

**TEACHERS' KNOWLEDGE, ATTITUDE AND PRACTICE OF COOPERATIVE
LEARNING; THE CASE OF ALAMATA TOWN ADMINISTRATION SECOND
CYCLE PRIMARY SCHOOLS**

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ABSTRACT

***Teachers' knowledge, attitude and practice of Cooperative Learning the case of
Alamata Town Administration Second Cycle Primary Schools***

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The purpose of this study was to describe the knowledge, attitude and practice of teachers towards cooperative learning. The study was conducted in Alamata Town Administration second cycle primary schools. In the town there are five elementary schools. The researcher selected three schools through simple random sampling technique. Questionnaire, interview and observation were used to gather data. Participants of the study were teachers, students, supervisor and principals. Available sampling was used for teachers, supervisor and principals. Regarding selection of students' simple random sampling technique was employed. Accordingly, 30 teachers, 1 supervisor, 212 students and 3 principals were included as respondents of the study. Regarding to the method of research employed, the researcher used descriptive survey. This was due to the fact that descriptive survey method was more appropriate to collect adequate information from various participants. On the top of this, both qualitative and quantitative analysis techniques was employed. The study revealed that teachers did not know what cooperative learning really is. However, it was found that teachers seem to have a favourable attitude towards cooperative learning, though they did not properly practice it in classroom instructions. It was also found that teachers in the study lack the necessary skills for implementing cooperative learning methodology. Seating arrangement and back ground of classrooms being observed was also found to be not suitable for practicing cooperative learning. Finally, based on the above findings, some recommendations have been forwarded. These are; adequate training time should be devoted to acquaint teachers with how and when to effectively implement cooperative learning in classroom instructions. It has also been recommended that for the cooperative group learning to be more likely to work in the classroom, teachers' should get access to long term support and learn from one another. This long term support can be through mentors, peer coaching and sharing ideas.

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CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Nowadays, there is a paradigm shift in pedagogy trends worldwide from the teacher dominated method in which the teaching learning process is managed and controlled by the teacher who holds power and responsibility in class, while playing the role of a director or a decision maker to a cooperative learning method which is more learner - oriented system that gives learners to become more active in the learning process.

Cooperative learning is a successful teaching technique in which small groups, each with students of various levels of ability, use a multiple of learning activities to improve their understanding of a subject. Each member of a team is answerable not only for knowledge what is taught but also for helping other team members to learn, thus developing an environment of success. They work in group to gain from each other's effort; they share a common fate, work in cooperation and feel proud for group success (Akhtar, Kiran, Rashid and Satti, 2012). Cooperative learning employs both enjoyable and effective teaching strategy and it results in significantly higher learning gains and positive learning experience. It provides the students opportunity to interact with their classmates and such interaction develops in them feelings of cooperation and care for others (Ahmad and Mahmood, 2010).

For learning to be effective, knowledge should be constructed, discovered, transformed, and extended by students. For this to happen, the main role of teachers should not be dominant like what has been mentioned above but create conditions within which the students can construct knowledge from what they are learning. In line with this, Derebssa (2006) said that the pedagogical shift from the traditional teacher-centered approach, in which the emphasis is on teachers and what they teach, to a student-centered approach, in which the emphasis is on students and what they learn, requires a

fundamental change in the role of the educator from that of a didactic teacher to that of a facilitator of learning.

Because cooperative learning is an effective medium to teach academic skills (it promotes positive learning interaction and enhanced attitudes toward learning), teachers should decide to adopt cooperative learning as an alternative teaching strategy to encourage learners to be in cooperative groups and learn together.

However, there is a difference between simply having learners work in a group and structuring groups of learners to work cooperatively. A group of learners sitting at the same table doing their own work, but being free to talk with each other as they work, is not structured to be a cooperative group. A cooperative learning strategy consists of five key components according to Johnson and Johnson (2009, p. 2)

- Clearly perceived positive interdependence;
- Considerable promotive (face-to-face) interaction;
- Clearly perceived individual accountability and personal responsibility to achieve the group's goals;
- Frequent use of the relevant interpersonal and small-group skills; and
- Frequent and regular group processing of current functioning to improve the group's future effectiveness.

To summarize in Isaacs's (2008) terms, for groups to be cooperative, the members must have clear positive interdependence, members must promote each other's learning and success face-to-face, hold each other personally and individually accountable to do a fair share of the work, use appropriately the interpersonal and small group skills needed for co-operational efforts to be successful and process as a group how effectively the members are working together. From this idea, the most important point that we should understand is that cooperative learning is a method of teaching not an end by itself but is a strategy that needs a skilful teacher to be purposefully implemented. Hence, if students are demanded to accomplish activities meaningfully through cooperative learning, the teacher should know why, how and when to employ cooperative learning strategies in

classrooms. This means that the knowledge and attitude that teachers hold on cooperative learning strategy are very pertinent for the method to be sufficiently utilized.

Recently, cooperative learning seems to become one of the major active learning strategies that attract attention of many countries. From the different definitions and explanations by different authors elsewhere in the world, cooperative learning can be conceptualized as an essential component that can accelerate problem solving capacity of students. However, this method demands teachers to know how, when and why to practice in classroom instructions. This is to mean that the effectiveness of cooperative learning implementation depends on teachers' knowledge, attitude and practice toward cooperative learning strategy. Furthermore, to have a general picture on the extent to which the science of cooperative learning is applied in classroom instructions, conducting an investigation on teachers' knowledge, attitude and practice towards cooperative learning is very important. Therefore, the purpose of this study was to assess the knowledge and attitude of teachers about cooperative learning and the degree to which they practice it in classrooms.

1. 2. Statement of the Problem

As has been said, there is a shift from the teacher dominated method of teaching to cooperative learning strategy where students interact with each other to maximize their own and each other's learning. Cooperative learning is a student-centered; the instructor facilitates the instructional strategy in which a small team of mixed ability students are responsible for their own learning and the learning of all team members.

Similar to this idea, Panitz (1996) mentioned cooperative learning is a teaching strategy which allows students to work together in small groups with individuals of various talents, abilities and backgrounds to accomplish a common goal. He added that each individual team member is responsible for learning the material and also for helping the other members of the team. On top of this, Slavin and Cooper (1999), define cooperative learning as instructional approach that has been shown to promote a variety of positive cognitive, affective and social outcomes. And the intent of cooperative learning is to

enhance academic achievement by providing students with increased opportunities for discussion, learning from each other, and by allowing students to divide up tasks in ways that tap into their academic strengths.

Cooperative learning is much more than placing students in small groups and requiring them to learn together, but demands each of the team members accountable for their and the team's outcome. Each individual team member is responsible for learning the material and also for helping the other members of the team learn.

Having realized this, Ministry of Education underlined the importance of implementing cooperative learning approaches in teaching at various levels to promote the development of problem-solving capacities and competencies of the students (MoE, 2002). However, Daniel (2007) pointed out that despite the strong criticisms on the conventional teacher-based approach in education, the teaching leaning process in most schools in Ethiopia has persisted to be teacher dominated. Most classes are characterized by a situation where students are made to listen to their teachers and copy notes from the blackboard. Learning by doing, problem solving, cooperative learning and group approaches are limited.

Furthermore, Derebssa (2006) also said that educators broadly agree that teacher-dominated pedagogy, placing students in a passive role is undesirable. Government policies and implementation strategies encourage learner centered, active pedagogy, cooperative learning and the development of critical thinking and problem-solving skills. Yet, there is ample evidence that teacher-dominated pedagogy is the norm in the vast majority of Ethiopian primary schools. Therefore, from the above research findings, it is possible to understand that in most schools in Ethiopia cooperative leaning is neglected though ideally the strategy is contemplated.

Like other Ethiopian elementary schools, Alamata Town Administration primary schools are expecting to practice cooperative learning strategies so as to realize the national educational objectives and produce effective students. However, from experience and the researcher's personal observations, it is understood that teachers seem to lack the basic techniques of cooperative learning. In addition to this, a research of this kind has not been

carried out so far in that particular Administrative Town. This means that the level of practice, knowledge and attitude of teachers on cooperative learning was not investigated before. Unless these points are assessed and evaluated through research, it could hardly be possible to talk about the effectiveness of cooperative learning.

Therefore, the researcher found that conducting an investigation on this issue in that particular Town is extremely significant. Hence, the researcher wants to know why teachers of that particular Town did not employ cooperative learning in classroom instructions to the level expected. Therefore, to bring to light why cooperative learning is not meaningfully implemented, the researcher wants to carry out an investigation on teachers' knowledge, attitude and practice of cooperative learning with particular reference to Alamata Town Administration second cycle primary schools in south Tigray Administrative State.

To this end, the following basic research questions were addressed:

1. What is the knowledge of teachers towards cooperative learning like?
2. What do teachers' attitudes towards cooperative learning strategies look like?
3. To what extent do teachers practise cooperative learning in the actual classrooms?

1.3. Objectives of the Study

The general objective of this study is to investigate teachers' knowledge, attitude and practice of cooperative learning. More specifically, the study seeks to

- i. explore teachers knowledge of cooperative learning strategies;
- ii. look into teachers' attitudes towards cooperative learning strategies; and
- iii. examine teachers' practice of cooperative learning strategies in their classroom.

1.4. Significance of the Study

It is expected that the results of this study would provide the following significances:

- I. Teachers may get more insights about the purposes of using cooperative learning strategies and the techniques and types of cooperative learning.
- II. The result of this study may help teachers to be aware of the existence of variety of cooperative learning methods.
- III. It may also provide significant information about the current practice of cooperative learning for Alamata Woreda Town Administration Education Office in particular and Tigray education bureau in general.
- IV. Interested researchers may get some ideas in studying further the same or related topics.

1.5. Scope of the Study

There were five elementary schools in Alamata Town Administration. However, this study was delimited to three of the elementary schools in the Town. For this study, Second Cycle primary schools (grades 7 and 8) teachers and students were included as participants. This is because grades 7 and 8 students are relatively able to evaluate the instructional methods of their teachers since they are relatively matured. Furthermore, the study was delimited to the knowledge, attitude and practice of teachers on cooperative learning.

1.6. Limitation of the Study

Using only one supervisor and three second cycle primary schools of a single Woreda as a respondent was the limiting factor to get more supervision experiences of different supervisors and more participants from different Woreda and various grade levels.

1.7. Operational Definitions of Terms

Cooperative learning: is a successful instructional approach where small teams of mixed ability students, (high, medium and low academic achieving students) work together to take full advantage of their individual and group learning.

Knowledge: familiarity of teachers with cooperative learning.

Attitude: the feeling of teachers on the implementation of cooperative learning.

Practice: is how cooperative learning strategies put into practice in classroom instructions by teachers

1.8. Organization of the Study

This paper contains five chapters. Chapter one covers the background of the study, statement of the problem, objectives of the study, significances of the study, scope of the study, limitation of the study and definitions of operational terms. Chapter two deals with a literature review about cooperative learning. The third chapter outlines research methodology. The fourth chapter presents analysis and interpretation of data. Finally, chapter five presents summary of major findings, conclusion drawn and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Introduction

In this part, a brief review of the related literature to the major topic of the study was made. The concepts and definitions of cooperative learning, essential element of cooperative learning, characteristic of cooperative learning, types of cooperative learning, the role of teachers in cooperative learning and benefits of cooperative learning and class activities that use cooperative learning are discussed.

2.2. Concept and Definition of Cooperative Learning

Researchers gave various definitions of cooperative learning Johnson and Johnson (2000) defined that cooperative learning is a generic term that refers to numerous methods for organizing and conducting classroom instruction. They also said that cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. Similarly, Kagan (n.d) mentioned that cooperative learning is a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement. Students work through the assignment until all group members successfully understand and complete it.

