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FACULTE DES SCIENCES DE L'EDUCATION
DEPARTEMENT DE CURRICULA ET EVALUATION
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CONSTRUCTIVE COOPERATIVE LEARNING AND CLASSROOM PRODUCTIVITY: THE CASE OF GOVERNMENT BILINGUAL TEACHER TRAINING COLLEGE, YAOUNDE.

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF REQUIREMENT
FOR THE AWARD OF A MASTERS II DEGREE IN
CURRICULUM AND EVALUATION

Par : **Yvette NYAKE MAKOGE**
B.Ed (Hons), CURRICULUM STUDIES AND TEACHING / ENGLISH

Sous la direction de
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INDIVIDUAL LESSON NOTE ON GENERAL PEDAGOGY

SUBJECT: General Pedagogy

CLASS: A'LEVELS

TOPIC: Evaluation

LESSON: definition of concepts pertaining to evaluation, importance of evaluation and types of evaluation

DURATION: 2hrs

ENROLMENT:

DATE: 4th march 2017

PROFESSIONAL COMPETENCE: solve problem situations by applying principles, methods, techniques and approaches

INTEGRATING OBJECTIVES: from a given problem situation, learners should by the end of the lesson be able to:

-defined the concepts pertaining to evaluation

-give some importance of evaluation

-explain the different types of evaluation as well as use them appropriately

NEW VOCABULARY: table of specification, taxonomy, evaluation, diagnostic evaluation

KEY IDEA: to enable student teachers identify, apply correctly the different types of evaluation where need be

PEDAGOGY RESOURCES: official syllabus for TTC

STAGES	INTERMEDIARY PEDAGOGIC SITUATION	RESOURCES	TEACHER'S ACTIVITY	STUDENTS' ACTIVITIES	MATERIALS	EVALUATION
Introduction -warm up	Singing	A song	Asks learners to stand up and sing a song	Stand up and sing a song		
Mobilization of previous knowledge	-Attempt a definition for evaluation	-What do you understand by the term evaluation? -what does it mean to evaluate	Asks them to brain storm the definition of evaluation -corrects where necessary	-Listen to the questions -brainstorms answers	notes	Diagnostic
Presentation of lesson's objectives	List out the objectives	-Reads objectives from the official syllabus	-List out the objectives of the lesson	-Listen to the objectives		
Presentation of didactic situation	Discovery of the problem situation	**Case1: Evaluation** is the process of making judgment about the effectiveness of pupils learning in relation to stated objectives. Theses judgments are based on information's gotten from the use of test, questionnaires, checklist, interviews etc. In order to come out with test for evaluation, a table of specification is needed**. A table of specification (TOS)** is a device used in setting questions according to domains of the content area. The TOS is equally an instrument that shows the number of items (question) that will be asked under a topic of the content area. Questions that make up the test, are referred to as **item**s .For example who is the president of Cameroon? It is equally important to consider the level of **difficulty** when formulating the items. Item Difficulty is the strength or weakness of an item when examined in relation to the taxonomies	-Present the problem situation -Asks the student teachers to read -Give instructions and listen to their point of views	-Discover the problem situation -take to instructions -give their different point of views	A text	Formative

		(Cognitive, Affective, and Psychomotor). For example the cognitive domains of the taxonomy include; -Knowledge = H1 -Comprehension =H2 -Application =H3 -Analysis =H4 -Synthesis =H5 -Evaluation =H6 That is to say **Taxonomy** refers to the classification of abilities/ level which must be considered when setting items for evaluation **.Domains** on the other hand is the main theme or branch of a particular subject area e.g. in math's we have domains like numbers and numeration, geometry, measurement etc **Case 2:** When I gained admission in to GBTTC Yaounde, I was admitted in to the A'Levels class. On my first day in school I was evaluated by the Pedagogy teacher before she started teaching what was prescribed in the syllabus. There after I was still evaluated after six weeks of classes. We were equally told, we will still be evaluated on all that we have done throughout our training				
Guided practice	Working under teacher's supervision	-Grouping of student teachers and assigning them to various tasks Question -what is the main idea that runs through text one and text two? -what are the different concepts that we	-Group student teachers and assigned them to different task -give instructions -Asks the different groups to present their	-group themselves according to teacher's instruction -Do the tasks	-Teacher's notes and hand out	Formative

