INSTITUTE OF PEDAGOGICAL SCIENCES

DEPARTMENT OF EDUCATIONAL PLANNING AND MANGEMENT

THE EFFECT OF STUDENTS' NETWORK ON ACADEMIC PERFORMANCE: THE CASE OF FOUR SELECTED GRADE 11 STUDENTS IN CENTERAL ZONE OF TIGRAI

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A Thesis submitted to:

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I, the undersigned, graduate student hereby declare that, this thesis is my original work, has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

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ABSTRACT

The purpose of this study was to assess the effect of students' network on academic performances of students. To this end, a descriptive survey design was selected and the research employed various data collection methodologies and processed both primary and secondary data sources using quantitative and qualitative data analysis techniques. The study was conducted among grade eleventh teachers and students. Four preparatory schools found in central zone were randomly selected out of twelve preparatory schools found in the central. A total of randomly selected 369 respondents (i.e. 14 teachers and 355 students) participated in the study by filling in the questionnaire prepared for data collection. In addition, classroom observation was conducted and interviews with school principals were held. The data collected was analyzed using frequency distribution and percentage. These were triangulated with qualitative data obtained from the observations and interviews. The findings of the study revealed that the effect of students' network that achieves their performance less effective. However, both teachers and students have positive perception on students' network impact on academic performance. Besides, the school teachers confirmed that this teaching method benefits more to students. Nonetheless, the student respondents strongly disagree with the relevance of students' network and considered it as wastage of time. They also lacked motivation to actively participate in this teaching method. The researcher strongly suggests that teachers should motivate the students in preparatory schools to use students' network method for the positive effect of the students' performance. Further research is needed for a low perception of students towards students' network need to be done thoroughly.

Chapter One
Introduction

Under chapter one, discussed and explained in respect of one another. Such as background of the study, objective of the study, research question, significant of the study, organization of the study paper, definition of the terms and others.

1.1 Back ground of the Study

Education is a process by which knowledge is imparted, skills are developed and attitudes are enhanced. It is also one of the means of social development in every society. In modern society, education is a determinant and an indicator of social, political, economic and technological development of a country. Therefore, the worth of education to the overall development of a nation is unquestionable (Abdurrahman, 2003). Cooperative learning is one of the most remarkable and fertile areas of theory, research, and practice in education. In the past three decades, cooperative learning has become a widely used instructional strategy across different grade levels and subject areas (Tsai, 2005; Tseng, 2004). Numerous studies have shown the effectiveness of cooperative learning with primary-level students (Ghaith& El-Malak, 2004; Law, 2011; Liao & Oescher, 2009). Studies have shown that cooperative learning instruction creates opportunities for students to interact with peers, increase their communication with each other, encourage reading-comprehension development, and lower anxiety (Gillies & Ashman, 2000).

Ziba (2010) also asserts that cooperative learning, in which small team of students with different levels of abilities and a variety of learning styles included, is a successful teaching strategy to improve their understanding of a subject. Each member of a given team is responsible not only for learning what is taught but also for helping their teammates. This creates a conducive atmosphere for students to work together on a given task (e.g. assignment) until all members successfully understand and complete it. Besides, cooperative learning which is student centered approach has changed the practice of traditional methods of teaching and resulted in a betterment of learners and their academic achievements.

Attend. The critical issues here are how teachers can take good care of their students and

construct a well-integrated and effective teaching-learning environment for students. Hence, cooperative learning strategies is claimed to effectively address this challenge (Johnson & Johnson, 1990).

The traditional teacher-centered method of teaching has been criticized for its lack of active learning of students. Actually, according to this method, education was conceived as a process of transmitting knowledge, facts rules, or action (Tanner & Tanner, 1980, Amare, 2000). The teacher is considered as the center of everything while the learner remains a passive receiver. These days, however, as the result of the impact of educational research and the development of new educational technologies, new methods are advocated for better learning and it is these factors that forces Ethiopia to advocate new teaching approach. The new education and training policy proclaimed in 1994 promotes active learning and problem solving approaches to overcome the shortcomings of the previous traditional method of teaching. One of the strategies of active learning in schools is cooperative learning (TGE, 1994).

According to Ziba (2010) cooperative learning techniques have the following benefits: promoting students learning and academic achievement, increasing students' retention, enhancing students' satisfaction with their learning experience, helping students develop skill in oral communication, developing students' social skills, promoting students' self – esteem. However, although most research findings point out the positive aspect of cooperative learning in students' academic achievements and towards their social skills development, there is little study conducted at a primary level of education regarding its implementation. Hence, the attitude of teachers and students towards cooperative learning need to be investigated.

Ethiopia is a country which has diverse cultures, languages and societies. Teachers have to develop approaches or strategies that are suitable for students who differ in their backgrounds, ways of learning, achievements and interests. Different students will react differently in the classroom they attend. The critical issues here are how teachers can take good care of their students and construct a well-integrated and effective teaching-learning environment for students. Hence, cooperative learning strategies is claimed to effectively address this challenge (Johnson & Johnson, 1990).

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1.2 Statement of the Problem

Based on the reality in Ethiopia, there are still some problems challenging the education sector. The first problem is that classes are very large. Although there have been consistent effort to bring down the number of students per class, large class size remains a problem. As a result it would be difficult for the teacher to manage a class activity for the students and design teaching strategies which still meet students' needs. Through the researcher's observation, normally, teachers are not able to cope with so many students at an individual level due to time constraints. Therefore, a teaching strategy should be put in place, which enables teachers who have to teach large classes to better meet individual student's needs.

The second problem is that students have a range of motivations towards their learning. Students with different level of proficiency are often placed in the same class. Some teaching strategies are suitable for some students and inappropriate for the others. Therefore, teachers again should seek relevant teaching strategies that create an effective environment that promote high motivation among the students.

The third problem is concerned with the teacher-centeredness of teaching. In most schools teachers' role is mainly to act as instructor, explainer and corrector of errors (Liang, 2001). Meanwhile the students' role is to do what the teacher tells them to.

One way to address the three challenges discussed above is to cultivate students' potential for independent study through group work and set up a suitable
environment for the students in order to learn the targeted objective. Cooperative learning groups encourage student-student communication where oral language is emphasized (Harmer, 2003). It could also move the focus of the source from the teacher to the students. Group work enables students to help each other. Thus, it could be a useful teaching strategy for large classes.

Therefore, some teaching and learning activities based on cooperative learning might alleviate the problems outlined earlier that exist in the classrooms. However, to apply and use cooperative learning, the attitude of teachers and students must be identified and recommendations suggested so that they can play a major role in its proper implementation and achievement of the intended goals.

Hundreds of studies have been conducted over the past 90 years to give an answer to the question of how successful competitive, individualistic, and cooperative efforts are in promoting productivity

and achievement (Johnson & Johnson, 1989). As the researcher mentioned above, the current Ethiopian educational policy promotes active learning and schools are expected to implement active learning strategies. However the attitudes of the major stakeholders (teachers and students) have major impacts on the applied strategies and their success to achieve the intended objectives.

This study therefore tries to assess the effect of students' network on academic performance. The research also intends to examine the attitude of teachers and students on the application of this method. Furthermore, this study is believed to throw some light on the students' network learning method and to motivate other researchers for further investigation.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study is to assess the effect of students' network on academic Performance?

1.3.2 Specific Objectives

The specific objectives of the study are:

* To identify the factors that negatively affects for students network on student's academic Performance in the study area.

*To investigate the attitude of students towards student's network.

*To examine students' network is practicing in the study area.

* How to solve the factors negatively affect students networking.

1.4 Research questions

Basically the study was conducted to answer the following basic research questions:

1. What are the factors that negatively affect student's network on their academic performance in the study area?
2. What is the attitude of students towards network on their academic achievement?
3. To what extent is student network practiced?
4. How does students' network impact on student's academy?

1.5 Significance of the Study

This study is believed to yield the following benefits for stakeholders like teachers, school managements and educational authorities at all levels. To begin with, the results of the study will improve effect of students' network on academic, attitude and implementation towards students' network learning method in terms of its relevance, management and enhancing students' learning within their school context. The results of the study will also raise the awareness of educational institution officials (e.g. at school, woreda and sub-city level) towards student network learning. The finding of this study is also believed to shed light on the improvement of the teaching and learning process at a classroom level. Moreover, it may serve as a reference for further research in the area of student network learning.

1.6 Delimitation of the study

This study was conducted in central zone of Tigrai due to the researcher's limited resources. These were lack of enough finance, time and material to do this study. From this central zone four schools were randomly selected to serve the purpose of the study on the effect of students' network on academic performance.

1.7 Limitation of the Study

Besides to its strengths and significances, this study, has certain limitations. In fact, success and failure are a coin of one piece of paper. Therefore, the researcher had faced problems while conducting this study because of the following reasons.

❖There were limited researches done on the areas of four woredas students' network teaching method that measure the student academic performance methods in Ethiopia and hence the research lacks sufficient literatures and reference materials to fully examine the nature of the problem.

❖There were insufficient internet accesses to get further information.

- ❖ Un willingness of students and teachers to fill the questionnaire
- ❖ Need some incentives from teachers during filling questionnaires and gathering data.

1.8 Operational definitions of key terms

Cooperative learning - is an active and inclusive instructional method in which a group of six heterogeneous students (due to achievement level, sex, age, and disability/special need) work together in a structured form with each member's taking an active role to maximize their own and one another's learning.

Networking-is pairing students in to small groups (contains 5 or 6 members) for cooperative learning to solve or improve their academic achievements

Attitude - is an expression of favor or disfavor toward a person, place, thing, or event

Implementation Practices -putting into effect by means of define plan.

Achievement -the competence learners have on the test prepared by teachers

Secondary schools- structure of educational systems that include secondary and preparatory Schools (9-12).

1.9 0rganization of the Study

This paper has five chapters. The first chapter introduces the problem, aims and scope of the study. Chapter two contained reviewed relevant literatures on cooperative learning. The methodology used in this study is explained under thethird chapter. Discussion and major findings of the study are presented in chapter four. Finally, summary, conclusions and recommendations are outlined in chapter five.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter begins with definition of cooperative learning. The history of cooperative learning and theories that highlight its importance are presented next. Then cooperative learning is compared with the traditional approach of teaching. Following that, elements of cooperative learning are outlined. Then cooperative grouping and students' role in the groups are explained consecutively. Next inclusion in cooperative learning is addressed. And finally research finding regarding cooperative learning are shared.

2.1 Definitions of Cooperative Learning

Different scholars define cooperative learning differently. For Johnson and Johnson (1990), cooperative learning is small groups of students that work together to maximize their own and their teammates learning. Parkay and Stanford (2007) explain cooperative learning as students working in small groups, or teams, sharing and helping one another with their task. Similarly Sharan (1990) also gave another perspective to the approach as a group- centered and student-centered approach to classroom teaching and learning. Slavin (1987) stressed on the composition of the group stating it as small, mixed ability learning group in which students are encouraged or required to work together. Christison's (1994) definition signifies the motivational and retention advantage of cooperative learning as a strategy that develop a positive image of self and others, and providing a tool for critical thinking and problem solving as well as promoting collaborative social skills. For Salend (1994) cooperative learning is an organized method, in which students work for common academic goal rather than competing or working separately from their peers. However, one can observe in all the definition working together and helping one another is emphasized.