Johnson, Johnson and Monson, (2012) conceptualized cooperative learning as a new paradigm of teaching that involves creating the conditions under which students can actively discover and construct their own knowledge, having students work together cooperatively to do so as learning is a social (not an individual) process, creating personal relationships among students, developing the competencies and talents of all students, and motivating students through intrinsic goals.

To Eslamian, and Aref (2012), the term is considered as a new approach in educational practice. The central idea underlying cooperative learning is involvement, which basically means that learners form a kind of mutual help group, and work interdependently to achieve a common goal of learning. Similarly, Hijazi and Al-Natour (2012) said that cooperative learning is a learning style where students group together to accomplish significant cooperative tasks. It is a learning style where students are likely to attain higher levels of achievement, to increase time on task, to build cross-ethnic friendships, to experience enhanced self-esteem, to build life-long interaction and communication skills, and to master the habits of mind (critical, creative and self-regulated) needed to function as productive members of society.

Other scholar, Knight (2009) defined cooperative learning as a learning mediated by students rather than the instructor. In cooperative learning, students work in groups to teach themselves the contents being covered. Cooperative learning also is a method that teachers can use to inject variety into their lessons, and handled effectively; it provides a setting for students to learn important social skill. Similar to this idea Cheong (2010) said that in cooperative learning, the development of interpersonal skills is as important as the learning itself. The development of social skills in group work-learning is a key to high quality group work. Many cooperative learning tasks are put to students with both academic objectives and social skills objectives.

It should be remembered here that simply putting students in groups to work together is not a sufficient condition for achieving the benefits of cooperative learning, unless the instructor takes steps to assure academic and responsibility heterogeneity of the small groups, the group learning is likely to be ineffective. As Cheong (2010) said, many of the strategies of cooperative learning involve assigning roles within each small group (such as recorder, participation encourager, summarizer) to ensure the positive interdependence of group participants and to enable students to practice different teamwork skills.

To sum up, the above definitions forwarded by the different authors shared a common ground in terms of explaining the fundamental principles of cooperative learning.

Therefore it is possible to put that common ground in the following way: cooperative learning is a successful learner focused instructional approach where small teams consisting of students with different ability (high, medium and low academic achieving students) work together to take full advantage of their individual and group learning. Moreover, it can also be conceptualized that cooperative learning is about moving from rote learning to learning how to think critically and in varying conditions. Besides, cooperative learning is a multipurpose learning style with the intention of enhancing academic achievement, encouraging individual accountability and creating an environment where learning and practicing social skills are possible. However, to be successful in setting up and having students complete group tasks within a cooperative learning framework, teachers should know, perceive positively and practice the essential elements or requirements of cooperative learning.

2.3. Essential Elements of Cooperative Learning

The meaningful implementation of cooperative learning in classroom instructions involves the accommodation and practice of various essential elements. Although it is assumed that there are several methods of cooperative learning, the most commonly cited are those suggested by Johnson and Johnson. According to, Johnson and Johnson (2009), putting students into groups does not necessarily gain a cooperative relationship. To be cooperative, to reach the full potential of the group, they suggested the following five essential elements to be carefully structured into the situation. These are positive interdependence, individual and personal accountability, face-to-face interaction, appropriate use of social skills, and group processing.

2.3.1. Positive Interdependence

Positive interdependence is the first element of cooperative learning that involves an effectively structured cooperative lesson where students develop a belief of sinking or swimming together. To ensure that students believe they "sink or swim together" and care about how much each other learns, the teacher has to structure a clear group or mutual

goal, such as learn the assigned material and make sure that all members of the group learn the assigned material.

Positive interdependence promotes a situation in which students: 1) see that their work benefits group mates and their group mates' work benefits them, and 2) work together in small groups to maximize the learning of all members by sharing their resources to provide mutual support and encouragement and to celebrate their joint success.

In general for positive interdependence to be effectively accomplished in classroom instructions, teachers have to make certain that the group's joint goal can be accomplished only through cooperation. Besides, teachers should be aware that unless there is positive interdependence, there is no cooperation. Hence, teachers must help their students learn to interact positively with people who are different from themselves and who may not think the same as they do.

2.3.2. Face-to-Face Promotive Interaction

The relationship between positive interdependence and Promotive interaction is linear for positive interdependence always results in Promotive interaction. Promotive interaction may be defined as scenario where individuals are encouraging and facilitating each other's efforts to achieve, complete tasks, and produce certain outcomes in order to reach the group's goals. Although positive interdependence can take the primacy in influencing the students and groups overall outcomes, the role of face to face Promotive interaction among individual students, which is fostered by the positive relations, and an adjusted psychology and social competence of students, is paramount and indispensable. Promotive interaction is an element of cooperative learning characterized by a state of affairs whereby individuals provide to each other with efficient and effective help and assistance; exchanging needed resources. Moreover, it also entails the exchange of feedback among group mates in order to bring about higher quality decision making and greater insights in to the issue being considered. The chance of reaping more advantages from the above mentioned element is still there. To mention, students can have the possibility to influence each other's efforts in order to achieve the group's goals; they can

also act in trusting and trustworthy ways; being motivated to strive for mutual benefit; and maintaining a moderate level of arousal characterized by low anxiety and stress.

2.3.3. Individual Accountability/Personal Responsibility

Individual accountability exists when the students are held responsible by group mates for contributing his or her fair share to the group's success. It requires the group to know who needs more assistance, support, and encouragement in completing the assignment.

Individual accountability is the key to ensure the strength of all group members through cooperative learning. To elaborate, since cooperative learning demands the contribution of all group members and enables each of them to get new insights from the other, the likelihood that individual strength become consolidated is higher.

Furthermore, to ensure that each student is individually accountable to do his or her fair share of the group's work, teachers need to assess how much effort each member is contributing to the group's work, provide feedback to groups and individual students, help groups avoid redundant efforts by members, and ensure that every member is responsible for the final outcome.

According to Johnson and Johnson (2009) the following are the common ways used to structure individual accountability:

1. Keeping the size of the group small. The smaller the size of the group, the greater the individual accountability may be.
2. Giving an individual test to each student.
3. Randomly examining students orally by calling on one student to present his or her group's work to the teacher (in the presence of the group) or to the entire class.
4. Observing each group and recording the frequency with which each member-contributes to the group's work.

5. Assigning one student in each group the role of checker. The checker asks other group members to explain the reasoning and rationale underlying group answers.

2.3.4. Interpersonal and Small-Group Skills

An efficient application of individuals' social skills in group discussions enables students to effectively run their groups which in turn laid a platform for furthering their social skills. In the meantime, teachers are expected to instruct their students these skills as part of their professional duties.

According to Johnson and Johnson (2009) in order to coordinate individual efforts to achieve mutual goals, students must: 1) get to know and trust each other, 2) communicate accurately and unambiguously, 3) accept and support each other, and 4) resolve conflict constructively. Besides, they further said that placing socially unskilled individuals in a group and telling them to cooperate does not guarantee that they will be able to do so effectively. Instead, social skills must be taught to students just as purposefully and precisely as academic skills. Leadership, decision-making, trust building, communication, and conflict management skills empower students to manage both team work and task work successfully.

2.3.5. Group Processing

Group processing is the fifth element of cooperative learning according to Johnson and Johnson (2009). It may be defined as reflecting on a group session to: 1) describe what member actions were helpful and unhelpful, and 2) make decisions about what actions to continue or change. The purpose of group processing is to clarify and improve the effectiveness of the members in contributing to the collaborative efforts to achieve the group's goals.

There are two levels of processing -- small group and whole class. In order to ensure that small-group processing takes place, teachers allocate some time at the end of each class session for each cooperative group to process how effectively members worked together.

Groups need to describe what member actions were helpful and not helpful in completing the group's work and make decisions about what behaviors to continue or change.

In addition to small-group processing, the teacher should periodically engage in whole-class processing. When cooperative learning groups are used, the teacher observes the groups, analyzes the problems they have working together, and gives feedback to each group on how well they are working together. The teacher systematically moves from group to group and observes them at work.

An important aspect of both small-group and whole-class processing is group and class celebrations. It is feeling successful, appreciated, and respected that builds commitment to learning, enthusiasm about working in cooperative groups, and a sense of self-efficacy in terms of subject-matter mastery and working cooperatively with classmates.

In general, the effectiveness of the elements of cooperative learning depends on teachers' knowledge, attitude and practice on these essential elements in classroom instructions. This is to mean that, if teachers have the necessary knowledge, positive attitude and if they effectively implement it in the real teaching and learning process, the goals of cooperative learning are more likely to be achieved. This is again to mean that, unless the essential elements of Cooperative learning listed above are implemented meaningfully and properly, teachers should not expect the many positive long-term results of cooperative learning. In addition to these elements there are also certain characteristics that further maximize the extent to which cooperative learning objectives are achieved.

2.4. Characteristics of Cooperative Learning

2.4.1. Heterogeneity and Group Size

Carefully planned cooperative learning teams can maximize the performance of each team member. For well-structured and organized teams, teachers should not allow students to self-select their team members. They should rather plan the heterogeneous team to be made up of students who have different ability levels. Similarly, Stahl (1994) elaborated that teachers should organize the three-, four-, or five-member groups so that

students are mixed as heterogeneously as possible, first according to academic abilities, and then on the basis of ethnic backgrounds, race, and gender. Students should not be allowed to form their groups based on friendship or cliques. When groups are maximally heterogeneous and the other essential elements are met, students tend to interact and achieve in ways and at levels that are rarely found in other instructional strategies. Moreover, Hailu, Solomon and Desta (2011) found that heterogeneous small-group cooperative learning strategy opens door for greater interaction through which negotiation of meanings and sharing of ideas are enhanced. They further stated that heterogeneous small-group enables students to develop the sense of responsibility, leadership, and managerial skills in the process of learning. Regarding group size, since it has a marked impact on the number of lines of communication, and nature of interaction among cooperative learning teams, teams of 4-5 are ideal Kagan (1989) as cited in Isaacs

2.4.2. Assigning Roles

Each member is assigned complementary and interconnected roles that specify responsibilities that the group needs in order to complete the joint task. Teachers create role interdependence among students when they assign them complementary roles such as reader, recorder, checker of understanding, encourager of participation, and elaborator of knowledge. Such roles are vital to high-quality learning (Johnson and Johnson, 2009). After group members are structured into heterogeneous ability small groups and receive instruction and different roles from their teacher, students within the group cooperate with one another and work through the task until each team member successfully understands and completes the team task.

2.4.3. Sufficient Time

For the desired behavior to be realized, students in cooperative learning should be given appropriate time with the issue they are given to discuss. Similar to this idea, Stahl (1994) said that each student and group should be provided the amount of time needed to learn the targeted information and abilities to the extent expected. Moreover, Johnson and Johnson (2011) further explained that cooperative learning teams should be provided

enough time for the students to function as a team where they learn to rely on, cooperate with, and learn from one another. Without adequate time, students may become frustrated and not function well as a team.

2.4.4. Clear Instructions

According to Johnson and Johnson (2011), for cooperative learning teams to be effective teachers are required to give the team a set of well-defined and explicit instructions or guidelines before they begin each team activity so all team members know what is expected of them, their roles, and how they should work within the team.

In addition, Stahl (1994) also said that teachers need to state directions or instructions that describe in clear, precise terms exactly what students are to do, in what order, with what materials, and when appropriate, what students are to generate as evidence of their mastery of targeted content and skills. These directions are given to students before they engage in their group learning efforts.

2.4.5. Clear Set of Specific Student Learning Outcome Objectives

Cooperative learning is a means to an end rather than an end in itself. Therefore, teachers should begin planning by describing precisely what students are expected to learn and be able to do on their own well beyond the end of the group task and curriculum unit. Regardless of whether these outcomes emphasize academic content, cognitive processing abilities, or skills, teachers should describe in very unambiguous language the specific knowledge and abilities students are to acquire and then demonstrate on their own (Stahl, 1994).