		find in the text that is related to evaluation? -bring out the definition of those concepts from the text -what are the different forms of evaluation found in test 2? -when are the different forms of evaluation used?	findings -Guide them in doing corrections where need be	as instructed -Take to correction		
summarizing	Bringing out the definitions of the different concepts pertaining to evaluation -Importance of evaluation -Different types of evaluation	Discussion on the different definitions (domains, table of specification, items, taxonomy etc) -Discussion on the different types of evaluation and their importance	-Asks questions and expatiates more to enhance understanding	-Student teachers answer questions and listens to teacher's explanations -They asks questions where need be	notes	Formative
Autonomous practice	Answering questions without the help of the teacher	Newly posted to a government school in a small village, you met your colleagues arguing on what name should be given to the evaluation that was done on the first day of school and that which was done after six weeks of classes as well as that which the class six pupils will write at the end of the school year. In order to help them, you are asked to: -Explain the different types of evaluation -Give the importance of each form of evaluation	-Propose exercises for the practice -Call upon the different groups to respond -Do corrections where necessary	-Read the problem and answer the questions posed	notes	Formative

Closure/end of lesson	Make a synthesis of the lesson -announcement of next lesson	-Notes -Marking of assignment -Evaluation criteria -Table of specification	-Do a synthesis -Announce lesson for the next class	Listen to teacher's summary -Copy assignments in their book	notes	Formative
Consolidation/ integration activities	Consolidate and mobilize the acquired knowledge to solve problem situation	Mr Onana was criticized for not being a skilled teacher by some inspectors because the items he set during the evaluation did not respect the different level of the cognitive taxonomy. He was equally criticized for not been able to carry out as diagnostic evaluation as well as a formative evaluation which made learner's performances to be poor during the First School Leaving Certificate Questions -What do you understand by: item, taxonomy, evaluation, skill -What is the difference between : -Diagnostic and Formative evaluation -Formative and summative evaluation	Give assignment	Copy assignment in their exercise books	notes	Formative

ACHIEVEMENT TEST ON GENERAL PEDAGOGY Duration: 2hrs

BAC A and B

Answer all the questions

Item 1

You are a student teacher, on the eve of a sequence evaluation; your friend was still having confusion amongst the following concepts;

Normal class and multi-grade classroom, Half day class (Shift) and double stream class

1-Help your friend by clearly defining these concepts (2mk)

Item 2

When you graduated from the Teacher's training college, you were posted to the west of Cameroon as the head teacher of a school with a complete cycle consisting of 3 classrooms and 3 teachers; respectively having 2years, 6 years, and 7 years teaching experiences.

1-Plan the pedagogic organization of this school taking care to precise how the teachers are going to be repartition amongst the classes (3mk)

2-Precise the type of classroom that is found in this organization (1mk)

Item 3

Being one of the resource persons in a seminar on general pedagogy, you were given the opportunity to carry out a presentation on Evaluation which is one of the themes in the official syllabus. For better understanding by your audience on this theme,

1) Defined the following concepts with one example each

a- Evaluation (2mk)

b- Taxonomy (2mk)

c- Item (2mk)

Item 4: Omaru your friend argued that evaluation is important only to the learners, but you had a contrarily point of view because, to you evaluation is important both to the learners and the teachers. To support your argument,

1) Give two (2) reasons each why evaluation is important to both learners and teacher (4mk)

2) List the different types of evaluation (3mk)

3) What is the difference between a formative and a summative evaluation? (1mk)

STRUCTURED OBSERVATION GUIDE FOR COOPERATIVE LEARNING PRODUCTIVITY

Date: ……..School……...Subject…….

Class: …….. Period: …….. Duration……Teacher…….. Grade: ……

Objective of observation: To verify if constructive cooperative learning influences classroom productivity

VARIABLES	**INDICATORS**	**Behaviour occurrences**	**Percentage (%)**
Group interaction techniques	-interaction between the learners		
	-interaction between teachers and learners		
	-participation (Active learning)		
	-Appropriate use of social skills		
Group management techniques	-Individual accountability		
	-size of the group (small, average and large)		
	-Group processing		
Group expectation	Group objective (goal)		
Total			100%

Instruction for Recording: Make a tally (i.e. code) in the appropriate cell to show the occurrence of any specific activity.