In this research, Johnson and Johnson's definition of cooperative learning is adopted as an umbrella definition which states cooperative learning as instruction method which encourages students to learn and study together as a group, with members actively involved in giving their suggestions and ideas, getting help and clarification from each other rather than from the teacher.

2.2 Background of Cooperative Learning

Cooperative learning has a long history. Many philosophers and educators had promoted it through the ages. However, competitive and individualistic learning was given emphasis in the early 1900s, but cooperative learning and the research into it were given renewed attention in the 1980s (Johnson & Johnson, 1998; Slavin, 1991).

The work of Deutsch (1949) had laid the framework of cooperative learning. His theory has served as the major conceptual structure for this area of inquiry (Johnson & Johnson, 1983). He came up with three types of goal structures: cooperative, competitive, and individualistic. In cooperative goal structure, the goals of individuals are supportive. One attains his or her own goal only when the others attain theirs. Individual excellence and understanding doesn't benefit one unless the others are part of it. This brings the team members together for the common goal. Students need to learn the material themselves and make sure that others have learned it (Johnson & Johnson, 1985).

In a competitive goal structure, goals are not directly associated with the attainment of others; when one attains his or her goal, the others may not. This type of goal situation presses individuals to selfishly aim at their goals only, affecting others negatively from achieving their goal.

In an individualistic goal structure, goals are not related one to another. This dictates individuals to seek their own goals, with no connection with others. Students in competitive and individualistic goal situations are instructed to learn the concept themselves, without cooperating with others (Johnson & Johnson, 1985).

2.3 Educational Theories that underline cooperative learning

Cooperative learning is advocated by numerous theories of education. These include motivation theory, social learning theory, developmental theory, and cognitive theory (Murray, 1994; Slavin, 1995; Tudge, 1990).

2.3.1 Motivational Theory

Motivational theories focus on reward that derives students to behave in a certain manner. A cooperative environment creates a context in which students want to help one other. This motivates

students to do well for themselves and make sure the other members of the group are also doing so. Students striving to meet their goals are motivated to encourage and support their group members to bring forth their best effort. Cooperative goals create norms that affect students' achievement positively (Slavin, 1995). In turn academic achievement leads to social acceptance (Slavin, 1995). In the traditional classroom the competitive and/or individualistic goals, are not related positively. Actually, an individual's academic achievement is unrelated to the rest of the class or it is against it. Academic achievement is not seen positively by the other students. This discourages students from striving for academic excellence (Slavin, 1995).

2.3.2 Social Learning Theory

Like motivational theories, social learning theories focus on the idea of rewards. However, the rewards anticipated in social theories are approval and expectation of group members. In the cooperative learning situation, it is demonstrated by the teachers through praise and peer pressure to encourage students to earn positive feedbacks from their peers. Cooperative learning provides positive social rewards for students to participate in the group. In addition, students build friendship with their group (Murray, 1994).

2.3.3 Developmental Theory

The basic idea of developmental theories is that individuals' interaction helps in learning. This collaboration brings forth cognitive growth (Murray, 1994). This theory is supported by the learning theories of some educational psychologists, such as Vygotsky and Piaget (Murray, 1994; Slavin, 1995; Vygotsky, 1997). According to Vygotsky, learning and our mental development take place in a social space; students learn through interaction with others. In his zone of proximal development, Vygotsky states that next level of development by the student is mainly achieved by adult guidance or during cooperative interaction with peers. That is, cooperative learning should be increased to optimize learning. In contrast to traditional way of transmitting knowledge, teachers motivate or guide student to achieve learning among themselves (Murray, 1994; Vygotsky, 1997). Similary Piagetian psychologists believe that knowledge is learned in interaction with others. Therefore, social interaction promotes cognitive development (Tudge, 1990). Many Piagetians propose cooperative learning as an effective means. It provides social interaction, resulting in cognitive development and student achievement (Slavin, 1995). The teachers who incorporate Piagetian ideas place students in situations where the students are asked to work with other students

who may have different views. Through this interaction, the teacher hopes to bring about academic development (Murray, 1994).

2.3.4 Cognitive Theory

Researchers from cognitive psychology also advocate the use of cooperative learning. Like the theories mentioned above, they believe that cognitive development is more achieved by the collaborative activity of the group (Murray, 1994; Sharan & Shaulov, 1990; Slavin, 1995; Wittrock, 1978). For example, one of the most helpful methods in cognitive learning involves explaining what one knows to another person. Giving and taking explanation is beneficial to student achievement according research done on cooperative learning (Webb, 1985). Students who give the explanations go through cognitive restructuring in order to make the concept more understandable for others (Sharan & Shaulov, 1990; Slavin, 1995; Wittrock, 1978). In the cooperative learning environment, students discuss and explain the material to their group members (Johnson & Johnson, 1983; Slavin, 1995).

Another aspect of cognitive learning is, particularly in the process of tutoring, students develop the model of a tutor. By tutoring and receiving help from a tutor, they develop the qualities of an expert. This gives a chance for both parties to exchange position as a tutor and one tutored and develop the cognitive structure by doing so. The teacher guides the students until he/she stands by herself (Murray, 1994).

2.4 Cooperative Learning verses traditional learning

In traditional educational systems, students are expected to be passive recipients of knowledge from the all knowing teacher. But education has shifted from this teacher-centered approach to a student-centered approach, where student are actively engaged to discover knowledge for themselves (Johnson, Johnson, & Holubec, 1992). Many researchers agree that the primary means for achieving the new paradigm in the teaching learning process is cooperative learning (Johnson et al., 1992, Dees, 1991; Gillies, 2008; Slavin, 1996).

The following table summarizes the key differences between cooperative group learning and traditional group work (Putnam, 1997; Johnson, Johnson, & Holubec, 2008; Johnson & Johnson, 1999, 2000).

Table 1: ***Differences between traditional group work and cooperative group learning***

Traditional Learning Groups	**Cooperative Group Learning**
Social skills are assumed: social skills are not systematically taught.	social skills are taught and practiced teachers teach social skills needed for successful group work
group membership is homogeneous	group membership is heterogeneous
individuals are accountable for self: some students let others do most or all of the work, then copy	Individuals are accountable for self and group members: each pupil must master the material
Positive interdependence is not structured: students work on their own, often or occasionally checking their answers with other students.	Positive interdependence is structured: students sink or swim together. Face –to face oral interaction is emphasized.
Emphasis is on academic development of learners only	social development is as important as academic development
emphasizes the positive aspects of learning	emphasizes the experiential process of learning
focus is on learning a body of knowledge	learning to learn is the focus
knowledge is constructed by authoritative figures and organizations	learners construct knowledge through collaboration with peers and the teacher
The teacher does not monitor group work or provide group functioning. No discussion of how well students worked together, other than general comments such as "Nice Job'' or "Next time, try to work more quietly.''	The teacher continually monitors group work, and provides feedback on group functioning. Feedback and discussion of students' behaviour is an integral part of ending the activity before moving on to another.

Moreover the difference between cooperative learning and group work should be underlined (Fehling 2008). One essential difference is the product of both methods. In group work the group product is the main focus, however for cooperative learning the focus is on learning and social achievement of students in the task. Another difference is in traditional group work, there is dependence of low achiever students on the high achiever. And yet another difference is that in traditional groups, how the group should function is not focus of attention, while in cooperative learning group work is carefully prepared, planned and monitored (Jacobs, 1997). Therefore just putting students in groups does not mean cooperative learning. Discussing with other students, giving and receiving help from each other or sharing materials in the group are all important in cooperative learning (Johnson & Johnson, 1990).

What is more, members should appreciate the importance of team work. The following conditions are essential in cooperation and are identified as critical elements of cooperative learning (Johnson & Johnson, 1990a, 1999; Johnson, Johnson & Holubec, 1993): positive interdependence, individual accountability, interpersonal and small group skills, face-to-face promotive interaction, and group processing.

2.5 Elements of Cooperative Learning

The five essential elements are critical for the success of any cooperative learning. However varied the approach and the focus, these five elements are indispensable for the success of any cooperative learning methods. These elements distinguish cooperative learning form other types of group learning (Johnson & Johnson, 1990). These five make up a cooperative learning group. Each element is discussed below.

2.5.1 Positive Interdependence

The first and the most essential element is positive interdependence. According to Johnson and Johnson (1990) positive interdependence is the most important element because it implies the presence of cooperation. Positive interdependence instills the concept in group members that they cannot succeed unless their group members do. In other words, students understand that they "sink or swim together'' (Johnson & Johnson, 1999; Johnson, Johnson, & Holubec, 1998). Students realize that the effort of all group members and including each individual's effort is required for the group to achieve its goal. Positive interdependence requires students for contributing their share of the work, and helping other group members to achieve the group's goal (Johnson & Johnson, 1990). Therefore, the absence of interdependence results in individualistic efforts. Positive interdependence instills the concept that each group member's effort is required and for group success, and each group member has a role to play to the joint effort (Johnson et al. 1993). This generates a commitment to the success of group members and one's own and is the heart of cooperative learning. If there is no positive interdependence, there is no cooperation.

2.5.2 Individual Accountability

Individual accountability means each member of the group is accountable for completing his or her part of the work. It requires each member in the group to develop a responsibility to learn and to help the rest of the group to learn (Jolliffe, 2007). Slavin (1996) also stresses the importance of individual accountability to achieve group goals in cooperative learning. Individual accountability assures members' commitment to the groups' success. The assessment of the individual student warns that individual accountability exists and the feedback to the group and the individual tells who needs more assistance, support and encouragement (Johnson & Johnson, 1999). In other words, groups and individual members are accounted collectively and individually. Individual accountability also assures cooperation. One way to do this is, after a cooperative learning task, students should do the tasks by themselves. Teachers must assess and provide individual feedback to ensure that each member has contributed her/his fair share. Structuring individual accountability by the teacher raises the students' level of involvement. Students should be informed about the follow up so that they will be actively involved and show their best effort (Johnson & Johnson, 1999).According to Johnson, et al. (1983), teachers can have individual students explain what they have done to another student to emphasize individual accountability. Another way to assure individual accountability might be by conducting random oral examinations. And yet students might be selected to represent their team, this possibility will motivate them to effectively take their role in the group.

2.5.3 Interpersonal and Small Group Skills

The other goal of cooperative learning is to develop social skills and acceptable social attitudes so that students can improve social relations within and between groups (Terwel, 2003). For the groups to function effectively appropriate social and communicative skills are required. Interpersonal and small group skills refer to these skills. Jolliffe (2007:3) express these skills as "lubricant of cooperative group work". 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.