2.5. Types of Cooperative Learning

According to Johnson and Johnson (2009) there are three types of cooperative learning. These are formal cooperative learning, informal cooperative learning and cooperative base groups as presented underneath.

2.5.1. Formal Cooperative Learning

Formal cooperative learning consists of students working together, for one class period to several weeks, to achieve shared learning goals and complete jointly specific tasks and assignments (such as problem solving, completing a curriculum unit, writing a report, conducting an experiment, or having a dialogue about assigned text material). Any course requirement or assignment may be structured to be cooperative. In formal cooperative learning, teachers do the following (Johnson et al., 2008) as cited in Johnson and Johnson (2009).

1. Make a number of pre- instructional decisions. A teacher has to decide on the objectives of the lesson (both academic and social skills objectives), the size of groups, the method of assigning students to groups, the roles students will be assigned, the materials needed to conduct the lesson, and the way the room will be arranged.
2. Explain the task and positive interdependence. A teacher clearly defines the assignment, teaches the required concepts and strategies, specifies the positive interdependence and individual accountability, gives the criteria for success, and explains the expected social skills in which to be engaged.
3. Monitor students' learning and intervene in the groups to provide task assistance or to increase students' interpersonal and group skills. A teacher systematically observes and collects data on each group as it works. When needed, the teacher intervenes to assist students in completing the task accurately and in working together effectively.
4. Evaluate students' learning and help students process how well their groups functioned. Students' learning is carefully assessed, and their performances are evaluated. Members of the learning groups then process how effectively they have been working together.

2.5.2. Informal Cooperative Learning

Informal cooperative learning consists of having students work together to achieve a joint learning goal in temporary, ad hoc groups that last from a few minutes to one class period (Johnson et al., 2008) cited in Johnson and Johnson (2009). Students engage in quick dialogues or activities in temporary, ad hoc groups in response to a limited number of questions about what is being learned. The brief dialogues or activities may be used to focus student attention on the material to be learned, set a mood conducive to learning, help set expectations as to what will be covered in a class session, ensure that students cognitively process the material being taught, and provide closure to an instructional session. Informal cooperative learning groups are often organized so that students engage in 3- to 5-minute focused discussion before and after a lecture and 2- to 3-minute turn to your partner discussions interspersed every 10 to 15 minutes throughout a lecture.

2.5.3. Cooperative Base Group

Are long-term, heterogeneous cooperative learning groups with stable membership whose primary responsibilities are to provide support, encouragement, and assistance to make academic progress and develop cognitively and socially in healthy ways as well as holding each other accountable for striving to learn (Johnson et al., 2008) cited in Johnson and Johnson (2009). Typically, cooperative base groups (a) are heterogeneous in membership, (b) meet regularly (e.g., daily or biweekly), and (c) last for the duration of the semester, year, or until all members are graduated. Students are assigned to base groups of three to four members and meet at the beginning and end of each class session (or week) to complete academic tasks such as checking each member's homework, doing routine tasks such as taking attendance, and engaging in personal support tasks such as listening sympathetically to personal problems or providing guidance for writing a paper.

The next section focuses on the different benefits of cooperative learning methods which can be used in the classrooms.

2.6. Benefits of Cooperative Learning

From the ideas presented in the definition and concept of cooperative learning section, we can understand to what extent cooperative learning is a multi dimensional learning strategy. In addition to what has been presented above there are many other benefits come up when cooperative learning is effectively employed in the classroom instruction. The following are some benefits of using Cooperative learning in real teaching learning process.

2.6.1. Academic Benefit

Researchers and education specialists endorse the view that student learning can be maximized, thus academic performance improved, by developing a sense of “we are all in the same boat together,” a basic tenet of cooperative learning (Akhtar et al,2012).

When the classroom is structured in a way that allows students to work cooperatively on learning tasks, students benefit academically as well as socially. Learners in cooperative learning groups can discuss, debate and clarify their understanding of the concepts and materials being considered during the class and can help one another master the basic facts necessary for computational procedures. Similarly Slavin and Cooper (1999) suggested that the intent of cooperative work groups is to enhance the academic achievement of students by providing them with increased opportunity for discussion, for learning from each other, and for encouraging each other to excel.

2.6.2. Enhance Creativity

Johnson (1977) as cited in Johnson and Johnson (2009) stated that cooperative learning promotes creative thinking by increasing the number of ideas, quality of ideas, feelings of stimulation and enjoyment, and originality of expression in creative problem solving. It is not surprising that students are "triggered" by the ideas of others and that different perspectives cause group members to consider a larger number of alternatives. The cooperative relationship also provides a context to consider and appreciate other group

members' ideas instead of ignoring (individualistic) or trying to come up with a better one (competition).

2.6.3. Psychological Benefits

Cooperative learning helps to develop interpersonal relationships among learners. The opportunity to discuss their ideas in smaller groups and receive constructive feedback on those ideas helps to build learner self-esteem. In a whole-class format, learners are called upon to respond to a question in front of the entire class without having much time to think about their answer. Cooperative learning creates a safe, nurturing environment because solutions come from the group rather than from the individual. Errors are corrected in the group before they are presented to the class (Isaacs, 2008)

2.6.4. Social Benefit

One of the most valuable uses of cooperative learning is to teach social and interpersonal skills. Cooperative learning teams provide a safe, intimate atmosphere where social skills are modeled by other group members. It is a place where students can practice new skills (Johnson and Johnson, 2009). Learners in cooperative learning tend to become tolerant of diverse viewpoints, to consider others' thoughts and feelings in depth, and seek more support and clarification of others' positions (stahl, 1994). Therefore for the desired behaviors to be happened social skills should be taught just as systematically as mathematics, social studies, or any subject.

2.6.5. Benefits for Teachers

During cooperative learning both teachers and learners can assume responsibility for evaluating the skills and contributions of group members. While learners are engaging in group activities, teachers often collect and share information on how groups are functioning in regard to the academic and social aspects of the lesson. This information is shared with the groups during and after the lesson. Direct observation is a valuable tool for teachers who are concerned about a learner's performance in a specific area (Isaacs, 2008).

To sum up, from the above advantages of cooperative learning discussed by different scholars, it is possible to say that both cognitive and affective growth results from cooperative learning. Moreover, cooperative learning benefits students to make higher achievement gains, higher level of self esteem and greater motivation to learn. However, for the above explained benefits of cooperative learning to be realized, teachers need to be well acquainted with the various steps used to implement cooperative learning.

2.7. Role of Teachers in Cooperative Learning

Teachers' role in a cooperative learning classroom involves a careful design of meaningful tasks that require active participation of each student in the group towards a common end. At the beginning of a cooperative lesson, the teacher's role, often in cooperation with the class, is that of "task setter." As groups work on tasks, the teacher acts as a facilitator moving from group to group to monitor the learning process. The teacher also provides students with regular feedback and assessment of the group's progress (Ogunleye, 2011). Besides, teachers should use the following pertinent steps used to successfully implement cooperative learning.

2.8. Teachers' Use of Cooperative Learning Strategies

Foyle and Lawrence (1988,p.2-3) identify the basic steps involved in successful implementation of cooperative learning activities:

1. The content to be taught is identified, and criteria for mastery are determined by the teacher.
2. The most useful cooperative learning technique is identified, and the group size is determined by the teacher.
3. Students are assigned to groups.
4. The classroom is arranged to facilitate group interaction.

5. Group processes are taught or reviewed as needed to assure that the groups run smoothly.
6. The teacher develops expectations for group learning and makes sure students understand the purpose of the learning that will take place. A time line for activities is made clear to students.
7. The teacher presents initial material as appropriate, using whatever techniques she or he chooses.
8. The teacher monitors student interaction in the groups, and provides assistance and clarification as needed. The teacher reviews group skills and facilitates problem-solving when necessary.
9. Student outcomes are evaluated. Students must individually demonstrate mastery of important skills or concepts of the learning. Evaluation is based on observations of student performance or oral responses to questions; paper and pencil need not be used.
10. Groups are rewarded for success. Verbal praise by the teacher or recognition in the class newsletter or on the bulletin board can be used to reward high-achieving groups.

2.9. Class Activities in Cooperative Learning

Kagan and his associates at Kagan Publishing and Professional Development have developed different cooperative learning activities. The following are some of the cooperative learning activities developed by Kagan and his associates, (n.d).

2.9.1. Jigsaw

Jigsaw concept is based on the division of activities and each group member is assigned some unique material to learn and then to teach to his group members.

The purpose of jigsaw learning is to develop team work and cooperative learning skills within all learners. In addition, it helps to develop a depth of knowledge not possible if

the learners were to try and learn all the material on their own. This is to mean that jigsaw method requires equal division of tasks among the cooperative learning teams and teams are responsible for mastering a unique portion of content and presenting that content to teammates.

2.9.2. Think pair-share

This method is usually embedded within large lessons and activities. It comprises four steps. First, the teacher poses a question or problem on the class. Second, students are given time to think by themselves. Third, students are to discuss their ideas with partner and fourth, the teacher calls on some of the students to share with whole class their own (and their partners) thinking. Often the focus is on preparatory thinking process rather than completed work projects, rewards are not a main feature of this method (Stahl, 1994)

2.9.3. Numbered Heads Together (Kagan)

A team of four is established. Each member is given numbers of 1, 2, 3, and 4. Questions are asked of the group. The learners are asked to ‘put their heads together’ to ensure that everyone knows the answer. Teacher calls out a number and the learners with that number raise their hands or stand up to respond. This activity guarantees positive interdependence because learners put their heads together to agree on the correct answer and to ensure that all team members know that answer, thus everyone anticipates being called on (Isaacs, 2008 and Stahl 1994).

2.9.4. Team Pair Solo (Kagan)

Team pair solo is a strategy of cooperative learning whereby students are grouped into teams. First, they solve problems as a team, then with a partner, and finally on their own i.e. individually. It is designed to motivate students to tackle and succeed at problems which initially are beyond their ability. It is based on a simple notion of mediated

learning. Team works a problem to completion and then splits into pairs. Pairs work a similar problem together and then split into solo students who individually work the same type of problem. This strategy builds confidence when attempting more difficult content material. It also helps students to do more things with help (mediation) than they can do alone.

In general, in spite of the differences among the different cooperative learning approaches, all cooperative learning strategies intended to have students believe a high degree of responsibility for their own learning rather than perceiving learning as imposed by others.

CHAPTER THREE

RESEARCH METHODS AND PROCEDURES

This chapter describes the way in which the study was designed and conducted in the selected sample Second Cycle Primary Schools of Southern Zone of Tigray Administrative state. It deals with the method that was employed; research design, sources of data and sampling techniques, instruments and procedures of data collection and method of data analysis.

3.1. The Method Employed

The objective of this study is to investigate teachers' knowledge, attitude and practice of cooperative learning. Thus, descriptive survey method was employed. This method was more appropriate to collect adequate information from various participants. Moreover, the qualitative approach was used to supplement or to get in depth understanding of teachers knowledge, attitude and implementation of cooperative learning in classrooms.

3.2. The Source of Data, Sampling Size and Sampling Technique

3.2.1. The Source of Data

This study was conducted in Alamata Woreda Town Administration second cycle primary schools (grades 7 and 8). Hence, the sources of the data were teachers, students, school principals and a supervisor.

3.2.2. Sampling Size

According to the information obtained from the school principals, in the selected schools there were a total of 1015 students (422 grade 7 and 593 grade 8 students) in the 2012/13 academic year. Out of this, 481 of the students were females and the remaining 534 students were males. Besides, there were 36 teachers (4 females and 32 males), 3

principals and 1 supervisor. Accordingly 240 students (120 from each grade level), 36 teachers, 1 supervisor and 3 principals were included in the study.