CERTIFICATION

We here by certify that this work was carried out by Yvette NYAKE MAKOGE in the department of Curriculum and Evaluation of the Faculty of Education, University of Yaounde 1.

Head of Department

Prof. Maureen TANYI

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President of Jury

_____

Supervisor

Dr. KIBINKIRI Eric LEN

_____

Examiner of Jury

Date_____

_____

DEDICATION

To

My parents

Mr. and Mrs. MAKOGE Paul NGANE

ACKNOWLEDGEMENT

The realization of this piece of work could have never been completed without the support and contributions of a good number of persons:

My sincere gratitude first goes to my supervisor, Dr. KIBINKIRI Eric LEN who was never tired of correcting this work and making useful suggestions in order to bring out the best of it.

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ABSTRACT

This research is entitled “constructive cooperative learning and classroom productivity.”The study was carried out to find out, the influence of constructive cooperative learning on classroom productivity of the Advance Level (GCE “A” Level) classes in Government Bilingual Teacher Training College, Yaounde. Three hypotheses were formulated to guide the study:

- Group interaction techniques influences classroom productivity
- Group management techniques influences classroom productivity
- Group expectations influences classroom productivity

Review of literature was based on what others have written in relation to the topic under investigation. Three theories were used for better understanding of the theme under study

The population of the study consisted of 75 student teachers of Government teachers training College Yaoundé; the research design was that of triangulation because it combined both the quantitative and qualitative research design. Instrument for data collection was experimental test and observation guide. An experiment of two non-equivalent groups was designed; one of the groups was used as the experimental group and having 40 student teachers and other as control group consisting of 35 student teachers, all at the “A” Level classes. The lessons were taught to the two groups using the active teaching methods for the experimental group and Dogmatic teaching methods for the experimental group. Thus the experimental group worked in groups carefully constructed while that of the control group worked individually. Both groups were subjected to pre-test and post-test. Data obtained from the field was analysed using mean, standard deviation, and t test. Analysis of the pre-test showed that there were no statistical-significance differences, which prove that the two groups were equivalent However, findings from the analysed results of the post-test and observation show that, there is a significant relationship between constructive cooperative learning and classroom productivity. Therefore, recommendations were made to students, teachers, parents, and school administrative, and policy makers on the improvement on the use of cooperative learning teaching method so as to improve on classroom productivity.

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RESUME

Cette étude intitulée «**l'apprentissage coopératif constructif et la productivité des élèves**». L'étude a été réalisée pour découvrir l'influence d'un apprentissage coopératif constructif sur la productivité des élèves en classe de niveau Baccalauréat (*GCE* «*Advanced Level*») de l'Ecole Normale des Instituteurs de l'Enseignement General (ENIEGE) de Yaoundé. Trois hypothèses ont été formulées pour guider l'étude:

- Les techniques d'interaction de groupe influencent la productivité des élèves.
- Les techniques de gestion de groupe influencent la productivité des élèves.
- Les attentes du groupe influencent la productivité des élèves.

La revue de la littérature était fondée sur ce que d'autres chercheurs ont écrit en relation avec le sujet à l'étude. Trois théories ont été développées pour mieux comprendre le thème à l'étude La population de l'étude était composée de 75 élèves maîtres de l'ENIEG Bilingue de Yaounde niveau BACC; Le modèle de recherche était la triangulation parce qu'elle combinait à la fois les méthodes quantitatives et qualitatives de la recherche. L'instrument de collecte des données a été un test expérimental et un guide d'observation. Un expriment de deux groupes non équivalents a été conduite; un groupe de 40 élèves maîtres constitue comme groupe expérimental et un groupe de 35 autres élèves maitres était comme le groupe control. Les participants des deux groupes étaient tous de niveau baccalauréat. Les leçons dispensent aux deux groupes en utilisant la méthode active pour le group expérimental et méthode dogmatique pour le group control. Les élèves du groupe expérimental ont travaillé en groupe et les élèves du groupe control ont travaillé individuellement. Les deux groupes ont été soumis à un pré-test et à un post-test. Les données obtenues du terrain ont été analysées en utilisant la moyenne, l'écart type et le test T. L'analyse du pré-test a étalé qu'il n"y avait pas de différences significatives statistiques entre les deux variables, ce qui prouve que les deux groupes étaient équivalents. Cependant, les résultats de l'analyse du post-test et de l'observation montrent qu'il existe une relation significative entre l'apprentissage coopératif constructif et la productivité de la classe. Par conséquent, des recommandations ont été faites à l'endroit des étudiants, des enseignants, des parents, des directeurs scolaires et des décideurs sur une amélioration de l'utilisation de ces techniques afin d'améliorer la productivité d'élèves.

