, MN: Interaction Book Company.
- Johnson. D. W. (2009). "An Educational Psychology Success Story. Social Interdependence Theory and Cooperative Learning". Educational Research.
- Johnson. R. T & Johnson, D. W. (1999). Cooperative learning and assessment in D. Kluge S.

- Kagan, S. (1994). Kagan cooperative learning. 2nd Ed. San Clemente, CA: Kagan Publishing.
- Kagan, S. (1995). We can talk. Cooperative learning in the elementary ESL classroom. Washington DC.
- Kesseler & Fathman. M. K. Fathman and Carolyn Kessler (1992).Cooperative Language Learning in School Contexts. Annual Review of Applied Linguistics, Vol. 13, Cambridge University Press
- Kevin Seifert & Rosmary Sutton. (2009). Educational psychology. 2nd Ed. Chapter 9. Facilitating complex thinking.
- Larsen-Free-man, Diane. (1986). Techniques and principles in Language Teaching. Oxford: Oxford University Press.
- Li, M. P. & Lam, B. H. (2015). The Hong Kong Institute of Education. WWW. Lededu. Hk/ aclass.
- Lin, M. (2009). Effects of cooperative learning on the oral proficiency of Chinese students in tertiary level EFL Classroom. PhD thesis, University of Leiceter, China.
- Lopez, M. and Sonet, R. (2014). The impact of Oral Communicative Strategies through Cooperative Work Activities on EFL Beginner Learner. MA thesis, Universidad de la Sabana, Chia, Colombia.
- Lyman, F.T. (1981). The responsive classroom discussion: The inclusion of all students. In main streaming digest, ed. A. Anderson, 109-113. College Park: University of Maryland press.

- Maldoado, et al. (2011). Role of cooperative learning Strategies in the Development of 5th Graders' Speaking Skills. MA thesis, George Washington School, USA.
- Martin DE., et al. (2004). Rank Difference Analysis of Microarrays, a novel approach to statistical analysis of microarray expression profiling data. BMC Bioinformatics. 5:148.
- May, M. & Doob, L. (1937). Cooperation and competition. New york: social sciences research council.
- McCormick, D. E. & Donato, R. (2000). Teacher Questions as Scaffolded Assistance in an ESL Classroom. In Hall, J. K. & Verplaetse, L. S. (Eds.), Second and Foreign Language Learning through Classroom Interaction, P182-201. London: Lawrence Erlbaum Associates, publisher.
- Mohammed, Y. (2017). The Feasibility of Using Cooperative Learning in Teaching English at Elementary Schools. MA Thesis, Nile Valley University.
- Olsen, R. E., & Kagan, S. (1992). About cooperative learning in C. Kessler (Ed.). Cooperative Language Learning: a teacher resource book. Englewood Cliffs, NJ: Prentice Hall.
- Palniscar, A. S., & Brown, A.L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. Cognition and Instruction, 1 (2), 117-175.
- Pattanpichet, F. (2011). The Effects of Using Collaborative Learning to enhance Students' English Speaking Achievement. Scientific Paper, Bangkok University. Thailand.

- Richard and Rodgers. (2001). Approaches and Methods in Languages Teaching. Cambridge Language Teaching Library. Cambridge. UK.
- Schul, J. E. (2012). Revisiting an old friend: The practice and promise of cooperative learning for the twenty-first century. The social studies.
- Slavin, R. E. (1984). Cooperative learning theory Needham Heights, Allyn & Bacon.
- Slavin, Robert. "<u>Cooperative Learning</u>". Johns Hopkins University. <u>Retrieved 5 march (2015)</u>.
- Soraya, B. (2010). Enhancing Students' Oral Proficiency through Cooperative Group Work. M.A thesis, Constantine University.
- Vidakovic, B. (1997). Optimal testing in a fixed-effects functional analysis of variance model. International Journal of Wavelets, Multiresolution and Information. Georgia Institute of Technology and Emory University.
- Rhoades, G. (2013). Minimizing the Chaos through CooperativeClassroom Management: Forming Groups. No. (4). EnglishTeaching Forum

Appendices

Appendix (1)

Teachers' Questionnaire

Dear teachers,

This questionnaire is a part of a (Ph.D.) study, designed to elicit teachers' views about the effectiveness and the influence of cooperative learning on improving foreign language learners' communication skills.

We would, greatly, appreciate your cooperation by filling in the questionnaire. Your individual responses will be kept, strictly, confidential.

Please, tick the appropriate opinion in the given spaces.

Definition of cooperative learning:

An instructional strategy, in which students work actively and purposefully together in small groups, to improve both their own and their teammates' learning.

Thanks

The researcher

No.	Statements	Always	Usually	Sometimes	Rarely	Never
1.	In my point of view, cooperative learning promotes speaking skill of					
	low-ability students.					
2.	I think, using cooperative learning					
	fosters positive students' attitudes to speak English.					
3.	As far as I believe, heterogeneous					
	groups enrich "diverse thinking"					
	through the use of language.					
4.	In my opinion, homogeneous group					
	students show a high satisfaction and					
	a better coordination.					
5.	I believe that, deep understanding of					
	the material being taught creates					
	active peer interaction.					
6.	I encourage my students to practice					
7.	speaking at any account. I involve my students in games to					
7.	practice the foreign language.					
8.	I encourage the students of foreign					
	language to exchange ideas for					
	discussion.					
9.	I make my students believe "it is					
	good to interact through think pair share".					
10.	I focus on group discussion to realize					
10.	positive interdependence.					

Appendix (2)

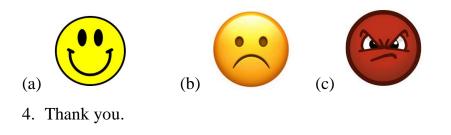
Tests

Part one:

- 1. What is your name?
- 2. What does your father do?
- 3. Why do you choose the specialization of anesthesia?

Part two:

- 1. Don't you mind if I dress myself into your lap coat for a while?
- 2. What about a course of IELTS?
- 3. Describe the following images:



Appendix (3)

Experts' Interview Questions

- 1) What do you think should be included when writing learning objectives in cooperative learning classrooms?
- 2) Chaos is expected in cooperative learning classroom so what is your own technique to bring the situation under control?
- 3) Is team work important? If so, what makes group-work works?
- 4) What are the some of the positive roles, do you believe cooperative learning plays?
- 5) What, do you think, are the problems that hinder cooperative learning in tertiary level?
- 6) To what extent, do you think, cooperative learning can be implemented in our classes?

Thanks