3.2.3. Sampling Technique

In the process of selecting participants for this study, random sampling technique was employed. Out of the five elementary schools, three schools were selected using simple random sampling technique. In the three schools there were 12 and 17 sections of grades 7 and 8 respectively. Hence, the researcher randomly selected 6 sections from each grade levels (2 sections from each school of each grade level). Thereafter, he randomly took 20 students from each selected section of the two grade levels. This means that a total of 240 students were selected from grades 7 and 8(120 students from each grade level). Besides, selecting teachers for this study was also pertinent. In the three sample schools, there were only 36 teachers who were teaching grades 7 and 8. Thus, since their number was manageable the researcher took them as a whole.

Finally, the three school principals and a single supervisor (the three schools were supervised by only one supervisor) were also participated in this study.

3.3. Instruments and Procedures of Data Collection

3.3.1. Instruments

The following instruments of data collection namely: questionnaire, classroom observation and interview were used in the study.

3.3.1.1. Questionnaire

The first part of the questionnaire was intended to gather background information of the teacher and student respondents. For the collection of the main data, questionnaire items were prepared for students and teachers. Regarding the questionnaire items prepared for teacher respondents, 5 point Likert scale items was prepared to assess their knowledge and attitude towards cooperative learning. Similarly, 5 point Likert scale items was also prepared for the students to see the extent to which their teachers employ cooperative

learning strategies. The questionnaire items that were prepared to collect data from students were first developed in English but latter translated in to Tigrigna language. During translation, people in the area was consulted (especially Tigrigna language teachers was consulted). Moreover, there were also some open-ended questions in order to let participants write down additional information about the situation of cooperative learning.

3.3.1.2. Classroom Observation

Observation is useful in exploring topics that may be uncomfortable for participants to discuss (Creswell, 2009). Therefore, an observation checklist was prepared for classroom observations.

The checklist was developed by the researcher based on the research objective. The researcher randomly selected six sections from the three schools. That is, two sections (one from each grade level) were selected from each school. Consequently, a total of 18 visits (six visits for each school with three visits for each grade level) were conducted. The purpose of the observation checklist was to see the skills of teachers in implementing the cooperative learning strategies.

3.3.1.3. Interview

Semi-structured interview items were prepared for three school principals and one supervisor. The responses were used to supplement the data that was collected through the different instruments employed for this study.

3.3.2. Procedures of Data Collection

The first step that the researcher did in collecting the pertinent data was making a contact with school principals in order to introduce them with the purpose of the study. Then the researcher with the school principals arranged time and place to get the participants. Accordingly, he first distributed the questionnaire for the students after class time. Questionnaire items were distributed in the presence of the researcher. The need to distribute the questionnaire papers in the presence of the investigator was to avoid any

ambiguity that might affect the study negatively. Before letting them fill the questionnaire, short explanation on how to fill the questionnaire was given by the researcher. Moreover, questionnaire papers for teachers were distributed with the help of the unit leaders. So as to let them thoroughly understand the questionnaires, two days were given. The researcher then carried out the interview with the supervisor and school principals while waiting for the return of the questionnaire papers of teachers. The interview was conducted on individual base. Finally, to carry out classroom observation, the researcher asked permission. After he got consent of teachers, he conducted classroom observations based on the check list prepared.

3.4. Validity and Reliability of the Instruments

Before the actual data collection, the instruments were given to colleagues so as to get valuable comments and criticisms on the strengths and weaknesses of the items. Based on the comments obtained, necessary modifications were made and were given to the thesis advisor for further comments, criticisms and evaluation.

Eventually, the instruments were tried out in small-scale study in Raya Alamata Woreda elementary school, specifically in Facha elementary school. For the pilot study, 40 (20 students from each grade level) students were selected. Moreover, 15 teachers were taken as participants through random sampling technique. Thus, the reliability of the instruments was tested by Cronbach alpha method. The computed reliability of the instruments was 0.83, 0.83 and 0.870 for items prepared to describe teachers' knowledge, attitude and practice of cooperative learning respectively. Hence, the test conducted confirmed that the instruments were reliable to collect data for the main study.

Likewise, to validate the items of the observation checklist, diverse means were employed. First, the observation checklists were given to professionals in the area such as educational researchers and pedagogyists for comments. This was done to increase the validity of the instrument.

Then after, reliability of the instrument was checked by observing a classroom being four observers. Based on this, the researcher, and his co-observers observed one class. The

average agreement calculated for the lesson observed was 0.78. Therefore, the result confirmed that the instruments can measure what is intended to measure.

3.5. Method of Data Analysis

For this study both qualitative and quantitative data analysis techniques were used. The supplementary data that was collected through interview and some open-ended items of the questionnaires was analyzed qualitatively. However, the data collected via questionnaires and observation checklist was analyzed using descriptive analysis and the end result of the study was presented by means of percentages, mean, grand mean and standard deviation. Moreover, one way Analysis of variance (ANOVA) was employed to test knowledge and attitude difference of teachers towards cooperative learning across the three schools. It was also used to test for differences in students' evaluation of teachers' cooperative learning implementation among the three schools. Additionally, Independent t-test was also used to identify if there was with in school difference in students' evaluation regarding teachers' implementation of cooperative learning in classroom instructions.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF THE DATA

This section of the paper presents the presentation, analysis and interpretation of the data collected from respondents. The data for this study were collected from teachers, supervisor, principals and students through questionnaire, observation and interview.

The questionnaires were distributed to second cycle primary school 36 teachers and 240 students (120 grade 7 and 120 grade 8). However, those filled by 30 (83.3%) of the teachers and 212 (88.3%) of the students were returned and used for the analysis.

In addition, one supervisor and three principals were interviewed and their responses were used as supplementary points to confirm responses of teachers, students and the data collected through classroom observation. Therefore, the analysis was made based on the responses obtained from these groups of respondents. Participants were also given open-ended questions in the questionnaires. The open-ended questionnaires were basically prepared to give participants opportunity to write down anything they want to write about the issue under study. The responses of the open-ended questionnaires were used for supplementary purpose.

In general, the qualitative and quantitative data that were collected from different participants via different instruments were presented and analyzed thoroughly as follows.

4.1. Background and Information of the Participants

The focus of this part was to summarize the important demographic characteristics of the respondents. The demographic information of student participants in terms of sex, age, grade level and their school is illustrated in Table 1.

Table 1: Summary of Demographic Characteristics of Student Respondents

S/No	Description		Respondents	
			No	%
1	Age	Below 14	114	53.8
		14 and above	98	46.2
		Total	212	100
2	Sex	Female	99	46.7
		Male	113	53.3
		Total	212	100
3	Grade level	7	102	48.1
		8	110	51.9
		Total	212	100
4	School	Andegna Dereja	72	33.9
		Biruh Tesfa	69	32.6
		Kokeb Tsibah	71	33.5
		Total	212	100

As it can be seen in the above Table, 53.3 % of the respondents were male and 46.7% of them were female. Regarding age of the students, 53.8 % of them were below 14 and the remaining 46.2 % of respondents were 14 and above. From this one can deduce that the majority of the students' joined a school at the age of seven which is the standard school age determined by the Ministry of Education. As indicated in the table, 48.1 % of the respondents were grade 7 and 51.9 % of them were grade 8 students. Moreover, 33.9 % of the students were from Andegna Dereja, 32.6 % of them were from Biruh Tesfa and 33.5 % of the students were from Kokeb Tsibah. This indicates that relatively an equal

number of students were taken from the three schools. This was due to the fact that the total numbers of students in the three schools were almost equal.

Table 2: Background information of teacher participants

S/No	Description		Respondents	
			No	%
1	Sex	Male	27	90
		Female	3	10
		Total	30	100
2	Academic qualification	TTI	—	—
		Diploma	29	96.7
		Degree	1	3.3
		Others	—	—
		Total	30	100
3	Service year	1 – 5 years	2	6.7
		6 -13 years	13	43.3
		Above 14 years	15	50
		Total	30	100
4	Work load per week	10-14 periods	3	10
		15-19 periods	2	6.7
		20-24 periods	17	56.7
		25-30 periods	8	26.6
		Total	30	100
5	Grade level taught	Grade 7	5	16.7
		Grade 8	8	26.7
		Grades7 and 8	17	56.6
		Total	30	100

As shown in Table 2, the teacher respondent consists of 3 (10 %) females and 27 (90 %) males which show the existence of wider gender imbalance among teachers of second cycle primary schools. Female teachers are very low in number as compared to their male counterparts. This wider gender gap among teacher participants may be due to historical gender inequality in access to education. Regarding the qualification of teachers, the data reveal that almost all teachers 29 (96.7%) were diploma holders where as only 1(3.3%) was a degree holder. This implies that almost all second cycle primary school teachers of the sample schools were qualified enough to teach the grade levels under discussion. Similarly, their teaching experiences dominantly fall in the category of 6-13 and more than 14 years (43.3% and 50% respectively). The remaining participants (6.7%) had work experience of less than 5 years. This implies that the majority of the sample respondents are highly experienced. The above table also depicts work load of teachers; that is, the majority of the respondents were overloaded (56.7% of the teachers had 20-24 periods per week and 26.6% of them had 25-30 periods per week). This means 82.7% of respondents had above 20 periods per week. The table also indicates that 5(16.7%) of respondents were teaching grade seven and 8(26.7%) were teaching grade eight; the remaining teachers 17(56.6%) were teaching both grades seven and eight.

4.2. Teachers' Knowledge of Cooperative Learning

One of the major tools employed in this study was questionnaire to teachers'. The sole purpose for developing this instrument was to generate information from teachers with regard to their knowledge of cooperative learning.

Items related to essential elements, advantages and characteristics of cooperative learning were designed to find out teachers' knowledge of cooperative learning (please see Appendix A items 1-17). The results of teachers' responses towards their knowledge of cooperative learning were calculated and presented in Table 3 below.

Table 3: Teachers' Knowledge of cooperative learning

Items	1=SD		2=DS		3=U		4=A		5=SA		X	S _x
	f	%	f	%	F	%	F	%	f	%		
1	2	6.7	2	6.7	2	6.7	9	30	15	50	4.1	1.21
2	5	16.7	14	46.7	2	6.7	8	26.7	1	3.3	2.5	1.17
3	4	13.3			3	10	9	30	14	46.7	3.9	1.35
4	2	6.7	5	16.7			14	46.7	9	30	3.8	1.25
5	15	50	13	43.3	2	6.7					1.6	.63
6			4	13.3	1	3.3	12	40	13	43.3	4.1	1.01
7	6	20	8	26.7	8	26.7	6	20	2	6.7	2.7	1.21
8	3	10	2	6.7	1	3.3	10	33.3	14	46.7	4	1.31
9			3	10			15	50	12	40	4.2	.89
10	9	30	8	26.7	4	13.3	5	16.7	4	13.3	2.6	1.43
11	2	6.7	2	6.7	5	16.7	15	50	6	20	3.7	1.09
12			2	6.7			17	56.7	11	36.7	4.2	.78
13			3	10	1	3.3	12	40	14	46.7	4.2	.94
14			1	3.3	2	6.7	16	53.3	11	36.7	4.2	.73
15			2	6.7	5	16.7	13	43.3	10	33.3	4	.89
16					7	23.3	16	53.3	7	23.3	4	.69
17	1	3.3	1	3.3	2	6.7	16	53.3	10	33.3	4.1	.92
G.X											3.6	

Note: SD(strongly disagree)=1,DS(disagree)=2,U(undecided)=3,A(agree)=4,SA(strongly agree)=5,X (mean) and S_x(standard deviation), G.X(grand mean).

As it can be seen in Table 3, except for item numbers 2, 5, 7, and 10, the majority of the respondents expressed their agreement to the items designed to measure the knowledge of teachers regarding the essence of cooperative learning The response in the table

indicates that the majority of the respondents have a clear understanding regarding the essential elements, characteristics and advantages of cooperative learning. The above finding can be figuratively further substantiated by the grand mean value (3.6) of all the responses as evidenced from the table. This shows the tendencies of the responses to maintain the values for agree. Therefore, from the responses, one can deduce that teachers seem to have a clear knowledge about cooperative learning. However, the data collected through some open-ended items, classroom observation and an interview with a supervisor and school principals indicate that most teachers' did not know what cooperative learning really is.