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LIST OF ABREVIATIONS

Bac: Baccalaureate.

df: degree of freedom.

F: Frequency.

O_1 O_2: Control group: pretest – posttest.

O_1X O2: Experimental group: pretest-treatment-posttest.

SPSS: The Statistical Package.

Std: Standard deviation.

Sig: Level of significance.

N: Total population.

GBTTC: Government Bilingual teachers training college.

PTTC: Presbyterian teacher training college

RED: Reseau Ecole et Development

t-test: student test

GENERAL INTRODUCTION

Communal life style has always been the African man ways of living. Right from time in memorial, our great grand and grant parents who were farmers always practiced what we commonly referred to in our local parlance as “Njangi”; where in a group of individuals will accompany an individual to his/her farm and work there for the whole day. The individual who is benefitting from that “Njangi”, that is the one who has invited people to come and work on his farm will also prepare food and drinks for those who have come to help him. With such a method of working, it was easier to cultivated large portion of land in less than no time and have an increase in yields. It is for this reason that the researcher sets out to verify if this communal life; that is, if learners working in group will enhance improvement in their output. When the learners work together; they tend to imitate or try to copy what other group members are doing, they interact amongst themselves, they manage or control themselves and many of such activities takes place. From this, a statement of problem was formulated and the research had as objectives to verify if constructive cooperative learning influences classroom productive. The general research question was formulated as thus; what is the link between constructive cooperative learning and classroom productivity .The study was delimited to constructive cooperative learning in relation to group interaction techniques, group management techniques and group expectations. The area of the study was the Government Bilingual Teacher’s Training College Nlongkak, Yaounde. For better understanding of the work, a review of related literature was carried out so as to examine what others have written concerning the topic under study. Also, three theories were also used to expatiate and enhance understanding of the topic under study. The theories used were; Social Independence Theory by Lewins, Social Constructivism by Lev vygotsky and social learning theory by Albert Bandura. The population of this study comprised of 75 Advanced level student teachers of Government Teacher Training College Nlongkak, Yaounde. The Quantitative and qualitative research design were used and this type of research design according Denzin (1978), which combines a number of methodologies in a study of the same phenomenon, is called triangulation. And to Campbell and Fiske (1959) in Amin (2005) triangulation has to do with collecting and analysing data using quantitative and qualitative methods. The stratified sampling, the simple random sampling and the clustered sampling techniques were used in the study. Data collection for the study was obtained through Achievement test and structured observation, which provided additional and useful unexpected information. Data was collected in relation to the stated hypothesis. The researcher was equally helped out by some

trained colleagues in the observation phase since the teaching and observation phase occurred simultaneously. Data collected from the field were presented with the help of tables and graphs. The t-test was used in analysing the data. The hypotheses were actually verified and all three alternative hypotheses were retained and the null hypotheses were rejected, implying that constructive cooperative learning significantly influences classroom productivity. From this, recommendations were made to teachers, learners, school administrators as well as policy markers for efficient use of this teaching method. Suggestion for further research was also made.

This work enhances the understanding of the place of a teaching method precisely constructive cooperative learning in improving learner's performances thereby improving classroom productivity. The work is made up of five chapters;

- Chapter one examined the introduction and background to the study
- Chapter two was based on reviewed of related literature and theories relative to the study
- Chapter three examined the research methodology
- Chapter four examined the presentation of results and data analysis
- Chapter five looked at interpretation of results, recommendation and conclusion.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

This chapter is going to examine the background to the study, statement of the problem, objectives, and research questions, hypotheses, scope and delimitation of the study, as well as the significance of the study.

1.1 BACKGROUND TO THE STUDY

1.1.1 Historical Background

According to Tambo (2012) teaching method refers to standard procedure used in presenting subject matter as well as the organization of student/teacher interaction during lesson. Also to him, teaching method could be generic or specific. Teaching method can be general or generic with respect to the fact that it can be used in the teaching of more than one subject. On the other hand, specific because it can be apply mainly to the teaching of a specific subject. Amongst the generic methods we have recitation, pure lecture, discussion, laboratory, dramatization and role play without leaving out cooperative learning which is the point of interest.