Social skills are life time endeavors and determine the success of students in most careers, family

life, and community life. Social skills dictate the way students interact with each other and the teacher should assess this progress of the students (Richards & Rodgers, 2001:197).

2.5.4 Face to Face Promotive Interaction

Face-to-face interaction creates an active learning. Students interact to do real work together in which they promote each other's learning by sharing, helping, supporting, encouraging, and praising each other's efforts to learn (Johnson & Johnson, 1999). Students benefit in their cognitive and personal development if they are involved in promoting each other's learning (Johnson & Johnson, 1999; Slavin, 1996). Students are involved in different activity like explaining, sharing, asking, answering, and sharing experiences.

Each of these activities can be well organized to bring about academic and a personal support system by the group to each individual student. By doing so members become personally committed to each other as well as to their mutual goals (Johnson, Johnson, & Holubec,1993).

2.5.5 Group Processing

The last element of cooperative learning is group processing. This comes about when students reflect about their achievement and relationship (Johnson & Johnson, 1999b). Students need to be taught to share recognition rather than claiming ownership of an idea. Moreover, group members need to feel they have a safe zone to express their ides, concerns and appreciation. As a group they should discuss how well they are achieving their goals and maintaining effective working relationships.

According to Johnson and Johnson (1998, 1999), group processing refers to intra-group reflection to identify supportive and ineffective interaction and to decide which group behaviors' should continue or be terminated. Its reflecting on the actions, that were helpful or not and what to do in the future. This helps build the groups social identity (Dornyei, 1997).

Similarly, Putnam (1997) mentioned that students should be encouraged to reflect on the groups goals from time to time. They can identify areas for improvements. They also need the teacher's feedback for effective reflection. Together, students and their teachers build understanding about why groups function well and why they struggle and sometimes fail the functioning of groups.

2.6 Cooperative Grouping

It is believed that how students are grouped can affect participation rates, particularly participation in cognitive activities. According to Johnson and Johnson (1990b), and Slavin (1993) grouping can improve the performance of students.

Cooperative grouping in the classroom is one of the important elements of cooperative learning. What students can learn from working together in a collaborative and cooperative setting depends on careful grouping. Teachers can use cooperative grouping successfully if they plan carefully, set clear goals, and then letting students a more hands-on and interactive learning experience, and giving on the spot feedback.

The four major types of cooperative learning teams are heterogeneous, random, homogeneous, and student-selected. All four have their merits and demerits as shown in the table below. Therefore, the type of team should match the educational objectives of the lesson. Among the types heterogeneous groups are most common (Cohen, 1994; Borich, 2007). This is because heterogeneous groups naturally consists of students of different abilities and peers assisting peers comes natural and both benefit from it (Kagan,1990). However, all four can be implemented throughout the school year to support instruction (Kagan & Kagan, 2009).

Table 2. **The advantages of and cautions against different types of cooperative teams.**

The Advantages of and Cautions Against Different Types of Cooperative Teams		
Team Type	**Advantages**	**Cautions**
Heterogeneous Mixed-ability, sex, race teams	Balanced Maximizes tutoring Easier management	Requires more teacher preparation time Ranks students Limited leadership opportunities
Random Teams Randomly formed teams	Fairness Novelty, variety, fun Quick and easy	Diversity not ensured Potential for off-task behaviors All-"low" or all-"high" teams may develop
Student-Selected Teams Students select own teams	Novelty, variety, and fun Familiarity Easy decision making	Not balanced Potential for off-task behavior high
Homogeneous Teams Teams with a shared trait (ability, interest, language)	Leadership opportunities High esteem for top groups Differentiated instruction	Lack of equity Poor esteem for low groups Negative stereotypes

(Adapted from Kagan & Kagan, 2009)

2.7 Roles of Students in Cooperative Learning Groups

In the world of education, many teachers have come to reframe their thinking about group work. Instead of simply throwing students into a group and assigning them a project or task to complete, the teacher goes a step further and assigns each student a role. These groups of students are working cooperatively together to accomplish a goal and learn the material, hence the educational term "cooperative learning groups."

Here are some examples of roles individual team members can play. Different groups may require somewhat different roles or combinations of roles (Johnson, et al., 1991; Millis & Cottell, 1998; Smith, 1996):

- **Group facilitator**: moderates discussions, keeps the group on task, assures work is done by all, and makes sure all have opportunity to participate and learn.
- **Timekeeper**: monitors time and moves group along so that they complete the task in the available time, keeps area clean, assumes role of any missing group member if there is no wildcard member.
- **Recorder**: takes notes of the group's discussion and prepares a written conclusion.
- **Checker**: makes sure that all group members understand the concepts and the group's conclusions.
- **Summarizer**: restates the group's conclusions or answers.
- **Elaborator**: relates the discussion with prior concepts and knowledge.
- **Research-Runner**: gets needed materials and is the liaison between groups and between their group and the instructor.
- **Wildcard**: assumes role of any missing member.

2.8 Importance of Students' and teachers' Attitude

According to Ajzen and Fishbein's (1980) theory of reasoned action, "attitudes are a function of beliefs" (p. 7). Based on this theory, believing that performing a task will result in mainly positive outcomes results in taking a favorable attitude towards the task. On the other hand, mistrust of the success of performing a task will lead to taking an unfavorable attitude. Therefore, if participants believe that, for example, cooperative methods will have a significant effect on their achievement, then this method will be to their benefit. Attitudes, once formed, can shape the way students think, understand, feel, and behave. "Attitudes and beliefs are a subset of a group of constructs that name, define, and describe the structure and content of mental states that are thought to drive a person's actions" (Richardson, 1996, p. 102, as cited in Rimm-Kaufman & Sawyer, 2004). The evaluation of students' attitude may provide new insights into the way these attitudes may hinder or facilitate learning.

2.9 Cooperative Learning and Inclusion

Students with disabilities learn better in cooperative classrooms than the traditional one. According to Stevens and Slavin (1995), students with disabilities learn better when explanations and models are provided by their peers. Cooperative classrooms are more engaging. This is because students in these classrooms share their thoughts more freely, receive constructive feedback, exercise questioning techniques, receive more practice on skills, and have more chances to respond. It is also convenient for teachers to assess their students because they can hear students discussing, therefore, they can easily address individual or group needs. By monitoring students learning in cooperative activities, teachers are able to redirect groups to their goals. This accelerates the comprehension process (Bucalos & Lingo, 2005). Ncube's (2011) research showed that flexible mixed-ability groups have advantages over homogeneously grouped students because the higher achieving students can help less achiever students. At the same time, the students who have mastered a particular concept or skill reinforce their own learning by applying higher level thinking skills while helping others. Heterogeneous groups are most widely used for cooperative learning because they naturally provide the opportunity for team members helping one another, improve social acceptance of all team members (Kagan & Kagan, 2009). In summary, cooperative learning promote active learning for students with disabilities and their nondisabled peers. Such methods especially benefit students who require additional practice and feedback. Cooperative learning support inclusive

practices and advance more academic and social skill development. In inclusive cooperative learning students learn together to improve academic achievement and social acceptance of all!

2.10 Research findings on cooperative learning

Research on cooperative learning has given benefits for the students. For the example, Yu (1995) carried out a research study of 48 learning hours in 16 weeks. Cooperative learning techniques were implemented in English language classroom. The students in the experimental and control groups were considered to have similar learning motivation and attitudes. Even though there is no significant difference was found in academic performance, Yu discovered the cooperative learning affected on developing self-esteem, changing behavior and improving personality. In addition, Slavin (1995) reviewed fourteen studies examining cooperative learning effects on self- esteem. He pointed out that eleven of them increased self-esteem.

According to Iqbal (2004) cooperative learning is more effectual as a teaching learning method for mathematics as compared to traditional teaching method. Students in cooperative learning method were more effective for English as compared to the traditional learning method. Haberyan (2007) and other have reported that team based learning is motivating, interesting and enjoyable, and has been utilize in science, education, business and medical disciplines with positive results.

In Ethiopia, there are few studies on active learning. Gara and Asrat (2009) conducted a research to find out the attitude of teachers towards the use of active learning method in Bahir Dar University English department and they concluded that the study have demonstrated positive outcomes.

A study by Betel (2011) investigated practice and attitude of Bulbula school community towards the implementation of Active Learning in Bulibula high school. The result showed that active learning tasks they used were fewer in number and lacked variety, misperception of teachers towards active learning, lack of pre-service training in active learning, large students' number in their classes, and lack of essential resources were some of the constraints the researcher identified. Enhancing teacher's awareness of active learning method and providing resource book involving active learning tasks were among the remedies suggested. In conclusion, cooperative learning approaches take advantage of heterogeneity in classes by encouraging learners to learn from one another and from more and less knowledgeable peers. Bonds thus develop among learners which can lead to increased understanding and acceptance of all members of society, a benefit of cooperative learning that expand beyond the walls of the school itself.

CHAPTER THREE
RESEARCH DESIGNED AND METHODOLOGY

This part of the research was present different sections such as research design research method, and study site, source of data, study population, sample size and sampling technique data collecting procedure and method of data analysis.