Regarding teachers' knowledge on cooperative learning, the supervisor disclosed his idea by saying:

As to me, teachers' knowledge of cooperative learning that is: when, how and why to practice seems to be very low. They did not even differentiate cooperative learning from mere formation of groupings. They did not consider ability heterogeneity while forming cooperative groups. They did not even know how to make classrooms supportive for cooperative learning implementation (27/06/05)

On top of this, the principals reiterated the idea that the supervisor forwarded concerning teachers' knowledge towards cooperative learning. Furthermore, they (principals) said that teachers understand cooperative learning as a system that fails to provide equal opportunity of participation to the students. Moreover, a finding has also been obtained from the class room observation that helps strengthen the above reality. To mention, teachers were not seen practicing the activities they required to accomplish. For example, they did not arrange the seats, share responsibilities among the students; and they failed to allot adequate time to accomplish the given activities for the groups. Besides, teacher respondents have manifested their lack and/or absence of knowledge on cooperative learning through their failure to list even single methods of cooperative learning as evidenced from their responses on open ended part of the questionnaire.

Furthermore, one way ANOVA was used to see if there was cooperative learning knowledge difference among teachers of the three schools. As illustrated in the table below, the summary of one way ANOVA for teachers' knowledge of cooperative

learning across the three schools revealed that there is no variation in teachers' knowledge of cooperative learning across schools. There is no statistically significant difference in teachers' knowledge of cooperative learning ($p < 0.05$ level among teachers of the three schools ($F(2, 27) = 0.735, p = 0.489$)).

This may be due to the fact that the three schools are in one Woreda under similar focus and exposure to different resources like training, workshops and the like. Moreover, geographically they are close to each other. To this effect they were under the supervision of the same supervisor who is expected to provide them the same support and guidance.

Table 4: Summary of one way ANOVA for teachers knowledge of cooperative learning across the three schools

	Sum of Squares	Df	Mean Squares	F	Sig.
Between Groups	39.200	2	19.600	.735	.489
Within Groups	719.600	27	26.652		
Total	758.800	29			

In general, the data collected through the above instruments revealed that teachers did not know the essential elements of cooperative learning. The reality on the ground can be attributed to various problems. For example, the absence of different committees that could have different roles to establish education friendly environment and open a door for discussion among the school teachers is perhaps one of those factors that hinders the proper implementation and awareness creation among the concerned bodies about cooperative learning. In addition, the lack of immediate and necessary follow-ups by supervisors and provision of training to teachers and even students on cooperative learning could also aggravated the poor knowledge of teachers on the topic at hand. Thus it is farfetched to imagine a teacher to know and implement the fundamental components of cooperative learning in the presence of all the above limiting factors. As a result, the extent to which the teachers implement cooperative learning in the class rooms is not in

line with what most literatures are recommending to be. For example, a certain cooperative learning method is expected to include the five major elements such as : positive interdependence, individual and personal accountability, face-to-face interaction, appropriate use of social skills, and group processing (Johnson and Johnson, 2009) which can further be developed through training, proper follow-ups and experience sharing. Furthermore, Hailu Nigus and et al (2011) said that to have successful small- group cooperative learning, teachers should be acquainted with principles, models, and tips of cooperative strategies that result in meaningful learning.

4.3. Teachers' Attitude towards Cooperative Learning

The researcher designed attitude items to be filled by teachers (pleases see Appendix "A" for items 1-14). The intention of the items was to assess teachers' attitude towards cooperative learning. The results of teachers' responses to the attitude items were calculated and presented in Table 5 below.

Table 5: Teachers' Attitude towards Cooperative Learning

	1=SD		2=DS		3=U		4=A		5=SA		X	S _x
	f	%	f	%	F	%	f	%	f	%		
1			1	3.3	3	10	8	26.7	18	60	4.4	.81
2	1	3.3	2	6.7	1	3.3	9	30	17	56.7	4.3	1.06
3					6	20	11	36.7	13	43.3	4.2	.78
4	4	13.3	5	16.7	3	10	8	26.7	10	33.3	3.5	1.45
5	1	3.3	1	3.3	1	3.3	14	46.7	13	43.3	4.2	.94
6	2	6.7	6	20	4	13.3	10	33.3	8	26.7	3.5	1.38
7	8	26.7	7	23.3	5	16.7	7	23.3	3	10	2.7	1.34
8					2	6.7	12	40	16	53.3	4.5	.63
9	8	26.7	7	23.3	6	20	2	6.7	7	23.3	2.8	1.52
10					5	16.7	11	36.6	14	46.7	4.3	.75
11					4	13.3	12	40	14	46.7	4.3	.71
12			1	3.3	3	10	13	43.3	13	43.3	4.3	.79
13	1	3.3			4	13.3	11	36.7	14	46.7	4.2	.94
14	5	16.7	8	26.6	5	16.7	12	40			2.8	1.16
G.X											3.9	

Note: SD(strongly disagree)=1,DS(disagree)=2,U(undecided)=3,A(agree)=4,SA(strongly agree)=5,X (mean) and S_x(standard deviation), G.X (grand mean)

As shown in Table 5, in order to assess teachers' attitude toward cooperative learning 14 items were raised. To this effect, the data in the table indicate that teachers had positive attitude towards cooperative learning (86.7% of them strongly agreed and agreed, mean=4.4). What is more, most of the respondents thought that group members in cooperative learning should be heterogeneous in ability (86.7% of them strongly agreed and agreed, mean=4.3). In the same Table, the majority of the respondents believed that cooperative learning improves students self esteem (80% of them strongly agreed and agreed, mean=4.2). Moreover, from among the respondents more half of them believed

that cooperative learning increases students productivity (60% of them strongly agreed and agreed, mean= 3.5). The respondents also affirmatively replied that cooperative learning improves respect of others opinions among students (90% of them strongly agreed and agreed, mean= 4.2). On the other hand, the table shows that a little more than half of the respondents claimed that that cooperative learning has a positive effects on students' academic achievement(60% of them strongly agree and agreed, mean= 3.5). Additionally, the table indicates that with the exception of few respondents all recognized that cooperative learning enables students to create new ideas (93% of them strongly agreed and agreed, mean= 4.5). From the same table evidence has been obtained that the majority of the respondents articulated that cooperative learning is important both for students and teachers (83.3% of them strongly agreed and agreed, mean=4.3). What is more, the majority of the respondents thought that teachers should know the essential elements of cooperative learning for successful learning (86.7% of them strongly agree and agree, mean=4.3). Moreover, most of the participants believed that cooperative learning is a valuable instructional approach (86.7% of them strongly agreed and agreed, mean=4.3). Finally, the table reveals that a large number of participants thought that cooperative learning makes students to be responsible for their learning (83.4% of them strongly agreed and agreed, mean=4.2).

To summarize, the aggregate responses of the participants indicates that most of them have a favorable attitude towards cooperative learning. The grand mean value (3.9) that tends to the value for "Agree" confirms that teachers have favorable attitude towards cooperative learning.

So as to supplement the questionnaire responses of teachers, an interview was also carried out with a supervisor and school principals. Accordingly, the interviewees were asked to elaborate how they describe the attitude of teachers towards cooperative learning implementation. In response to this item one of the principal (P₁), disclosed his idea by saying:

Actually proper implementation of cooperative learning in the actual teaching learning process is not a simple task; especially in a situation, where there is no adequate supervision and training. Therefore, in our worda particularly in

my school cooperative learning implementation can be evaluated as low and as to me, this low practice of cooperative learning might not be caused due to attitudinal problem of teachers towards cooperative learning it rather might be due to teachers' lack of knowledge on how to meaningfully implement it (05/07/05).

Furthermore, the supervisor and the rest principals have also found to provide the same reflection to the idea provided above concerning to the same question forwarded to the above interviewee. Accordingly, the interview result found from the above interviewees can be summarized that the status of the implementation of cooperative learning was low and the reason for this situation was lack of teachers' knowledge on cooperative learning rather than their attitudinal problems.

Meanwhile, an attempt was made to know whether attitudinal difference among teachers of the three schools exists. As indicated in the table underneath, there is no statistically significant difference in the attitude of teachers towards cooperative learning ($p < 0.05$ level across the three schools ($F(2, 27) = .529, p = 0.595$)).

Table 6: One way ANOVA Summary of teachers' attitude towards cooperative learning across schools

	Sum of squares	Df	Mean squares	F	Sig
Between groups	36.200	2	9.73	.529	.595
With in groups	5518.800	27	18.39		
Total	555.000	29			

In general, based on the data collected from the different sources via different instruments regarding teachers' attitude towards cooperative learning, it is possible to say that teachers have positive attitude on cooperative learning. Similar to this finding Berhanu (2000) founded that though teachers did not effectively practice cooperative learning, they had a favorable attitude towards cooperative learning.

4.4. Teachers practice of Cooperative Learning

To assess to what extent cooperative learning strategies are practiced in classroom instructions, the researcher developed observation checklist. The observation checklist had three parts. The first part presents about classroom conditions of the schools being observed, the second part presents activities that are expected to be accomplished by teachers and the final part is about students' activities. In order to evaluate teachers' practice of cooperative learning, the results of the three sections of the observation checklist were compiled and presented in the tables below.

Table 7: Classroom Conditions

S/No	Items	Yes	%	No	%
1	Seats are suitable to employ cooperative learning.	2	11.1	16	88.9
2	The scene/ background of the classrooms are suitable for cooperative learning.	1	5.6	17	94.4
3	There is enough space to move in classroom for the teacher.	4	22.2	14	77.8
4	Number of students is manageable.	18	100	-	-
5	There are enough seats.	18	100	-	-

As depicts in the above Table, the data obtained from classroom observation portrays that 88.9% and 94.4% of the observation result indicate that the arrangement of seats and the back ground of classrooms respectively did not support the implementation of cooperative learning. Similarly, in the classrooms being observed, 77.8% of the observations showed that there was no enough space for teachers to move and monitor every group's activity. Regarding availability of seats, there were enough seats though they were not arranged in a way suitable to implement cooperative learning. Similarly, the numbers of students were manageable (there were 40 and below 40 students in each classroom room being observed).

Similar to the data obtained via observation, in the open-ended items, teachers complained that classroom conditions were not supportive for the proper implementation of cooperative learning. It is commonly known that making classroom conditions supportive and attractive for cooperative learning implementation is inseparable to meaningful instruction. However, the data from teachers indicates that teachers were not discharging their classroom roles that include making classroom conditions supportive for effective implementation of cooperative learning.

To sum up, the classroom conditions of the schools being observed were not helpful to implement cooperative learning. In addition, though there were enough seats, it was placed haphazardly. Teachers neglected to arrange students' seats in the way suitable to accelerate the implementation of cooperative learning.

Table 8: Teachers' activities in practicing cooperative learning

S/No.	Item	Yes	%	No	%
1	Organizing the class for cooperative learning implementation.	1	5.6	17	94.4
2	Holding a facilitating role.	8	44.4	10	55.6
3	Explaining the objectives of the activities.	7	38.9	11	61.1
4	Practicing variety of cooperative learning.			18	100
5	Letting students to cooperatively interact each other.	2	11.1	16	88.9
6	Equally sharing responsibilities among students.			18	100
7	Helping students to develop positive interdependence.	2	11.1	16	88.9
8	Forming heterogeneous in ability cooperative groups.			18	100
9	Utilizing the essential elements of cooperative learning.			18	100
10	Providing directions on how to work cooperatively.	3	16.7	15	83.3
11	Providing chance to present the groups idea.	3	16.7	15	83.3

According to the above Table, the greater parts of the activities which are expected to be undertaken by the teachers were not accomplished. That is, 100% of the observed sessions did show that teachers were not employing the essential elements and characteristics of cooperative learning, such as heterogeneous ability grouping, equal responsibility sharing, organizing the class for cooperative learning implementation, and practicing variety of cooperative learning.