Prior to World War 2, Allport, et al. (1932) established cooperative learning after discovering that when learners work in group, their outcome is more efficient and effective in terms of quality and quantity as well as the overall productivity when compare to working alone. It was not until 1937 when May and Doob found out that those who work together to achieve share goals, were more successful in the outcome they attained than those who work individually or strive independently (May and Doob, 1937). Moreover, Philosophers and psychologists in the 1930s and 40’s such as John Dewey, Kurt Lewin, and Morton Deutsch also influenced the practice of cooperative learning used today. Dewey believed that it was very necessary that learners acquire knowledge and social skills to be used out of the classroom setting. Thus the learners are active recipients of knowledge drawn from the fact that, they are involved in discussion of information as well as answering question, and not just being passive recipients of knowledge or information.

Lewin's contributions to cooperative learning were based on the ideas of establishing relationships between group members in order to successfully carry out and achieve the learning goal (Lewin, 1945). Deutsch's contribution to cooperative learning was positive social interdependence, the idea that the student is responsible for contributing to group knowledge (Deutsch, 1962). Since then, David and Roger Johnson (1975) have been actively contributing to the cooperative learning theory. They identified that cooperative learning promoted mutual liking, better communication, high acceptance and support, as well as demonstrated an increased in a variety of thinking strategies among individuals in the group. Students who showed to be more competitive lacked in their interaction and trust with others, as well as in their emotional involvement with other students. Johnson and Johnson (1994) equally published the 5 elements (positive interdependence, individual accountability, face-to-face interaction, social skills, and processing) essential for effective group learning, achievement, and higher-order social, personal and cognitive skills for example; problem solving, reasoning, decision-making, planning, organizing, and reflecting).

According to Montagu (1965), in the mid 1960, cooperative learning was not widely known; it was greatly ignored by educators for what dominated our elementary, secondary as well as the universities was the competitive and individualistic learning. Cultural resistance to cooperative learning was based on social Darwinism, with its premise that students must be taught to survive in a "dog-eat-dog" world, and the myth of "rugged individualism" Underlying the use of individualistic learning. Thus competition dominated educational thoughts and this competition was challenged by B.F Skinner's work on individualist learning. B.F Skinner worked on programmed learning and behavior modification. Educational practices and thoughts however have changed. Cooperative learning is now accepted and it's now often the preferred instructional procedure at all levels of education. Cooperative learning is presently used in schools and universities, in every part of the world, in every subject area, and with every age student.

History equally holds that, the strategy of cooperative learning according to Coleman (1959) was develop as a solution to reduce competition, which was seen as a negative component of the educational system among schools in America. Coleman (1959) developed what he termed "climate of values" for the "adolescent society" after studying Midwest nine high school students for two years. From his findings he discovers that competition

effectively impedes education process, thus schools should introduced a more collaborative method of teaching; also from the findings of Coleman, Slavin (1994) on the types of cooperative learning which he described as Student Team Learning. To him, cooperative learning is an instructional program in which students work in small groups, in order to enable each other master academic content. Slavin (1994) equally suggests that cooperative learning" has the potential to capitalize on "the developmental characteristics of adolescents in order to harness their peer orientation, enthusiasm, activity, and craving for independence within a safe structure."According to Slavin, (1994), even though there are many methods of implementing cooperative learning techniques in different subject areas as well as in different grade levels, the fundamental aspect is that, learners work together and they are responsible to each other's learning. From his work, he identifies three fundamental concept of cooperative learning:

i. *"Students are rewarded as a team but are graded individually.*
ii. *The team's success is not conditionally based on individual performance of one student. All students must help each other to achieve learning goals.*
iii. *All students are expected to improve based on their own previous performance, thus ensuring all students are challenged to do their best."*