3.1. Research Design

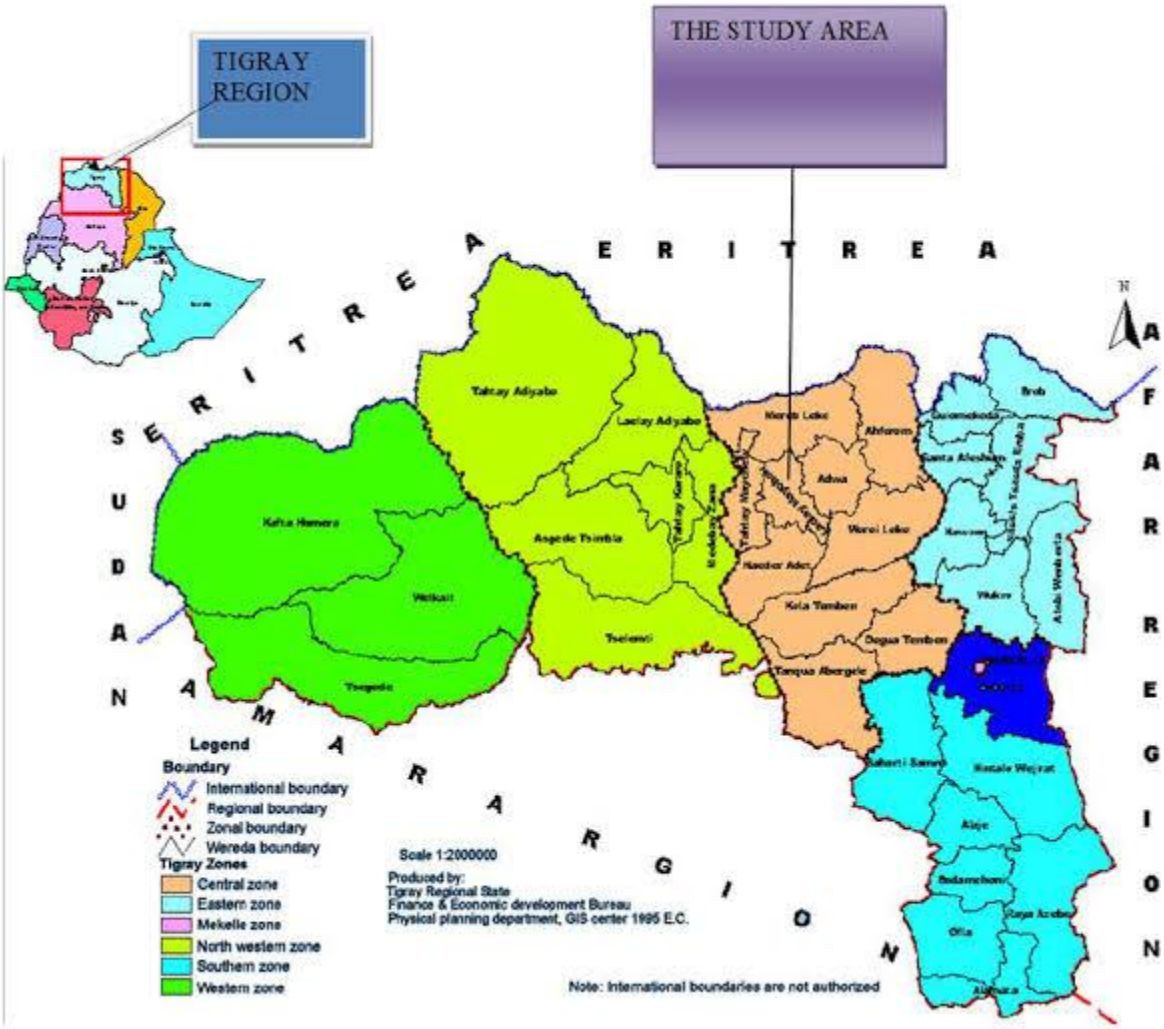
Research design serves as a blue print for conducting the research. Research design focuses more on the end product and the research problem while the methodology focuses more on the process, the tools and procedures to be used in the research (Bobbie and Mouton, 2001). The design selected for this study is descriptive survey design, which can entertain both quantitative and qualitative research methods (Onwuegbuzie and Daniel, 2003). Descriptive survey describes the status of a given phenomenon. It describes the nature of existing conditions, or identifying standards against which existing conditions can be compared, or determining the relationships that exists between specific events at a given time (Abiy et.al.2009). Therefore, a descriptive survey method was selected because it serve the intended purpose of assessing the perception of teachers and students towards cooperative learning strategies, its implementation and its benefit to students with special needs. As stated by Sidhu (1985), descriptive survey is a method that describes and interprets what exists at present form of practice, effects, attitudes, etc.

3.2 Research Methodology

This study used mixed research method utilizing both qualitative research methods and quantitative methods. It was desirable method because the study was intended to describe the effect of students' network on academic performance in preparatory school level in terms of teacher's and students' actual practice

3.3. Location of the Study Area

The study was conduct in four selected preparatory schools of grade eleven students in central zone of Tigray, Ethiopia particularly in Enticha, Queen Saba, Axum and Rama which are found in woreda Ahferom, Adwa, Axum and Mereb Leke respectively. The researcher chose the grade due to small numbers of students, to save resources and time.



Source: Google

3.4. Population of the Study

In Central Zone of Tigray, there are 12 governmental preparatory schools (GPS). They are: Enticho PS, Laclayhahaile PS, Werie PS, Enbasneiti PS, Gelefandi PS, Yechila Ps, Meles Zenawi PS, Queen Saba PS, D.r Tsegay PS, Rama PS, Axum PS and Wukro Maray preparatory schools. From these preparatory schools, the population for this research was from four preparatory schools with total population of 2954 students, 53 grade eleven teachers and 4 principals. All these documents gained from the record office.

3.5 Sample size and Sampling Techniques

3.5.1. Sample size

To determine the total sample size respondents of the study, the researcher employed the formula proposed by Kothari (2004) as;

$$n = \frac{z^2 p.qN}{\mathrm{e2(N-1)} + \mathrm{z^2 p.q}}$$

Where:

n= the intended sample size,

N= Total population (2954)

z= confidence level (95)

P=sample proportion of success (0.02)

q= l-p = 0.98

e= accepted error (0.02)

Therefore $\mathrm{n} = \frac{200522x0.02x0.98\ x2954}{0022\ (2954-1)\ +200522x0.02x0.98} = 355$

3.5.2. Sampling technique

From the preparatory schools in Central Zone of Tigray, the researcher selected four preparatory schools purposely because it was near to researcher's living area and working place. In addition, the schools had with access of transport, to save time and resource. These are Enticho preparatory school, Queen Saba preparatory school, Axum preparatory school and Rama preparatory school.

So, from 2954 total numbers of students (N), the required number of representatives or participants for the data was totally 355 students .To determine the specific number from each grade 11 students, a stratified random sampling technique used and calculate according the steps used by Feseha (2002). In such cases, the sample size from each grade 11 students was calculated proportionally by the following steps:

Step 1: Number of students from each selected grade 11 students counted already from the record office which is students.

Step 2: To determine the proportion (p): p $= \frac{n}{N}$ .Where, n is the intended sample size and N is total population of the selected preparatory schools. Therefore, the proportion (p) would be 355/2954 = 0.12

Step 3. Multiply the number of each selected students in each school by the obtained proportion that is by p =0.12.

From Kothari formula, the number of sample size determined is equal to 355 students. Then, the specific number of participants from the four selected grade 11 schools is as follows:

Enticho Ps: 551x 0.12=67

Queen Saba PS: 613x 0.12= 74

Axum PS: 954x 0.12= 115

Rama PS: 839x 0.12= 101 totally 355 respondents were taken by using an accidental sampling techniques.

Table 3 1: participants from the sampled schools

Name of school	Number of students	Sample	Number of principles	Sample	Number of teachers	Samples
Enticho s	551	67	1	1	10	3
Oueen Saba	613	74	1	1	11	3
Axum	954	115	1	1	17	4
Rama	839	101	1	1	15	4
Total	2954	355	4	4	53	14

3.6 Source of Data

The main source of data for this study was primary source of data such as, questionnaires (close and open ended), interview and observation. Questionnaires were distributed to the selected respondents. An interview was conducted with students, teachers and principals of the selected schools. Observation was directly conducted by the researcher using checklist so as to whether the students appropriately discuss or not. In addition to this, the researcher used secondary source of data such as document analysis mainly students roster of network in order to identify the result of network in first semester 2012 E.C.

3.6. Data Collection Instruments

To conduct the research, the researcher used two questionnaires (close and open ended), interview and observation as instruments of data collection. These instruments were developed on the basis of the objectives of the study which is to assess the effect of students' network on their academic performance in the four selected grade 11 schools.

3.6.1 Questionnaire

Questionnaires are an appropriate in enabling the researcher to collect a large amount of data from many subjects economically (Orodho, 2009). He also listed out the following advantages of using questionnaire to gather factual information (a) The person administering the instrument will have an opportunity to establish rapport (b) To explain the purpose of the study and (c) To explain the meaning of items that may not be clear. The availability of a number of respondents in one place such as schools also makes possible time management expense and provides a high proportion of usable responses. "A questionnaire is a set of questions dealing with a specific topic given to the selected sample of the study in order to gather data about the related topic." Kothari (2004).

1) Teacher questionnaire

The questionnaires were developed and distributed to sample teachers. This questionnaire has three parts each, in which teachers were expected to give necessary information for the study. The first part includes five items which ask teachers to provide general background information like name of the school, their age and gender, quality of teacher training, service years. The second part of the questionnaire was designed as close-ended questions captured through a five point Likert scale anchored through one (strongly disagree) to five (strongly agree). A sample question in this part reads as follows suggestions on the use of student network learning in regular classes". This part contained three categories with a total of 20items. (See appendix B).

2) Student questionnaire

In order to understand the effect of students' network towards learning and practice, a questionnaire, which has two parts, was constructed. The first part includes four items which asks students to provide general background information including name of the school, age, gender, and grade level. In the second part, there are sixteen items. Like teachers' questionnaire,

the second part was designed consisting of close ended items at a five point Likert Scale with the range from strongly disagree to strongly agree. A sample question (See appendix A).

3.6.2. Interview

Interview is one of the most important research tools which help the researcher to gather in-depth information from the respondents. According to Dawson (2002), interview helps the researcher to achieve a full understanding of the interviewee's point of view or situation. In line with this, (Merriam, 1998 as cited in Dawson, 2002) said, "We interview people to find out from them those things we cannot directly observe feelings, thoughts and intentions. We cannot observe how people have organized the world and the meaning they attached to what goes on in the world." Therefore, the researcher used semi structured interview with teachers and principals, in this research to gather relevant data in concerning assessing the effect of student's network on their academic performance.

3.6.3. Observation

Observation is one of the supplementary instruments to gather data. Therefore, the researcher was made observation during the students' network discussion using check list.

3.6.4 Pilot testing

The pilot test is a very important part of the research process. It was done as a first step towards conducting a larger study. If the pilots study factors such as checking validity and reliability results of the tools are well, then the study team can successfully conduct the main study in larger scale (Stone, 2016). Therefore, the researcher apply pilot testing on 30 students of grade 11 in Ahsea comprehensive secondary school which is found in Central zone woreda Merebleke that was not included in the sample of the study.

3.7.1 Validity of the instrument

Validity is the most important criteria for the quality of a test. The term validity refers to whether or not the test measures what it intends to measure. On a test with high validity the items were closely linked to the test's planned focus. For many certification and licensure tests this means that the items were highly related to a specific job or occupation. If a test has poor validity then it does not measure the job-related content and competencies it ought to (Professional testing Inc., 2006).

Questionnaires, observation and interview questions for teachers was checked their validity by experienced teachers.

3.7.2. Reliability of the questionnaires

Reliability is one of the most important elements of test quality. It checks consistency reproducibility or an examinee's performance on the test. For example, if you administer a test with high reliability to an examinee on two occasions, you were very likely to reach the same conclusions about the examinee's performance both times. If a test yields inconsistent scores, it may be unethical to take any substantive actions on the basis of the test (Professional testing inch. 2006). The values for reliability coefficients also called (Cronbach's coefficients) range from 0 to 1.0. A coefficient of 0 means no reliability and 1.0 mean perfect reliability. Table about reliability coefficient and its interpretation is presented on Appendix F. There are several methods for computing test reliability, one of which is the split half reliability rKR-20 formula (Korb, 2002).According to him, if you have dichotomous items (e.g., right-wrong answers) as you would with multiple choice exams, the KR-20 formula (Cronbach's alpha) is the best accepted statistic.