Furthermore, the observation result indicates that almost all teachers emphasized the teacher focused (lecture method) teaching style. This indicates that students are not given the opportunities to interact among themselves. Similarly, Girma (2005) strongly expressed

that class time was dominated by teacher-fronted mode of teaching while pair and group work activities were never used in most of the classes observed. Moreover, Derebssa (2006) also found out that in Ethiopian primary schools, traditional lecture methods, in which teachers talk and students listen dominate most classrooms

From the above listed ideas, it is possible to understand that teachers underwent their teaching and learning process in contrary to, if not, different from the principles of cooperative learning. Therefore, it can be deduced that teachers are not only failed to implement cooperative learning but also lack the basic skills of forming cooperative teams.

An interview conducted with a supervisor and the principals pointed out that lack of training on cooperative learning was a major reason for the failure of teachers to practice cooperative learning in classroom instructions. Additionally, teacher respondents reiterated that absence of training on cooperative learning was a major cause for their failure to implement cooperative learning in classrooms and subsequently recommended that training must be provided for teachers to avoid the problem. From this idea, we can imagine the extent to which training affects teachers' knowledge and implementation of cooperative learning in the real teaching and learning process. In the same way to this idea, Seid (2012) founded that insufficient training on cooperative learning, influence teachers to have imperfect understanding of what cooperative learning really is.

Table 9: Students' activities

No	Items	Yes	%	No	%
1	Students are sharing roles equally.	-	-	18	100
2	students are playing their roles effectively			18	100
3	Students are demonstrating what they discussed in their groups	4	22.2	14	77.8
4	Students are open and honest in dealing with the entire group.	2	11.1	16	88.9
5	Students express willingness to cooperate with the other group members	3	16.7	15	83.3
6	Use their time effectively during cooperative learning.	5	27.8	13	72.2

The observation result of the above table shows that students were not playing the activities that they were required to play. Group activities were dominated by few students. The majority of the students were mere listeners. The main reason for their poor participation may be due to failure of their teachers to allocate responsibilities equally among the students and failure to form groups from the different achievement levels (higher, medium and lower achievers). In the classes being observed group members were established according to students seats. This is to mean that ability heterogeneity of students which is the most basic while forming cooperative teams was neglected. Besides, numbers of group members were not proportional. That means some groups had many students and some other groups had very few students.

In general, researcher's observation and experience indicate that teachers simply order students to discuss the activities either in pairs or in groups without telling them how they should discuss and what they should say while they are discussing together.

This finding coincides with the literature that read cooperative learning involve assigning roles within each small group (such as recorder, participation encourager, summarizer) to

ensure the positive interdependence of group participants and to enable students to practice different teamwork skills (Cheong (2010). Similarly, what teachers did was also contrary with the literature that reads teachers should organize the three-, four-, or five-member groups so that students are mixed as heterogeneously as possible, first according to academic abilities, and then on the basis of ethnic backgrounds, race, and gender. Students should not be allowed to form their own groups based on friendship. When groups are maximally heterogeneous and the other essential elements are met, students tend to interact and achieve in ways and at levels that are rarely found in other instructional strategies (Stahl 1994).

4.5. Responses of students regarding Teachers' Implementation of Cooperative Learning

Items related to teachers' implementation of cooperative learning in classroom instructions were designed to be filled by students (please see Appendix "B" for items 1-14). The purpose of the items was to evaluate teachers' practice of cooperative learning. Therefore, the results of students' response were calculated and presented in the Table 10 below.

Table 10: Responses of Students regarding Teachers' Implementation of Cooperative Learning

Items	1=SD	2=DS	3=U	4=A	5=SA	X	S _x
	F	F	F	f	F		
	%	%	%	%	%		
1	39	56	13	57	47	3.1	1.47
	18.4	26.4	6.1	26.9	22.2		
2	47	55	20	39	51	2.9	1.52
	22.2	25.9	9.4	18.4	24.1		
3	70	52	20	29	41	2.6	1.53
	33	24.5	9.4	13.7	19.3		
4	52	62	18	41	39	2.8	1.47
	24.5	29.2	8.5	19.3	18.4		
5	52	58	32	39	31	2.7	1.39
	24.5	27.4	15.1	18.4	14.6		
6	24	44	33	49	62	3.4	1.39
	11.3	20.8	15.6	23.5	29.2		
7	41	55	28	48	40	2.9	1.42
	19.3	25.9	13.2	22.2	18.9		
8	39	43	21	46	63	3.2	1.52
	18.4	20.3	9.9	21.7	29.7		
9	47	46	36	41	42	2.9	1.45
	22	21.7	17	19	19.8		
10	39	38	28	36	71	3.3	1.53
	18.4	17.9	13.2	17	33.5		
11	43	55	28	47	39	2.9	1.43
	20.3	25.9	143.2	22.2	18.4		
G _x						2.97	

Note: Sd(strongly disagree)=1,DS(disagree)=2,U(undecided)=3,A(agree)=4,SA(strongly agree)=5,X (mean) and S_x (standard deviation), G_x (grand mean)

Statements in the above table were prepared to collect data from students regarding teachers 'classroom implementation of cooperative learning. Therefore, as it can be seen from the table, almost all respondents expressed their disagreement to the ideas raised regarding their teachers implementation of cooperative learning. The grand mean value (2.97) confirms that the implementation of cooperative learning in classroom instructions was low.

Moreover, in the open-ended question items, the students have stipulated various ideas about teachers' practice of cooperative learning in the questionnaire provided to them. Accordingly, a summary of their suggestions has been made as follows.

- ✓ The majority of the students did not actively participate because teachers did not share tasks among the students and they simply tell them to be in groups.
- ✓ Group formations did not consider heterogeneity in ability.
- ✓ A guide and support on how students could cooperatively learn were not given.
- ✓ Number of students in groups was not proportional.

The above ideas are good manifestations of the failure of teachers to implement cooperative learning as has been uncovered in the preceding finding. In order to supplement the data obtained from students regarding the implementation of cooperative learning, an interview was conducted with a supervisor and school principals. The supervisor and the principals were asked how they feel the practicability of cooperative learning in their schools. In response to this, one of the principal (P₂), said that:

The practicability of cooperative learning in the schools in which I am supervising is very low. Actually implementation of cooperative learning requires adequate training, workshops; inter school and intra school experience sharing and the like. However, teachers were not accessed to the above mentioned opportunities so far. On the top of this, many of the teachers' are overloaded with classroom teaching learning process and co-curricular activities of the schools as well. Hence, they did not have time to come together and share experiences (03/07/05).

Moreover, the school principals disclosed that though teachers are supposed to employ cooperative learning in classroom instructions, their practice is not to the level desired. According to them (principals) the majority of the teachers rely on instructional methodologies that give less emphasis to students' classroom interaction such as teacher focused learning style. They recommended that teachers should get training on how and why to implement cooperative learning. Similar to this idea (Liang, 2002) said that to make cooperative learning well implemented in classrooms, teachers needed prior training to obtain professional competence of cooperative learning.

To sum up, the data that were collected regarding implementation of cooperative learning from students, supervisor and principals through questionnaire and interview indicate that teachers were not practicing cooperative learning. Therefore, it is possible to generalize that teachers of the sample schools were not implementing cooperative learning in classroom instructions to the level expected.

Despite the above gross picture, attempts were made to test for differences in cooperative learning implementation of teachers across the three schools using one way ANOVA (see the table below)

Table 11: One way ANOVA used to test for differences in cooperative learning implementation across the three schools teachers.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	10301.810	2	5150.905	42.271	.000
Within Groups	25467.261	209	121.853		
Total	35769.071	211			

The results in the table revealed that there is a statistically significant difference on teachers' implementation of cooperative learning across the three schools ($p < 0.05$ level. $F(2,209) = 42.271, p = .000$). Moreover, to specifically identify the school that has a

relatively better implementation of cooperative learning, a post hoc comparison was conducted. The results are presented in the table below.

Table 12: The post hoc comparison of schools teachers in terms of implementing cooperative learning

		Mean		95% Confidence Interval		
		Difference	Std.		Lower	Upper
(I) school	(J) school	(I-J)	Error	Sig.	Bound	Bound
Andegna	Biruh Tesfa	-16.29227*	1.85967	.000	-20.6821	-11.9024
Dereja	Kokeb Tsibah	-3.48905	1.84625	.144	-7.8472	.8691
Biruh Tesfa	Andegna	16.29227*	1.85967	.000	11.9024	20.6821
	Dereja					
	Kokeb Tsibah	12.80323*	1.86607	.000	8.3983	17.2081
Kokeb Tsibah	Andegna	3.48905	1.84625	.144	-.8691	7.8472
	Dereja					
	Biruh Tesfa	-12.80323*	1.86607	.000	-17.2081	-8.3983

* The mean difference is significant at the 0.05 level.

The post hoc comparisons using Tukey HSD test indicated that the mean scores of Biruh Tesfa students for the items regarding to cooperative learning implementation of teachers ($m=46.02$, $SD=17.16$, $p=.000$) was significantly higher than the mean scores of Andegna Dereja and Kokeb Tsibah elementary school students for the items regarding to cooperative learning implementation of teachers ($m=29.72$, $SD=4.80$) and ($m=33.21$, $SD=7.38$) respectively. The students' evaluation of cooperative learning implementation indicates that Biruh Tesfa teachers' practices cooperative learning relatively better than the two other schools. Furthermore, the table shows that there is no statistically significant difference on students evaluation of cooperative learning implementation among the mean scores of Andegna Dereja ($m=29.72$, $SD=4.80$, $p=.144$) and Biruh Tesfa ($m=33.21$, $SD=7.38$, $p=.144$).

Furthermore, as presented in the table below, independent t-test was computed to find if there were mean differences with in schools students' evaluation regarding teachers' implementation of cooperative learning in classroom instructions. Accordingly, the independent t-test result in the table below showed that there was statistically significant difference in evaluation of cooperative learning implementation with in students of Biruh Tesfa elementary school. Grade seven students of Biruh Tesfa scored higher mean ($m=61.6$, $SD=10.53$) than grade 8 students of the same school ($m=31.69$, $SD=5.44$) for the items designed to evaluate teachers implementation of cooperative learning in classrooms. However, the table displays there is no statistically significant difference among the grade levels of Andegna Dereja and Kokeb Tsibah students.

Table 13. Independent t-test for difference of means as a function of grade level

School	Grade level	Number	X	Sx	Df	t-test value	P-value
Andegna	7	35	30.46	5.34	70	-1.269	.063
Dereja	8	37	29.03	4.18			
Biruh Tesfa	7	33	61.6	10.53	47.001	-14.643	.000
	8	36	31.69	5.44			
Kokeb	7	34	37.65	6.24	69	-5.919	.672
Tsibah	8	37	29.14	5.87			

Note; X (mean), Sx (standard deviation)

This may be due to the fact that, one to five (1-5) networking students was started practicing for the first time in Biruh Tesfa primary school. Particularly, in all sections of grade five students before two years. Those students are now grade seven and are included as participants in this research. Therefore, though not fully organized and appropriate, relatively those students had been exposed with how to learn being with others.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter presents the summary, conclusion and recommendations of the study. Firstly, a summary of the study and the major findings are made. Secondly, conclusions of the fundamental findings are drawn. Lastly some possible recommendations are forwarded on the basis of the findings of the study

5.1. SUMMARY

The objective of this study was to investigate teachers' knowledge, attitude and practice of cooperative learning in Alamata Town Administration second cycle primary schools. In order to achieve this objective, the following specific questions were raised in the study.