With regards to the advent of teacher training colleges in Cameroon, with respect to the Denominational and non Governmental Support Teacher training college for the English Speaking Cameroon, a Teacher training college for girls was opened in Kumba by the St Franciscan Missionaries in 1949, awarding a Grade III and later Grade II certificates. More, another training college was opened in Mutengene for both men and women. Today what remains of these efforts is the training college in Tatum in the North West province. The Presbyterian Church had three teacher training colleges opened since 1966, only Presbyterian Teacher Training College (PTTC) Mbengwi opened in 1981 for the training of Grade II teachers now exists. The Baptist Mission with the German Development Service (DED) opened a teacher training college for Grade I and II Teacher Certificates with boarding facilities in Ndop in 1985. Other than these, DED through the financial support of the Protestant Association for Cooperation and Development (EZE) initiated in-service training programmes for academically qualified, but pedagogically untrained teachers in the Presbyterian and Baptist secondary schools in the North West and South West provinces as from 1994/1995 academic year. The programme was to improve skills in the teaching of

Mathematics, Pure Sciences and Food and Nutrition. This initiative provides school-based in-service training opportunities for their teachers.

With regards to the French Speaking Cameroon, they had only four private teacher training colleges in the whole territory by 1956, the first of which was opened at Nkongsamba. Between 1957 /1958 the Lutheran Evangelical Church opened a college which had as objective to train teachers. Other strategies for training were adopted by the mission, which lead to the creation of a center in Ngaoundere in 1975 for the retraining of teachers. Other prospective teachers of the Lutheran schools were trained as private teachers in the then Government Teacher Training Colleges for all levels of the school systems as far backs 1972. Some of the teachers were trained in Senegal and France. The importance of this was to improve on the quality of teachers at the primary and secondary levels. In 1988 the leaders of Protestant education in Francophone Africa created a group to reflect on pedagogic reforms for the purpose of ensuring more active participation of pupils in the learning process and relevant programmes that would facilitate the integration of pupils in their environment. The reflection led to the creation in 1989, of a school development net work (Reseaue Ecole et Development) known by the acronym, RED. The pedagogic reform to improve teacher's skills focuses on the development of teaching methods that encourage independence and initiatives. In addition to institutional offerings, the Catholic mission organizes more school-base teacher training at diocesan level with the support of pedagogic animators. Teachers must participate in a number of sessions to qualify as teachers.

Nevertheless, according to Tchombe (2006) and Tchombe and Fonkoua (Eds.) there are some constrains to teacher developments such as: Inadequate Access to Seminars & Workshops and no Follow up for Capacity Building Training programme for initial and in-service need to reflect the needs of the school system. At present the programmes are inadequate for effective teacher preparation as concern the development of skills in ICT, Human rights, and HIV/AIDS. There is no career growth profile within or between levels. Public Service employs teachers based on prescribed categories for teachers and their qualifications. Teachers from rural areas never want to service in these areas. Teachers in most of our institutions are not trained and those who are trained are not well trained. In-service provisions whenever such is provided do not pay particular attention to teachers' immediate needs. Organizers of in-service training ought to have an operational rationale focused primarily on identifying practicing teachers' needs. Teacher education should provide

student teachers with skills for research so that they can be critical of their own teaching and be self-evaluative. Because the programmes are overcrowded with student-teachers being expected to attend lectures, be on the field for practicum or teaching practice, and at the same time do a long essay, dissertation and produce field report. The essential courses for professional training are treated in a very shallow manner. There is much emphasis on teaching disciplines than on the education courses. Out of the 32 hours to 36 hours a week of course offerings in all the levels of teacher education, only an average of 6 hours are devoted to education courses. Students feel they are not adequately prepared for the profession.

1.1.2 Conceptual Background

Johnson and Johnson (2000) say without the cooperation of its members, society cannot survive, and the society of man has survived because the cooperativeness of its members made survival possible. It was not an advantageous individual here and there who did so, but the group. In human societies, the individuals who are most likely to survive are those who are best enabled to do so by their group. Johnson and Johnson (1989) say cooperation means people coming together to work to accomplish a shared goal. That is individuals work for outcomes that are profitable not only to them but equally to the whole group. That is to say cooperative learning is the instructional use of small groups so that the learners work together to maximize their own as well as each other's learning.

According to Slavin (1994), cooperative learning is an "instructional programs in which students work in small groups to help one another master academic content". He equally suggests that cooperative learning has the potential to capitalize on "the developmental characteristics of adolescents in order to harness their peer orientation, enthusiasm, activity, and craving for independence within a safe structure. Based on Johnson and Johnson (2000), the society cannot survive when there is no cooperation. For this reason members have to come together to work to accomplished shared goals. To Slavin (1994), when members work together to accomplished shared goals, there is the possibilities of individual learners to develop other skills that will enable them perform better as well as fit in their respective societies. Implying that as the learners work in group they will learn how to interact, they will learn to management their individual groups as they work towards attaining group goals.