3.8. Data Collection Procedure

Before distributing the instruments, the researcher's was contacts with the school administrator to explain the objective of the study and to coordinate the targeted students and teachers. The schedule was arranged when and how the data collecting instruments was conducted. Based on the schedule, students was select together by the researcher and home room teacher’s co-operation. The time schedule for observation and interview with teachers and principals were arranged. Finally the instruments were applied to the main study participants. Lastly, all the required data was collected. Organized and made ready for data analysis

3.9. Methods of data analysis

The data were collected from different sources. The researcher used quantitative and qualitative data analysis techniques depending on the nature of the data to analyze and interpret the collected data. The quantitative data were analyzed and interpret through relevant statistical tools excel and SPSS version 20. Descriptive statistics particularity frequency. Percentage was used in the analysis and presentation of the data. On the other hand, the qualitative data collected through open ended items, observations and interviews were organize and analyze by summarizing the main points through sentences.

CHAPTER FOUR

DATA ANALYSIŞ, PRESENTATION SAND INTERPRETATION

This chapter deals with the data analysis, presentation and discussion of the already collected data through different instruments. The data was presented in the form of tables followed by descriptive statements.

The data collected through the close ended questionnaire from students and teachers were presented with the help of tables in which contained statistics and percentiles followed by descriptive statements for analyzing and interpreting quantitatively and qualitatively respectively. In addition to this, the data obtained through outside classroom observation, open ended questionnaire for teachers and interview for teachers and principals were also analyzed and interpreted qualitatively. The total numbers of respondents were 355 students with 194 males and 179 females, 4 male principals as well as 14 teachers with 8 males 6 females.

4.1. Data presentation, Analysis and interpretation

Table 4.1 Demographic Data of Respondents

NO	Variables		Teachers		Principal		Students		Total	
			N	%	N	%	N	%	N	%
1	Sex	Male	8	57.14	4	100	182	51.45	194	51.87
		Female	6	42.85	-	-	173	48.55	179	48.13
	Total		14	100	4	100	355	100	373	100
	Age	17-18	-	-	-	-	341	95.95	341	91.42
		19-20	-	-	-	-	8	2.31	8	2.15
		>20	-	-	-	-	6	1.73	6	1.6
		36-45	10	-	-	-	-	-	10	2.68
		>46	4	-	4	-	-	-	8	2.15
	Total		14	100	-	100	355	-	373	100

As indicated in the above table 4.1; among secondary school teachers 8(57.14) and 6(42.85) were male and female respectively while 89(51.45) and 84(48.55) were male and female students respectively. This showed that in both groups the numbers of female respondents was less than their male counter parts.

Concerning age distribution of respondents, the teachers respondents were: 10(71.43) in the age group 36-45 and 4(28.57) were in the age group of 46 and above. Whereas, the age distribution of students respondents were in the age of group of 17-18years, 341(95.95), from19-20years, 8(2.15٪) and 21 and above years 3(1.6٪). Therefore, the intended age interval in both teacher and student respondents were claimed.

Table 4.2 Qualification, grade level and experiences of respondents

NO	Respondents	TEACHERES			Principles		Student		Total	
			N	%	N	%	N	%	N	%
1	Qualifications	MA	11	78.57	2	50	-	-	11	78.57
		BA/Bse/Bes	3	21.43	2	50	-	-	3	21.43
	Total		14	100	4	100	-	-	14	100
2	Grade level		-	-			355	100	355	100
3	Teachers services	11-15	10	71.43			-	-	10	71.43
		16-20	4	28.57					4	28.57
	Total		14	100					14	100
4	Principal services	10-15			2	50				
		16-20			2	50				
	Total				4	100				

4.1.1. Analysis and interpretation of closed-open ended questions

Table 4.3 Student's response on item related to factors affecting student network

No	Item	Response									
		N	%(SA)=1	N	%(Ag)=2	N	%(Un)=3	N(Da)=4	%	N(Sd)=5	%
1	Student network is well organized	-	-	-	-	10	2..81	173	48.55	172	48.3
2	Schools are more comfortable for student network	-	-	-	-	6	1.73	31	8.67	318	89.6
3	Students participate during student network	-	-	6	1.73	21	5.78	215	60.69	113	31.79
4	There are enough materials for discussion	-	-	-	-	10	2.89	74	20.81	271	76.33
5	Teachers help students at the time of networking	-	-	-	-	-	-	154	43.35	201	56.61
6	School distance has influenced in student networking	113	31.83	113	31.83	6	1.69	72	20.28	51	14.36
7	Students use time properly during student network	31	8.67	51	14.45	-	-	150	42.19	123	34.64

From the above table 4.3, the percentage of students marking on each statement is shown in five rating scales. So the following suggestions are the views of the students according to the results obtained from table above:

As it revealed in the above table 4.3: item I indicated 345(97.18%) of the respondent students suggested that the student network is not usually well organized in their schools. Conceding of his given information the student's network in the schools cannot be led by the home-room teachers, unit leaders and principals, Only 10(2.81%) undecided on the students networking whether or not well organized manner the student networking. from this the researcher studied the student networking did not well organized manner in the most school to implement the student networking

In response to item 2 question table 4.3 is 318(89.6٪) respondents responded strong disagreed schools are not more common hale to implement he student networking and 31(8.67%) responded disagree to implement student networking schools are not more conducive and attractive for students while networking. By combining respondents who disagreed and strong disagreed majority of respondents 348 (98.27) that in most schools is uncomfortable and inconvenience for the student network, while students even want to spend the rest their time in schools. Out of 6(1.73%) undecided on the above statement that schools are more comfortable to implement student networking whether is not or comfortable while networking.

Item 3 of table 4.3 215(60.69%) respondents disagreed most students during networking are not share and active participants while discussion their tasks given by their subject teachers but dominated by the leaders of the group members and 113(31.79%) strongly disagreed in the student networking there is not active

participating among the group members dominated by leaders that facilitate while networking. Majority of the respondents, that they were not active participants during the student networking that is dominated by the some group members those facilitators of the networking. These shows the students during the group discussion did not share their knowledge. experience and cooperating skills simply dominated by the group mentors and leaders that have responsibility to run all tasks .Out 11(1.73%) agreed that active participating during the student networking among the group members sharing all the tasks given by their teachers and 10(2.78%) undecided on the active participation of students during student networking whether is sharing or not all the tasks given to the group members shares.

Item 4 of table 4.3, 271(76.3%) strongly disagreed the access of enough necessary educational materials during the student networking to discuss in group and 74(20.81%) disagreed educational materials for student networking to discuss the tasks given by subject teachers. By combining respondents who responded disagreed and strong agreed majority of respondents 345(97.1 1%) accepted that there are no enough access materials in schools like (desks, extra classes, blackboards and etc) during student networking. This made the student networking is boring and ineffective discussion for all tasks given by each subjects in cach group to hold discussion. But some of 10(2.89%) the access of enough educational materials available the students networking in all student groups during task discussion whether is not or enough access undecided.

Item 5 of table 4.3, 201(56.62%) strong disagreed the redness of teachers to support and coordinating the different groups to facilitate all the necessary expectations and 154(43.38%) disagreed the above statement that the teachers are not ready to stir up the network groups to discuss among members all tasks.. By combining respondents who responded disagreed and strong agreed majority of respondents 355(100%) accepted that the redness of teachers in supporting students during student networking is to low, this shows the role of teachers in helping and guiding students while student networking is very low. Therefore, the unwilling of teachers and carelessness hurt the sense of the student networking on its implementation and decreases students interests to spent their time in schools.

Item 6 in the same table 4.3, 133(31.83%) strongly agreed the distance of the schools is one of the hindrance of the students to engage during networking in the opposite shifts and 113(31.83%) agreed that on the above statement distance of the school a critical obstacle for students during networking to turn back in the opposite shifts, By combining respondents who responded agreed and strong agreed majority of respondents 246(69.36%) accepted that school distance has its own effect to turn back to school in opposite shifts for student networking, This shows that schools distance challenges and facing the students another burden and tiredness to engage in the networking to improve their academic performance. 51(14.36%) strong disagreed the school distance has no any influence to engage student networking in the opposite shifts. Some of 6(1.69%) the distance of the school to turn back in to the school to conduct and participate during student networking students have no effect or to say undecided.

Item 7 in table 4.3, 150(42.19%) disagreed that time during networking students didn't use their time perfectly while networking and 60(34.68%) strong disagreed students are not use their time during student networking properly. By combining respondents who responded disagreed and strong disagreed majority of respondents 273(76.87%) accepted that students didn't sue wisely their time for networking to turn back into schools to discuss the tasks while networking. The lack of time management in participating student networking make problematic. So the effectiveness of the student network could make it questionable. 51(14.45%) agreed the

above statement students use their networking time when turn back in to schools while networking and 31(8.87%) strong agreed the same to that students uses their network time during student network in the opposite shifts perfectly. The researcher conclude the above table, the implementation students' network hindered with different external problems in to practice.

Table 4.4 The attitude of students towards student networks

NO	ITEMS	Respondent									
		(SA)=1		(Ag)=2		(Und)=3		(Da)=4		(Sd)=5	
		N	%	N	%	N	%	N	%	N	%
1	Student network has no any influence on academic	174	49.13	133	37.57	31	8.67	10	2.89	7	1.97
2	Achievements of students rather than wasting resources and time	199	56.07	117	32.95	4	1.12	25	7.04	10	2.81
3	Students does not like students networking	113	31.83	216	60.84	--	-	10	2.81	10	2.81
4	Student networking is time spending	113	31.83	206	58.02	20	5.63	16	4.50	-	-
5	Students network has no positive impact on academic performance	137	38.59	183	51.54	22	6.19	12	3.38	-	-

According table; 4.4, 174(49.13%) of respondents strongly agreed that student network has no any influence on academic achievements. The other respondents on the

Same question 133(37.57) agreed on the negative influence on their academic achievements rather than wasting time and resources. Anyone could understand from this analysis the student network can't bring any fruitful academic performance in their learning life. Out of 10(2.89%) disagreed student networking is useful for students to enhance their academic performance achievements and 7(1.97%) strong disagreed student networking is very advantageous in the students' current academic achievements than before. Out of the 31(8.67%) respondents responded that the student networking negative effect on the student academic performance is undecided.

As in indicated in item 2 table 4.4; 199(56.07%) strong agreed that respondents responded that most of students interests towards student networking is unlikely and 117(32.95%) agreed on the above statement on the students preferable towards networking. Respondents who responded strong agree and agreed majority of respondents 316(89.01) believed and accepted that student network is not preferable and unlikely this type of learning strategy in opposite shifts during specific day of network discussion. Out of 25(7.04%) disagreed student networking is interested to networking in the opposite shifts and 10(2.81%) strong disagreed that

student networking in the opposite shits being necessary to exercise different tasks making groups But some of 4 (1.12⁒) the student networking is preferable or not by the students undecided the above idea

Item 3 in the same table 4.4, 216(60.84) agreed respondents responded that student networking tiresome and boring students while discussion in groups and 113(31.83⁒) respondents strong agreed the above statement networking is making tires and comfortable during discussion in the opposite shifts Conceding the data most of the respondents agreed 339(92.4S6) that believed student networking is a hectic and exhausting kind of task while networking in the opposite shifts of discussion the tasks given by teachers 10(2.81) disagreed that the student networking is necessary and inputs curious and to be active in their learning teaching to enhance their academic performance to have plenty of time and space in discussion the tasks given by the subjects in such of the opposite shift and 10(2.81) strong disagreed the above statement student network gives students to be active in their learning process.