1. What does the knowledge of teachers towards cooperative learning like?
2. What do teachers' attitudes towards cooperative learning strategies look like?
3. To what extent do teachers practise cooperative learning in the actual classrooms?

To answer the research questions mentioned above, the researcher employed different research instruments. Teachers, a supervisor, principals and students of these schools were the subjects of the study. Available sampling technique was used to select teachers, principals and the supervisor whereas students were selected using simple random sampling techniques. Accordingly, 30 teachers, 1 supervisor and 3 principals were taken as participants of this study. Regarding the student respondents, it was reported that there were 1015 number of students in the selected sample schools. Out of these, 212 students (102 from grade seven and 110 from grade eight) was included to the study through simple random sampling technique. The data were gathered mainly through questionnaire and observation. For supplementary purpose an interview with a supervisor and principals were held. The data collected via questionnaire and

observation checklist was analyzed using frequency, mean, and standard deviation. Besides the data secured via interview and open ended questions of the questionnaire were analyzed qualitatively. One way ANOVA was also employed to test knowledge and attitude difference of teachers towards cooperative learning across the three schools. It was also used to test for differences in students' evaluation of teachers' cooperative learning implementation among the three schools. Independent t-test was also used to identify if there was a mean difference with in schools students' evaluation regarding teachers' implementation of cooperative learning in classroom instructions.

Finally based on the analyzed data, the following findings were obtained.

Major Findings

Knowledge and attitude of teachers towards cooperative learning

- It was found that the majority of the teachers did not know the essential elements of cooperative learning.
- It was also found that teachers seem to have a favourable attitude towards cooperative learning.

Practices of cooperative Learning

The analysis of the data obtained through questionnaire and classroom observation confirmed that:

1. The extent of the practice of cooperative learning in the sample schools was found to be low. This was further confirmed by the following findings:
 - Teachers did not assign individual responsibility (responsibilities were not shared equally among the students).
 - Groups were formed based on students' seats (heterogeneous ability grouping was not considered).
 - Groups were not proportional in terms of their size.
 - Group activities were dominated by few students.

- Teachers gave great emphasis to lecture method.
- Teachers did not take prior training about cooperative learning.

Classroom conditions

The result of the study shows that the arrangement of seats and the back ground of classrooms of the schools being observed were not supportive for the implementation of cooperative learning. Furthermore, it was also founded that teachers did not arrange seats in the way supportive to implement cooperative learning. Students' seat was placed haphazardly.

5.2. CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn.

1. The analysis of the questionnaire items filled by teachers indicates that almost all of the participants seem to have a clear view point about cooperative learning. However, the data collected through interview from a supervisor and the principals and some open ended questionnaires from the teachers indicates that almost all participants did not know why and how to implement cooperative learning in classroom instructions. Thus, it can be possible to conclude that teachers of the sample schools seem to lack the basic knowledge of cooperative learning.
2. With regard to the attitude of teachers towards cooperative learning, the findings of the study revealed that though, they did not practice in the actual classrooms, their attitude seem to be positive. Therefore, it can be concluded that, though teachers did not implement cooperative learning, their attitude towards cooperative learning seem to be positive.
3. Regarding classroom conditions (arrangement of seats and the background of classrooms) the result of the study showed that classrooms of the selected sample schools were not supportive for cooperative learning implementation. It was also founded though there were enough seats, they were placed haphazardly.

Therefore, it can be concluded that teachers did not arrange seats in the way suitable to practice cooperative learning.

4. During cooperative learning implementation, teachers missed the following points
 - ✓ Having heterogeneous groups.
 - ✓ Sharing group tasks equally.
 - ✓ Making groups proportional in terms of size.
 - ✓ Making all students equally active.

From this, one can conclude that, teachers lack the necessary skills or procedures of cooperative learning implementation. It is also possible to conclude that the implementation of cooperative learning is not in line with what most researchers recommended to be. For example a certain cooperative learning is expected to include the five major elements such as; positive interdependence, individual and group accountability, face-to-face interaction, appropriate use of social skills, and group processing (Johnson and Johnson, 2009).

5. With regard to training, it was founded that teachers did not get any training about cooperative learning as a result their knowledge and practice has been greatly affected. Therefore, it can be concluded that, because of lack of training on cooperative learning, teachers appeared to have inadequate knowledge of cooperative learning.

5.3. RECOMMENDATIONS

Based on the findings of the study, the researcher would like to forward the following recommendations for the improvement of the practices of cooperative learning.

1. The result of this study revealed that the classroom condition was not arranged in the way to facilitate cooperative learning. It was also observed teachers formed cooperative groups based on students' seats. This affects the assumption of cooperative learning. For example, it affects students' academic achievement and social skills. Hence, teachers should be aware of the impact of classroom

conditions and grouping mechanisms on students' meaningful learning. Therefore, the first step of learning should be arranging classroom conditions in the way suitable to implement different kind of cooperative learning, and forming heterogeneous ability grouping should also be given due emphasis.

2. Implementation of cooperative learning has been found low and how students perceive each other and interact with one another is a neglected aspect of instruction. Hence, the researcher believes unless teachers get training, it is a challenge for them to be equipped with the necessary assumptions of cooperative learning that enable them implement cooperative learning effectively. Therefore, adequate training time should be devoted to acquaint teachers with how and when to effectively implement cooperative learning in classroom instructions.
3. For the cooperative group learning to be more likely to work in the classroom, teachers should get access to long term support and learn from one another. This long term support can be through mentors, peer coaching and sharing ideas.
4. A new version of continuous professional development (CPD) and higher diploma program (HDP) that focused on improving teachers' knowledge and skill of teaching methods must be provided.
5. The practices and experiences of schools which excel in quality education must be replicated and scaled up through inter school and intra school experience sharing.
6. The focus of this paper was delimited only on investigating teachers' knowledge, attitude and practice of cooperative learning. Therefore, the researcher would like to suggest that future research should be undertaken with regard to the factors that affects the implementation of cooperative learning in the sample schools.

References

- Ahmad, Z & Mahmood, N. (2010). Effects of Cooperative Learning vs. Traditional Instruction on Prospective Teachers' Learning Experience and Achievement. Ankara University, *Journal of Faculty of Educational Sciences*, 43 (1).
- Akhtar, P., Kiran, S., Rashid, M and Satti, A. (2012). A Study of Student's Attitudes towards Cooperative Learning. *International Journal of Humanities and Social Science*, 2(11).
- Berhanu Gebremichael. (2000). A study of the practices of cooperative learning in grade eleven: *Group work organization in focus*. (MA. Thesis). Addis Ababa University: Addis Ababa.
- Cheong, C. (2010). From Group-based learning to Cooperative Learning: A Met cognitive Approach to Project-based Group Supervision. *Informing Science: the International Journal of an Emerging Tran discipline* 13.
- Creswell, J. W. (2009). Research design: Qualitative, Quantitative, and mixed methods approaches (3rd ed.).
- Daniel Desta. (2007). Enhancing Active Learning through Teachers' Peer and Self Reflections in Selected Primary Schools in Ethiopia¹. Addis Ababa University
- Derebssa Dufera. (2006). Tension between Traditional and Modern Teaching-Learning Approaches in Ethiopian Primary Schools. CICE Hiroshima University, *Journal of International Cooperation in Education*, 9(1).
- Eslamian, D & Aref. K. (2012). The Influence of Cooperative Learning on Academic Performance. *Journal of American Science*, 8(2)

Foyle, H and Lawrence, L. (1998). Cooperative Learning Strategies and Children. ERIC Digest., ERIC Clearinghouse on Elementary and Early Childhood Education Urbana IL.

_____the cooperative learning network retrieved on Feb. 6, 2013 from <http://home.att.net/~clnetwork>).

Girma Gezahegn. (2005). A study of secondary school English language teachers' implementation of methodological innovation: The teaching of grammar in focus. (PhD dissertation), Addis Ababa University:

Hailu Nigus, Solomon Tewolde and Desta Berhe. (2011). The effects of small-group cooperative learning strategy on college students' performance of basic mathematics. *The Ethiopian journal of Education*, 31(1).

Hijazi, D and Al-Natour, A. (2012) teachers' attitudes towards using cooperative learning for teaching English interdisciplinary. *Journal of Contemporary Research in Business*,3 (12).

Isaacs, B. (2008) "Cooperative learning implementing an alternative teaching and learning strategy in a grade 7 Technology class" (2008). CPUT Theses & Dissertations. Paper 19. Retrieved on jan12, from http://dk.cput.ac.za/td_cput/19.

Johnson, D., Johnson, R., & Stanne, M. (2000). Cooperative learning methods: A meta-analysis. Retrieved on Jan 16,2013 from <http://www.clcrc.com/pages/cl-methods.html>

Johnson, D., Johnson R. and Monson, V. (2012) Cooperation-Competition and Constructive Controversy in Developing Professional Ethics in Law School Classes. The University of St. Thomas Law School *Journal University of St. Thomas School of Law*.

- Johnson, D., and Johnson, R. (2000): An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning. retrieved on jan10, 2013 from <http://edr.sagepub.com/cgi/content/abstract/38/5/365>
- Johnson, D and Johnson, R. (2009). An overview of Cooperative Learning. retrieved on Jan 15, 2013 from <http://www.co-operation.org/pages/overviewpaper.html>
- Johnson, D. and Johnson, R. (2011) cooperative learning. standard article published online. DOI; 10.1002/9780470672532.wbeppo66
- Kagan, S. (n.d) Cooperative Learning. San Clemente, CA: Kagan Publishing, retrieved on Jan 6, 2013 from <http://www.kaganonline.com/>
- Knight, J. (2009) Cooperative Learning, version 1.2. retrieved on Jan 4, 2013 from www.instructionalcoach.org
- Kupczynski, L., Mundy, M., Goswami, J. and Meling, V. (2012) Cooperative learning in distance learning: a mixed methods study: *International Journal of Instruction*, 5(2).
- Liang, T. (2002). Implementing Cooperative Learning in English Foreign Language teaching: process and effects. (PhD, dissertation). National Taiwan Normal University.
- Ministry of Education (MoE). (2002). The Education and Training policy and its implementation. Addis Ababa
- Ogunleye, B. O. (, 2011). Team Pair Solo” Cooperative Learning and Personality Type as Determinants of Students’ Achievement and Attitude to Chemistry. *An International Multidisciplinary Journal, Ethiopia*, 5 (6), Serial No. 23, DOI: <http://dx.doi.org/10.4314/afrev.v5i6.22>.
- Panitz, T. (1996). A definition of collaboration vs. cooperative learning. Retrieved on Jan 3, 2013 from <http://www.19v.ac.uk/deliberations/collab.learning/panitz2.htm>.

Seid Mohammed. (2012) Effects of Cooperative Learning on Reading Comprehension Achievement in EFL and Social Skills of Grade 10 Students.(M.A. thesis).Addis Ababa University

Slavin, R.E. and Cooper, R. (September, 1999): Improving Intergroup Relations: Lessons Learned from Cooperative Learning Programs¹. Centre for Research on the Education of Students Placed at Risk .Johns Hopkins University. *The Journal of Social Issues*.

Stahl, R. J. (1994). The essential elements of cooperative learning in the classroom. ERICDIGESTS.ORG.ERICIdentifier:ED370881. Retrieved on Jan 3, 2013 from <http://www.ed.gov/pubs/OR/ConsumerGuides/cooplear.html>

Tirualem Ayalew (2003). The classroom practices of learner-cantered approach in second cycle primary Schools of Addis Ababa. (M.A. Thesis). Addis Ababa University.