Item 4 in the same table.2 06 (58..02%) respondents agreed that no impact student network on their academic performance. 113(31.83%) respondents strong agreed and believed that the weak implementation of the student networking couldn't perform and initiate on their academic achievements By combining 319(89.85%) agreed and strong agreed that believed and accepted the respondents the impact of student network can't bring positive academic performance in their learning outcome don't initiate learning interests Out of 16(4..50) disagreed student networking has positive impact and initiate learning interests and 22(5.63) undecided by some respondents the student networking have positive impact and initiate learning and teaching in actual classes

Item 5 in the same table. 173(38.59.) agreed respondents responded that student networking tiresome and boring students while discussion in groups and 184(51.83⁒) respondents strong agreed the above statement networking is making tires and comfortable during discussion in the opposite shifts Conceding the data most of the respondents agreed321 (90.42) that believed student networking has no positive impact on academic performance 22(6.19) undecided by some respondents the student networking have positive impact and initiate learning and teaching in actual classes12(3.38) disagreed that the student networking is necessary and inputs curious and to be active in their learning teaching have positive impact on academic performance to have plenty of time and space in discussion the tasks given by the subjects in such of the opposite shift .From the above table could be concluded that the perception of students on the students' network are low.

Table 4.5 students' response on practicing student networking

No	Item	Response									
		(SA)=1		**(Ag)=2**		**(Und)=3**		**(DA)==4**		**(SD)=5**	
1	Student network is implemented effectively	-	-	-	-	-	-	115	32.39	240	67.6
2	Student networking frequently practices	-	-	31	8.73	-	-	201	56.61	123	34.64
3	Students activities equal with the other members during network discussions	-	-	-	-	-	-	205	57.74	150	42.25

Item 1 table 4.5, related to practice on student network. According to all respondents item 1 240(67.6%) strong agreed that the implementation of student networking in almost the schools are not effectively practiced and 115(32.39%) of them responded disagreed that about the statement of implementation of student networking in schools is not effectively practiced. By combining all respondents who responded disagreed and strong disagreed 355(100%) believed and accepted that the implementation of student networking on its practicable the student network in the schools can't be implemented effectively.

Item 2 of table 4.5, 201(56.61%) of them disagreed the student networking is not implement frequently that of the time table scheduled and 123(34.64%) respondents responded the above statement students strong disagreed for not frequently using the student network in almost of the schools by its schedule . . By combining all respondents who responded disagreed and strong disagreed 324(91.26%) believed and accepted that the student networking on its practicable the student network in the schools can't be practice effectively .Out of the 31(8.73%) agreed student networking frequently practiced and implemented in the schools as the time table scheduled as in the opposite shifts.

Item 3 the same table; respondents responded 205(57.74) disagreed students don't shares the tasks among members of the network groups and 150(42.25%) strong disagreed the above statement of the students don't sharing all the activities among the members of the groups. By combining all respondents who responded disagreed and strongly disagreed 355(100%) totally accepted no sharing activities equally with their members during task discussion. This shows that the student network is denominated by few group members that selected to coordinate and lead individual network group to facilitate all the tasks given from each subject in the opposite shifts. According the above information students' network is not effectively practiced in the round. Therefore, the effect of students' network on the academic performance is negative.

Table 4.6 Teachers response on the factors facing the student network

No	Item	Respond									
		(SA)=1		(Ag)=2		(Und)=3		(DA)=4		(SD)=5	
		N	%	N	%	N	%	N	%	N	%
1	Usually students network is given well organized	-	-	-	-	-	--	5	35.71	9	64
2	School is more comfortable for student network	-	-	-	-	-	-	12	85.71	2	14.29
3	School has enough material for discussion		-	-	-	-	-	8	57.15	6	42
4	Period load is not an obstruct to facilitate students network	-	-	-	-	-	-	11	78.57	3	21.43

All items given from item 1 to item 3 are related to factors affecting the implementation of student networking. According to item 1 of table 4; 9(64.29%) respondents responded strong disagreed the student networking is not well organized and lack of coordination among responsible organs and 5(35.71%) responded strong disagreed the above statement on the student networking suffered lack of coordination among the responsible administrative organs. By combining respondents who responded agreed and strong agreed majority of respondents 14(100%) accepted that the implementation of the student networking in schools is not usually well organized and coordination among the home room teachers, unit leaders subject teachers and school leaders

Item 2 of table 4.6, is about the school convenience for networking. In this item 12(85.71%) respondents disagreed that schools are not conducive their infrastructures for networking and 2(14.29%) strong disagreed the same statement student networking implementing in schools could not good their environment for conducting. All the respondents 14(100%) responded disagreed and strong agreed that schools are not more comfortable their compounds to implement the student networking due to lack of infrastructure especially in the opposite shifts. Form the above statement most schools are not equipped the necessary materials that facilitate the student networking

Table 4.6,item 3 is about the access of materials for networking On this tem 11(78.57%) respondents disagreed that the access of enough educational materials that facilitate the student networking is not well structured and equipped and 6(42 86) strong agreed the same statement of the above the access of enough educational materials facilitating for student networking is not equipped. By Combing disagreed and strong disagreed that enough access of materials for networking in the schools not well structured and equipped. This unstructured and well un organized of schools to implement the student networking becomes very problematic.

Table 4.6, item4 11(78. 97%) respondents responded disagreed that load of periods and double shifts problems for student networking not to facilitate and 3(21.43) strong agreed the above statement the load of period and

double shifts hinder to facilitating student networking. All the respondents 14(100٪) responded disagreed and strong disagreed that load period and double shifts are one of the hindrance on the student networking that teachers fully not to facilitate networking in the opposite shifts. From the above information could be summarized with different factors students' network did not implement well in the class and out class rooms.

Table 4.7 Attitude of teachers towards practice student network

NO	ITEM	Response									
		N (SA)=1		N (Ag)=2		N (Und)= %3		N (DA)=4		N (SD)=5	
		N	%	N	%	N	%	N	%	N	%
1	Student network is more wastage of resource and time	4	28.57	5	35.71	-	-	3	21.43	2	14.28
2	I am not interested to help my students in opposite shift	2	14.29	3	21.43	5	35.71	3	21.43	4	28.57
3	l do not prefer to apply different techniques for student network on opposite shift	2	14.29	4	28.57	7	50	1	7.14	-	-
4	I am not volunteer to monitor students while networking	2	14.29	4	28.57	5	35.71	3	21.43	-	-

Items from 1-3 tables 4.7 are related to attitudes in the implementation of student network According to item l tables 5 (35.71%) respondents responded agreed student networking is wastage of resource and time than its impact on student academic and 4 (28.57٪) strong agreed student networks is wastage of resource and time than its impact on student academic. By combining respondents who responded agreed and strong agreed majority of respondents 9(63.29٪) believed and accepted that the student networking is a time and resource wasting than brought any visible academic performance on students 3(21.43%) agreed that student networking is not wastage of resource and time than its impact on student academic performance. Some of 2(14.29) strong agreed the above statement student network is not wastage of time and resource than enhance students' academic performance

Item 2 of table 4.7,(14.29%) respondents strong agreed teachers don't volunteer to support students by networking in the opposite shifts and 3(21.43٪) respondents agreed that they are not interesting to help while networking students during the opposite shifts Majority of respondents 5(35.71%) responded that helping students by student networking in the opposite shifts undecided. Out of 3(21.43%) respondents disagreed teachers want to support their students with in student networking in the opposite shifts and 1(7.14٪) strongly disagreed that they are interesting to support students during networking within the opposite shifts

Item 3of table 4.7, 2(14.29٪) respondents strong agreed teachers want to use different techniques to support their students while networking in the opposite shifts and 4(28.57٪) agreed that they want to use different mechanisms to support students while network in the opposite shift Majority of respondents 7(50٪) responded that they are not decides supporting students using different techniques while networking within the opposite shifts. Some of the respondents 1(7.14) disagreed that they prefer to help und coordinate students while

networking using varieties techniques in the opposite shifts. By concluding the above statement most of the teachers schools in dilemma lo whether to support or not to decide up on the students networking.

Item 4 in the same table (14.29%) respondents strong agreed teachers did not want to act as mentor and facilitator for student networking while networking on the opposite shifts and 4(28.57%) agreed that they don't like to as mentor and coordinating students during networking within the opposite shifts. Most of the respondents 5(35.51%) that they are not decides to act as mentor and facilitators in the opposite shifts when students in network discussion. Out of the respondents 3(21.43%) strong8 agreed that teachers don't want to serve as mentors and coordinators to support students during student networking within the opposite shifts. For this statement most of teachers definitely hesitation on the student network on implementation. On this case most teachers did not accept to use the learning strategy in their daily learning. Therefore, the perception of teachers in students' network is low.

Table 4.8 Teachers response on practicing students' network

No	Item	Response									
		(SA)=1		**(Ag)=2**		**(Und)=3**		**(DA)=4**		**(SD)=5**	
		N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
1	The school is practicing student network effectively	-	-	-	-	3	21.43	5	35.71	6	42.85
2	The school runs students network with time schedule	-	-	-	-	2	14.29	7	50	5	35.71
3	Teaches give clear activities, exercise and feedback so anyone knows during student network	-	-	3	21.34	2	14.29	5	35.71	4	28.87
4	Teacher move around the student while networking to help students	-	-	1	7.14	-	-	8	57.1	5	21.42

Items from 1-4 tables 4.8, are related practicing on student network According to item 6(42.85٪) respondents responded strong disagreed that the practice of the student networking in the schools didn't implement effectively as the time table scheduled setup and 5(35.71٪) disagreed the implementation of student networking effectively in the schools as the program set out. By combining respondents who responded disagreed and strong disagreed majority of respondents 11(78.57%) believed and accepted that the student networking is not effectively practiced in schools according to the program set out for implementation. Some of the respondents 3(21.43٪) responded that the implementation of student networking in the schools whether practice or not student networking is effectively undecided.

networking is not run as the program set and 5(35.71٪) strong agreed the student networking didn't implement through the program set out in the opposite shifts By combining the respondents who responded disagreed and strong disagreed majority of respondents 12(85.71٪) accepted that schools are not managing and implement

Item 2 of table 4.8, 7(50%) respondents responded disagreed that the student student networking within the time-table schedule and student networking is occasionally practice as will of the teachers summoned the students to cover up the lessons. But some of 2(14.29%) that undecided the practice of student network on its time-table schedule set out in the opposite shifts

Item 3 table 4.7, 5(3S.71%) respondents responded disagreed the activities that gave by the teachers don't shares and gain feedbacks among group members and 4(28.57%) strong disagreed also sharing activities and giving feedback about the tasks that expected to discuss among the group members un manageable in the opposite shifts. Most of the respondents who responded disagreed and strong disagreed total of 9(64.28%) accepted that teachers are not clearly guided all the activities and feedbacks for students during networking on the opposite shifts. 3(2.43%) agreed some of gave clearly activities, exercises and feedbacks during student networking in the opposite shift and 2(14.29%) of them undecided on the above statement that teachers gave clear activities exercises and feedback while networking within the opposite shifts

IteBy combining respondents responded who responded disagreed and strong disagreed majority of respondents 13(92.85%) accepted that teachers are not usually move round in to students networking lo facilitate tasks of the group members in the opposite shifts. Some of the respondents 1(7.14%) agreed teachers move around in to students while students discuss networking in groups in the opposite shifts This indicates students during networking didn't guided and supported their tasks given by their teachers forced to leave and divert in to other unnecessary works or spent their time with nothing else

.In 4 in the same table 8(57.1%) respondents responded disagreed that teachers didn't move round into students while networking and 5(35.14%) strong disagreed didn't move round teachers while students practice student networking in the opposite shifts. From the above table could be conclude that the students' network is not practice based on the program set of the schedule.