Appendix “A”

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF EDUCATIONAL RESEARCH
QUESTIONNAIRE TO BE FILLED BY TEACHERS

The questionnaire items that are listed below are designed to assess teachers’ knowledge and attitude of cooperative learning in classroom instructions. The data to be collected through the questionnaire is highly valuable to meet the objectives of this study. Thus, your frankness, thoughtfulness and truthfulness while filling each item of the questionnaires is essential since the value and the trustworthiness of the finding of this study greatly depend on your genuine responses to the questionnaire. Please put a tick mark ‘✓’ in the pace provided that corresponds to the responses you select. When you are asked to provide information, please write your responses in the space provided. You do not have to write your name in any part of the questionnaire.

Thank you for your cooperation in advance.

PART I. BACKGROUND INFORMATION

1. Sex
 - 1.1. Male_____
 - 1.2. Female_____
2. grade level taught
 - 2.1. grade 7_____
 - 2.2. grade 8_____
3. qualification
 - 3.1. degree_____
 - 3.2. diploma_____
 - 3.3. TTI_____
 - 3.4. Others (please specify)_____
4. Work load per week_____
5. Years of service as a teacher_____

PART II. TEACHERS' KNOWLEDGE OF COOPERATIVE LEARNING

INSTRUCTIONS:

Statements are listed below. They are prepared to assess your **knowledge** on cooperative learning. Please read them carefully and give your appropriate response to each item. Your responses could vary from “Strongly Agree” to “Strongly Disagree”. Use “✓” mark to give your responses.

Key to numbers:

- 5. Strongly Agree
- 4. Agree
- 3. Undecided
- 2. Disagree
- 1. Strongly Disagree

No	Item	5	4	3	2	1
1	I fully know what cooperative learning means.					
2	Cooperative learning is different from mere formation of groupings					
3	Cooperative learning is academically more motivating.					
4	Cooperative learning enhances students' social skills					
5	Cooperative learning gives equal opportunity to all students.					
6	Cooperative learning enhances problem solving capacity of students.					
7	I know how to form effective cooperative learning groups.					
8	Cooperative learning increases students' achievement.					
9	Cooperative learning encourages group members to have different roles for the effectiveness of the group learning.					
10	In cooperative learning group members should be formed based on students' seat					
11	Cooperative learning is pertinent even for teachers.					
12	I understand cooperative learning well enough to implement it successfully.					

13	Cooperative learning motivates students with different ability levels to master academic materials.					
14	Cooperative learning helps students obtain a deeper understanding of learning materials.					
15	I know cooperative learning improves learner's self esteem.					
16	I know the essential elements that make cooperative learning meaningful.					
17	I know the advantage of cooperative learning for students learning.					

18. Please state anything else you would like to mention about cooperative learning

18. Write down some cooperative learning strategies that you are familiar with.

PART III: TEACHERS' ATTITUDE TOWARD COOPERATIVE LEARNING

INSTRUCTIONS: The following statements are designed to assess teachers' **attitude** toward cooperative learning. Please read them carefully and give your appropriate response to each item. Your responses could vary from "Strongly Agree" to "Strongly Disagree". Use "✓" mark to give your responses.

Key to numbers:

1. Strongly Disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

No	Items	5	4	3	2	1
1	I think cooperative learning is advantageous for students' learning.					
2	I think group members in cooperative learning should be heterogeneous in ability.					
3	Cooperative learning improves students self esteem.					
4	Cooperative learning increases students' productivity.					
5	Cooperative learning improves respect of others opinions among students.					
6	Cooperative learning affects students' academic achievement positively.					
7	Cooperative learning facilitates students to use higher level thinking strategies.					
8	Cooperative learning encourages students to create new ideas.					
9	In cooperative learning, group members should not be formed based on friendship.					

10	Cooperative learning is important both for students and teachers.					
11	I think teachers should know the essential elements of cooperative learning for successful learning.					
12	Cooperative learning is a valuable instructional approach.					
13	Positive interdependence among group members ensures effective learning.					
14	I think cooperative learning makes students responsible for their learning.					

15. Please write down anything else you would like to say about your attitude toward cooperative learning.

Appendix “B”
ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF EDUCATIONAL RESEARCH
QUESTIONNAIRE TO BE FILLED BY STUDENTS

This questionnaire is designed to gather data from students’. The purpose of the items is to let learners evaluate the classroom instruction of their teachers.

The data to be collected through the questionnaire is highly helpful to meet the objectives of this study. Therefore, you are thoughtfully requested to fill in and return the questionnaire. The information you provide would be used only for academic purpose and kept confidential.

Thank you in advance.

PART I BACK GROUND INFORMATION

1. Gender: _____
2. Age _____
3. Grade: _____
4. Name the school: _____

PART II INSTRUCTIONS:

Items related to your teachers’ implementation of cooperative learning in classroom instructions are provided below. Please read them carefully and give proper responses for each item. Your responses could vary from “Strongly agree” to “strongly disagree”. Put an ‘✓’ mark to indicate your reaction to each of the statements.

Key to numbers:

- 5 = Strongly Agree
- 4= Agree
- 3= Undecided
- 2= Agree
- 1= Strongly Disagree

No	Items	5	4	3	2	1
1	Teachers gave us a chance to reflect what we discussed in our group					
2	Our teachers tell us how we can learn cooperatively.					
3	Cooperative teams are formed based on our seats.					
4	Our teachers give us a chance to learn cooperatively					
5	When cooperative learning is implemented, teachers take a facilitating role.					
6	I believe our teachers give us enough time to learn together.					
7	I believe that we all participate actively during cooperative learning.					
8	I believe that our teachers employ different cooperative learning activities.					
9	Our teachers motivate us how to learn cooperatively.					
10	Teachers employ cooperative learning in the way to improve our relationship.					
11	We all equally share tasks and responsibilities when we learn cooperatively.					

Please share anything else you'd like to say about the practice of cooperative learning

አዲስ አበባ ዩኒቨርሲቲ

መርሃ ግብረ ድሕረ ምረቃ

ክፍሉ ትምህርቱ ትምህርታዊ ምርምርን መከናወን

ብተምሃሮ ዝምላእ ፅሕፋዊ መሳተፊት

እዚ መሳተፊት ካብ ተምሃሮ ሓበሬታ ንምርካብ ዝተዳለወ እዩ። ናይዚ መሳተፊት ዓላማ ተምሃሮ ናይ መምህራኖም አገባብ አመሃህራ እንታይ ከምዝመስል ንክግምግሙ ምግባር እዩ። እቲ ዝድለ ሓበሬታ ንምርካብ እቲ መሳተፊት ብአግባቡ ተረዲኢኹም እቲ ዝድለ ሓበሬታ መሊእኹም ንክትምልሱለይ ብትሕትና እናሓተትኩ እቲ ዝትህቡኒ ሓበሬታ ካብዚ መከናወኑ ወፃኢ ከምዘይወፅል ብምርግጋፅ ንዝግበረለይ ምትሕብባር አቐዲመ የመስግን።

I ሓፈሻዊ ሓበሬታ

1. ፆታ _____
2. ዕድሜ _____
3. ደረጃ ትምህርቲ _____
4. ሽም ቤት ትምህርቲ _____

II መምህራኒ

ናይ መምህራንኩም አገባብ አመሃህራ ብዝምልከት ስዒቡ አብ ዘሎ ሰደቓ ዝተዳለዉ ሕቶታት አለዉ። እቶም ሕቶታት ብጥንቓቕ ብምንባብ ትክክለኛ መልሲ ሃቡ። መልስኹም አብ መንጎ አዝየ ይስማሙን አዝየ አይስማሙን ዝተወሰነ ይኸውን። አብቲ እትደልይዎ መልሲ ናይ “✓” ምልክት አቐምጡ።

መፍትሒ

5. አዝየ ይስማሙን
4. ይስማሙን
3. ርግፀኛ አይኮንኩን
2. አይስማሙን
1. አዝየ አይስማሙን

ተ.ቁ	ሕቶታት	5	4	3	2	1
1	አብ ተሓባብርካ ምምሃር ዝበዝሕ ጊዜ ብመምህራን እዩ ዝሸፈን።					
2	መምህራና ብከመይ ተሓባቢርካ ከምእንመሃር ይሕብሩልና እዮም።					
3	ጉጅለታት አቀማምጣ ተምሃሮ መሰረት ገይረን እየን ዝምስርታ።					
4	መምህራና ተሓባብርና ንክንምሃር ዕድል ይህቡና።					
5	አብ እዋን ተሓባቢርካ ምምሃር መምህራና መተሓባበርቲ እዮም።					

6	መምህራና ተሐባብርና ንክንምሃር እኹል ጊዜ ይህበና እዮም።					
7	አብ እዋን ተሐባቢርካ ምምሃር ኩላትና አባላት ጉጅለ ንጠፋት ተሳተፍቲ ኢና።					
8	መምህራና ዝተፋላለዩ ዓይነታት ተሐባብርካ ምምሃር ተግባራዊ ይገብሩ እዮም።					
9	መምህራና ተሐባብርና ንክንምሃር የተባበሩና እዮም።					
10	መምህራና ተሐባብርካ ምምሃር ርክብና ፅቡቕ ብዝገብር መልክዑ ይትግብርዎ።					
11	አብ እዋን ተሐባብርካ ምምሃር ኩላትና አባላት ጉጅለ ተግባራትን ሓላፍነትን ማዕረ ኢና ዝንከፋፈል።					

12. ብዛዕባ ናይ መምህራንኩም አተገባብራ ማእ ተሐባብርካ ምምሃር ትብልዎ ነገር እንተሃልዩ ቀፅሉ አብ ዘሎ ክፍቲ ቦታ ፅሓፍ።

Appendix “C”
ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF EDUCATIONAL RESEARCH
OBSERVATION CHECK LIST

General Directions

This checklist is designed to obtain information regarding the practice of cooperative learning in classroom situations. It is used to examine to observe the front line practitioners’ activities in the school.

PART I: GENERAL INFORMATION

School observed:_____ **Date:**_____

Class observed: Grade _____ **Time** _____ **topic of the lesson** _____

Number of students in class: _____

PART II: PHYSICAL SETTINGS

Instruction: Please read the items, and put a ‘✓’ mark in the box that is correct about the physical settings of the school observed.

No	Items	Yes	No	Remarks
1	Seats are suitable to employ cooperative learning.			
2	The scene/ background of the classrooms are suitable for cooperative learning.			
3	There is enough space to move in classroom for the teacher.			
4	Number of students is manageable.			
5	There are enough seats.			

Teachers' activities

No	Items	Yes	No	Remarks
1	Organizing the class for cooperative learning implementation			
2	Holding a facilitating role.			
3	explaining the objectives of the activities			
4	Practicing variety of cooperative learning.			
5	Letting students to cooperatively interact each other.			
6	Equally sharing responsibilities among students.			
7	Helping Students to develop positive interdependence.			
8	Forming heterogeneous in ability cooperative groups.			
9	Utilizing the essential elements of cooperative learning.			
10	Providing directions on how to work cooperatively.			
11	Providing chance to present the groups idea			

Students' activities

No	Items	Yes	%	No	%
1	Students are sharing roles equally.				
2	students are playing their roles effectively				
3	Students are demonstrating what they discussed in their groups				
4	Students are open and honest in dealing with the entire group.				
5	Students express willingness to cooperate with the other group members				
6	Use their time effectively during cooperative learning.				

Please write anything else you observed about teacher's practice of cooperative learning.

Appendix “D”
ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF EDUCATIONAL RESEARCH
INTERVIEW GUIDES TO SCHOOL DIRECTORS AND SUPERVISORS

1. How do you feel the practicability of cooperative learning in school?
2. What do you think are the advantages of cooperative learning?
3. How do you evaluate the knowledge of teachers toward cooperative learning?
4. How do you see the attitude of teachers on cooperative learning?

DECLARATION

This thesis is my original work and has not been presented for a degree in any other university and that all sources of materials used for the thesis have been dully acknowledged.

BERHANU YAYO

This thesis has been submitted for examination with my approval as university advisor.

Dr. BERHANU ABERA