4.2 Findings of the open ended questions from teachers.

The respondent's views are presented and the responses are identified in this section as follows:

Questions;

1. Suggest on the current status of student network practicing

2. List the major factors that hinder the practicing of student network

3. What do suggest to minimize the problem that hinder the practicing of student network

Respondents' response to the above questions

The practice of the student network in the schools, student at the first quarter of the academic year students grouped by their result of last year graded A', B and 'C and set out a schedule two days in a week. But the current status of network student practicing in the schools begins with different problems like of interruption and absenteeism of student in the regular schedule especially in the first semester most students went to collect and support their families in the rural area. But in some town schools there are some positive movements in practicing the student network. Generally, the practicing of the students' network in all of the schools we say that very low and not organized manner. It is run with full of interruptions through the Vera.

The practicing of student network is in the most schools surrounded with different problems of infrastructure. The most we observe that hinder the students networking that of the lack of classrooms, teachers load period. Parents awareness and un conducive schools environment. In addition to the schools and weredas' experts and supervisors lack of coordination and did not give frequent supports and incentives for those have active participants.

All of the respondents put down their suggestions to solve the current problems that hinder for the practicing of the student network; extension of infrastructures like classrooms, reduction of teachers period loads, incentives both for teachers and students, create schools conducive for school communities, delivering educational materials make strong collaboration with wereda education office beyond than report. Preparing short training and seminars for (teachers, students and parents) and make frequent contacts with stakeholders supporters of education improvements.

The researcher was also to summarize the suggestions of the respondents on one of the prepared open-ended question that help to address some of the solutions for the challenge facing the practicing of student network in the opposite shifts. The following are (1) the government must give great consideration to student network and must full stationary materials and other needed by the school (2) focus must be given to the students in the opposite shifts great care and all necessary body must give continuous fellow up (3) the school must work to fill infrastructure by participating of community, NGO and all stakeholders to solve the problems (4) the government must reduce the size of students in class (5) the school must work with students family in order to reduce students absenteeism (6) he teachers ust commit for the successful of practicing student network.

4.3. Findings of the interview with school teachers

Question l; what do you think about the current status of the implementation of

Student network in your school?

Concerning of the response obtained from interviewed most of the respondents stated that the current status of the practical of student network is not implemented properly As the teachers justify the student networking because of the lack of students and teachers interests. Not only this but also the coordination of school leaders, wereda education office and the other stakeholders of the school community are not working cooperatively. It is conducted with full of interruptions that students and teachers expected met each in two days in a week

Besides this one of school C teacher said the following about implementation of student network.

> *In our school as we observed the implementation of student network is not practicable. Because of the bad condition, lack of shelters like trees and lack of coordination in the opposite shifts. Students came but nothing done the Networking yet. At the beginning of academic year students paired form for networking but the rest no any visible work. (l6 02/2020)*

Another in this of school a teacher said the following about the practicing towards the student's network.

> *In our school the practicing of student network is hold with the schedule set. Two days in a week that set out in the schedule. Most of teachers and students retuned back in the schools and gve tasks for their students But they left soon. The student while network discussion and did not gave feedback (l4/02/2020).*

Question 2; what can you suggest about the attitude of others teacher towards student network implementation in your school?

According to the respondents suggested that the attitude of other teachers on the implementation of student networking: most of the teachers realized that students network is difficult to implement in an opposite shifts. Because teachers have load periods, double shift, leading different extra activities made student network problematic. And most teachers are not volunteers to support and mentor during the student's network in the opposite shifts. Due to the hardest and lack of intentions from wereda education office and zones most teachers ignore the student network

One of school B teacher said the following about the attitude of other teachers on the towards student networking

> *In our school some teachers have businesses centers like shops, Bajaj, pool house and Bars. Therefore, they don't want to support student network discussion in the opposite shifts. They don t cares about school extra works and spent time in their private jobs. (1502/2020)*

Another school C teacher said the following about the attitude of others teachers on towards student network

> *Most teachers they don't to participate in the student networking because they believe that student network nothing effect on students result. It is wasting resource and time rather than students focus on the regular classes to enhance their academic achievements. (16/02/2020)*

Question 3: what are the factors that affect the student network in your school?

According to teachers respondents obtained from the interviewed most respondents raised the factors that hinder the implementation student networking, Those are; facilities of the schools like desks, chalkboard, lack of abundant classrooms, shortage of water, distance of the school, parents awareness to send their children in opposite shifts. In addition to this the un conducive school compound are mentioned. And also the Wereda Educational offices, supervisors and experts can't usually support for schools in implementing student network.

Besides this one of school A teacher said the following about infrastructures in real situation of their school.

> *Since our school new; shortage of chairs, conputers and stationary materials are the problems seen in our school most commonly. Even, we have no chairs and table on which our teachers sit on. Due to this we are negatively affect by this problems and it is difficult to say student network implement effectively. (14/02/2020)*

One of school C teacher said the following about the problems of the wereda education office supervisor.

The support given from school and wereda education office and supervisor are low and they didn't gave us any supportive materials, short training, seminars and initiatives of recognitions. (I6/02/2020)

Again the teacher of school D also said the following on the Parents Teachers Association of the school.

In our school, the Parents Teachers Association didn't create smooth relationship Among teachers, parents and students to have a common understanding on the Student network as school administrative body and finance rising Control. (17/02/2020)

Question4: what should be done to improve the current implementation of students networking?

Most of the respondents from the interviewed responded that to improve the current implementation of student networking, school leaders should create great positive awareness of students, parents, school communities to understand the impact of students networking on the academic performance. In addition to that schools should be equipped resources like desks, chair, chalkboards, and fair period allocation and loose of extra activities. Not only this but also the school community should solve the school problems with different stake holders like NGOs in order to create a conducive and preferable school environment

One of the interviewed school a teacher sad the following about the how to improve the practicing of student network

The education bureau zone and wereda education efface shod equipped the Schools all the necessary materials. heir enough English and laths teachers Create awareness of parents on the impact of the students network on their Academic performance (14/ 02/ 2020).

Beside this one of the school B teacher said the following about number of students

Most schools suffered by number of students increase from time to time that made schools difficult to manage students during regular und out of class in the school compound Therefore, the students network in the opposite shift to manage became problematic (5/02/ 2020).

Again the teacher of school C also said about the school leaders

Our school lead by one principal more than two years without successors. That most tasks of the school vested on the vices that controlled the all the activities of the school D of external tasks Therefore, wereda education office must be heir immediately school assistance that facilitate the students affaires (I7/02/ 2020)

4.4. Findings of the interview with school principals.

Question l; what do you think about the current status of the implementation of student networking in your school?

Regarding to this item some interviewed principals responded that he current implementation of student network is totally weak in its implementation due to the low interests of students, reckless of teachers and load of periods, double shifts and extra co-curricular activities carried out by teachers to make the network not to fully implement.

Besides this one of school A principal said the following about the practice of student network

In our school. the practice of student network is implemented that of the school Schedule

that bvo days in a week But the effectiveness of the network is not such good in its practices; Because of the reckless of teachers and mentors Some of the students also didn't punctual in the network time. (14/02/2020).

Again the principal of school D also said the practice of network

Since our school is an old school with crowded of students even the student network in the opposite shifts tried to implement but the regular schedule was interrupted by the luck of classrooms and desks. This made the network difficult in our schools to meet its objective. (17/02/2020)

Question 2: what supports do the school, wereda education office, zone for

According to the most respondents interviewed principals responded that schools: wereda education office and zone don't give any support that related to capacity building of teachers, initiatives, modules supporting the student network and other helpful guidance.

Besides this one of school C principal said about the wereda education office

Our wereda education office we met us in the first quarter annual work plan evaluation only But the rest of second, third and fourth quarters didn't met and seen the school what they done rather than by contact reporting system. Therefore, the upper administrative body does not support and give any Supplementary materials and training (1 5/02/2020)

Again the principal of school D also said the following the acknowledgements and incentives in school

Since the last five there were incentives and acknowledge for clever and outstanding teachers as best teacher give thank in moral and accredit Ones in a year, but at these moment there are not any thanks or incentives for teacher's encouragement both seen the weak and the bests. This discourages industriousness and competition among teachers (l7/02/ 2020)

One of the interviewed principal school A sad the following about supports of school wereda education office respective to their school in general particular

In our school there is at least one training given per year concerning about how to follow up student network and some initiatives for all teacher. In addition to wereda education give support s short training on network implementation. Even if some volunteer teachers. (date 14/02/2020)

Question 3; what can s you suggest about the attitude ef students and teachers toward student network?

Most of the teachers are believed that the students network in the schools practicing did not conduct a research how and when would apply especially out of the regular classrooms Most schools in Tigrai have short of infrastructure and contain more students than its capacity This problems influence teachers in schools not o do in sporting and facilitating the students network especially in the opposite shifts Teachers tired during the regular classes in the low participation of students The accumulated students deteriorating interests in learning. the overall cheating during exams and the weak policy of promotion decreases the teaching and learning

processing schools Because of this problems teachers said that student network is nothing but for a game of report

Beside this one of school A principal said the following about teachers attitudes

Most of teachers used the student network for portion coverage than helping students on the topic difficulty during learning .They didn't use student network us cooperative learning strategy to enhance academic performance (14/02/2020)

Again the director of school B also said the following on the attitude of teachers

In our school teachers didn't hearty accept the students 'network as to soften their tasks of teaching learning during classrooms simply the for sake of efficiency and to be from principals 'pressure. (15 /02/2020)

Question 4; what are the major challenges facing the implementation of student network in your school?

According to the interviewed school principals, the major challenges that hinder for the practicing of the student network are many obstacles. These are: school infrastructure, reckless of teachers and students, lack of parents' awareness on the network, school distance for students, legal document for student network to account in teachers, double shift of schools, load periods and shortage of teachers. Mathematics and English. Because of student network more focused on the above subjects. In addition to the loose contact in the wereda education office and Zones made students network as serious agenda. The above challenges faced the student network to practice in most schools.

Besides this one of school principal C said the following on school infrastructure.

Since the block grant financed from wereda education office is not given for Consequent years challenged that scarcity of stationary materials especially Paper face us and some of our school teachers take their own measures on

Task. This is some of the problems to give extra activities for students. (16 02/2020).

Again the principal of school C said the following about infrastructures in real situation of their school:

Since our school is new: shortage of chairs, computers and stationary materials are the problems seen in our school most commonly. Even we have no chairs and tables on which our teachers sit on Due to this we are negatively affected by this problems and it is difficult to say student network is practiced effectively. (16 /02/2020).

Question 5; what should be done to improve the problem hindering the implementation of student network in your school particularly?

Most of the respondents from the interviewed responded that to improve the current implementation of student networking, school leaders should create great positive awareness of students, parents, school communities to understand the impact of students networking on the academic performance. In addition to that schools should be equipped resources like desks. chair, chalkboards, and fair period allocation and loose of extra activities. Not only this but also the school community should solve the school problems with different stake holders like NGOs in order to create a conducive and preferable school environment. In addition to, a government must give annual budget for schools beyond to school grant and block grant with subsidizing. Regional education bureau.,

zone education and social advisory and wereda education office must gave attention the students network as cooperative learning strategy and should repaired a blue print on the network and schools must introduce and create competition environment and incentive systems both for teachers and students.

Besides this one school B principal said the following to overcome the hinders for student network

> *The wereda education office and other stakeholders should subsidize school to extension and build enough classrooms, reserved area for networking and enough Science teachers, give attention to teaching profession and revised education policy and hcus on quality education (15 02/2020)*

Again the principal school A also said the following about school authority

> *All the school authority lay on the hand of wereda education office the school Principals nothing have authority than power. Because of this most principals don t want to take responsible due to lack of legality f law to executive action done by teachers while networking in the opposite shits (14/02/2020)*

The researcher was also to summarize the suggestions of the teachers and principals respondents on one of the prepared interview questions that help to address some of the solutions for the challenge facing the practicing of student network in the opposite shifts. The following are: (a) the government must give great consideration to student network and must full stationary materials and other needed by the school (b) focus must be given to the students in the opposite shifts great care and all necessary body must give continuous fellow up (c) the school must work to fill infrastructure by participating of community, NGO and all stakeholders to solve the problems (c) the government must reduce the size of students in class (d) the school must work with students family in order to reduce students absenteeism (e) the teachers must commit for the successful of practicing student network.

4.5. Results from the outside classroom observation

Using the check list outside classroom observation was made on the opposite shift student's network and result of the observation is listed below:

- There are some broken chairs, desks and tables available on the area most student network practiced. All most of the students group sat on stones, woods and other materials during network discussion but some students also sat on the ground. The schools have lack af chalkboard and desks that very necessary materials while network discussion. Therefore, the availability of educational materials very low in schools.
- Students and teachers during the network time are not punctual. Almost students came in to the network area too late. Even teachers were not reached into the network area on time.

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, conclusion of the fundamental findings are drawn. Finally some possible recommendations are launched on the basis of the findings of the study.

5.1. Summary of Major Findings

The researcher was also to summarize the suggestions of the teachers and principals respondents on one of the prepared interview questions that help to address some of the solutions for the challenge facing the practicing of student network. The following are:

1. It was found that student network did not well organized, condition of school is Uncomfortable and inconvenient, there is no enough access materials, redness of teachers is too low for supports of students network and lack of time management are the problems of student network on academic performance that not achieved. .
2. It was also found that the attitude of student network on academic performance student s and teachers are well not good. They assume that student network is not change the academic performance of the students and time consumed.
3. It was found that there is low practice of student network activity because of low attention readiness woreda educational bureau, student families, school communities, teachers and other stuff.
4. By developing the awareness of students toward student network to achieve theirs performance, give great consideration by the government, teachers must be committed on network activities, school should be equipped resources … etc.

5.2. Conclusions

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

With regard to the attitude of teachers and students towards the student's network on achievement on academic performance of students is low attitude. The finding of the study revealed that teachers and students didn't practice in the actual student network; their attitudes seem to be negative. Therefore it can be concluded that teachers and students didn't implement student network, their attitude towards student networks learning seem to be negative.

The analysis of the questionnaire items filled by students indicates that the majority of the participants didn't seem to have a clear view point (perception) about student network However, the data collected through interview and some open ended questionnaires from teachers indicates that almost all participants how to achives the student performance Thus, it can be possible to conclude that teachers seem have basic knowledge student network learning.

Regarding problems of teachers and students facing in using student network learning on the opposite shift that affect distance from the school is another hinders of students.

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 students' network learning, teachers appeared to have inadequate knowledge of students' network learning.

5.3 recommendations

1. The government should give great consideration to student network and must full stationary materials and other needed by the school
2. Teachers and school managements should be given to the students in the opposite shifts great care and continuous fellow up
3. The school should work to fill infrastructure by participating of community, NGO and all stakeholders to solve the problems. The government and the school should work with students family in order to reduce students absenteeism
4. The teachers should be committing for the successful of practicing student network.

Based on the findings of the study, the researcher would like to forward the following recommendations for the implementation of student networking.

1. Implementation of learning has been found low and how students and teachers perceive one another and inter act each other is a forgotten aspect of instruction. For this reason the researcher believe unless teachers get training it face problem for them to be equipped with the necessary assumptions of students' network learning that enable them implement students' network learning effectively, consequently, adequate training time should be devoted to familiarize teachers with how and when to effectively implement student networks in classroom instructions.
2. It is recommended that students need to be taught the appropriate interactional skills. Knowing how to work effectively in a cooperative team is not something that comes naturally to anyone. Therefore, teachers should help students to be aware the necessary skills for successful one to five students' network learning tasks. Like other skills, student network learning skills need to be taught.
3. It is also suggested teachers should make lessons and tasks need to be well organized and assign roles for every individual to discourage free-riding. Besides, make the student network tasks to have some parts that cannot be performed by one or two students rather need participation to all members.
4. School condition was not arranged in the way to facilitate student network learning. It was also observed teachers formed student network groups based on students' seats. This affects the assumption of student network learning. For instance, it affects students' academic achievement and social skills. Hence, teacher should be aware of the impact of classroom conditions and grouping mechanisms on students' meaningful learning. Therefore, the first or learning should be arranging classroom conditions in the way suitable to implement different kind of one to five students' network learning and forming diverse ability grouping should also be given due emphasis.
5. More importantly, officials and concerned bodies are recommended to improve some natures of students' network learning and to match with pedagogical science. It should be flexible

6. The focus of this paper was delimited only assign effect and implementing of students' networks attitude of teachers and students towards it. Therefore, the researcher would like to suggest that future research should be undertaken with regard to the attitude of parent and factors that affect the implementation of students' network the sample schools.

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APPENDIX-I

MEKELLE UNIVERSTY

INSTITUTE OF PEDAGOGICAL SCIENCES

DEPARTMENT OF EDPM

POST GRADUATE PROGRAM

Questionnaire for students

Dear students:

The purpose of this questionnaire is to collect information about the effect of students' network on academic performance. Your genuine answers will help the researcher to know how the students' network effect on the stud3ents academic result. . Hence, you are kindly requested to response to all questions carefully and honestly according to the instructions given to each question. Your information will be used only for the research purpose and will be kept confidential.

Note: You need not to write our name. Choose the answer which you believe it express your idea. Thanks for your cooperation

Part 1the effect of students' network on academic performance formations

The following information is related to students' network answer and indicates by right marks.

1. Strongly agree 2.Agree 3.Disagree 4. Strongly disagree

No		1	2	3	4	5
1	Student network is well organized					
2	Schools are more comfortable for student network					
3	Students participate during student network					
4	There are enough materials for discussion					
5	Teachers help students at the time of networking					
6	School distance has influenced in student networking					
7	Students use time properly during student network					
8	Student network is wall organized					
9	Student network has no any influence on academic					
10	Achievements of students rather than wasting resources and time					
11	Students does not like students					

	networking					
12	Student networking is time spending					
13	Students network has no positive impact on academic performance					
14	Student network is implemented effectively					
15	Students activities equal with the other members during network discussions					
16	Student networking frequently practices					

APPENDIX-II

MEKELLE UNIVERSTY

INSTITUTE OF PEDAGOGICAL SCIENCES
DEPARTMENT OF EDPM
POST GRADUATE PROGRAM

Questionnaire for Teachers

Dear Teachers:

The purpose of this questionnaire is to collect information about the effect of students' network on academic performance. Your genuine answers will help the researcher to know how the students' network effect on the stud3ents academic result. . Hence, you are kindly requested to response to all questions carefully and honestly according to the instructions given to each question. Your information will be used only for the research purpose and will be kept confidential.

Note: You need not to write our name. Choose the answer which you believe it express your idea. Thanks for your cooperation

Part 1the effect of students' network on academic performance formations

The following information is related to the effect of students' network answers and indicate by right marks.

1. Strongly agree 2.Agree 3.Disagree 4. Strongly disagree

No		1	2	3	4	5
1	Usually students network is given wall organized					
2	School is more comfortable for student network					
3	School has enough material for discussion					
4	Period load is not an obstruct to facilitate students network					
5	Student network is more wastage of resource and time					
6	I am not interested to help my students in opposite shift					
7	l do not prefer to apply different techniques for student network on opposite shift					
8	I am not volunteer to monitor students while networking					
9	The school is practicing student network					

	effectively					
10	The school runs students network with time schedule					
11	Teaches give clear activities, exercise and feedback so anyone knows during student network					
12	Teacher move around the student while networking to help students					
13	The school is practicing student network effectively					
14	The school runs students network with time schedule					
15	Teaches give clear activities, exercise and feedback so anyone knows during student network					
16	Teacher move around the student while networking to help students					

APPENDIX -III

PART -3: open ended questions from teachers

Questions;

1. Suggest on the current status of student network practicing----------
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2. List the major factors that hinder the practicing of student network----------
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3. What do suggest to minimize the problem that hinder the practicing of student network---------
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APPENDIX-IV

PART -4 INTERVIEWS

Question l; what do you think about the current status of the implementation of Student network in your school?

Question 2; what can you suggest about the attitude of others teacher towards students' network Implementation in your school?

Question 3: what are the factors that affect the student network in your school?

Question4: what should be done to improve the current implementation of students networking?

Question 5; what should be done to improve the problem hindering the implementation of student network in the school?