In relation to group interaction in the classroom, we noticed that generally, classroom interaction facilitates language development and communication competence in learners. Classroom interaction does not only contribute to language development but equally co-construction of learner's self and cognitive development. According to vygotsky (1985), in his social cultural theory; learning is to awaken a variety of internal developmental processes that are able to operate only when learners have the opportunity to interact with other people in his environment, as well as operate with peers. To him, classroom needs to reflect possible outside sociocultural and institutional realities. Vygotsky (1985), equally says when we talk of classroom interaction; we are looking at components such as collaboration, dialogue, negotiation and co-construction.

This implies that cooperative learning has an influence on the learner's performance taking into consideration that working in their small groups they are able to interact, thus awakening a variety of internal developmental processes. According to Celce (1987), interaction in the classroom is an essential part of teaching learning process. Interaction or human interaction has been defined as a process whereby two or more people engaged in reciprocal actions. This action may be verbal or nonverbal. Diknas (2004) looks at how teachers can maintain classroom climate which is very crucial for the teaching and learning process. According to him, classroom climate is built up by the pattern of interaction between teacher and learners' verbal exchange, asking questions, responding and reacting. The most important factors in a classroom situation are the interactions and exchanges initiated by teacher and the learners. Chaudron (1988), states that interaction is significant because, it is through interaction, that learner can decompose the teaching learning structures and derive meaning from classroom events. Moreover, Allwright and Bailey (1991) state that through classroom interaction, the plan produces outcomes (input, practice opportunities, and receptivity).Thus interaction has a great role to play in the teaching and learning process, thus affecting learner's productivity.

Moreover Classroom interaction also consists of some components such as: Collaborative dialogue according to vygotsky (1985), it is a component of interaction between learners and learners. Here Vygotsky was interested in the individual potential level of development than his/her current level of development. That is to say learners can be at the same time of actual development judged on their test scores; but may exhibit different levels

of potential development as determined by their different abilities to solve the same problem with different degree of assistance from adults. Vygotsky (1978), in his Social Cultural theory sees learning as an aspect that awakens a variety of internal developmental processes that are able to operate only when learners interact with individuals in his/her environment, as well as cooperate with his peers.

The next component of interaction is negotiation. According to Ellis (1990) he claims in Interaction Hypothesis that when learners who are faced with communicative problem and are given the opportunity to negotiate, they are able to come out with the solution. That is to say negotiated interactions are necessary for input to become comprehensible. The notion of negotiation is generally defined as "discussion to reach agreement". According to Allright (1984), Interactive negotiation should be person-to-person communication since the conditions would be satisfactory. Negotiation has a significant role to play in classroom interaction because it gives to the learners the opportunity to negotiate their problem in to comprehension, thus affecting learner's productivity as more success will be gained.

Co-construction is another component of interaction. Jacoby and Ochs (1995:171), defined co-construction as *"the joint creation of a form, interpretation, stance, action, activity, identity, institution, Skill, ideology, emotion or other culturally-related reality".* To them when talking of interaction, all the group members have as responsibility to see in to it that they construct a successful and appropriate interaction for a given social context. As peers negotiate with other peers as well as with tutors; learners become more consistent in the use of the target structure correctly in all contexts, which in turn affect learner's productivity.

Notwithstanding, classroom interaction has some significance and implications. According to Allright (1984), classroom interaction is a productive technique in which classroom learning is managed through the process of negotiation that can be seen in interaction. As far as the writer is concerned, interaction enhances learner's development as they are able to acquire knowledge and ability through interaction. That is to say interaction amongst the learner and teacher gives room for learning opportunity which motivates the learner's interest and potentials to communicate with others and goes a long way to facilitates not only language development but also learners' development. Classroom interaction is equally productive for language development. There are many ways of attaining classroom interaction. They include group work, closed-ended teacher questioning, individual work,

choral responses, collaboration, teacher initiates and student answers, full-class interaction, self-access and so on. Among these patterns, Pair or group work is considered the most interactive way. It does not only pay attention to the sociocultural and Personal experience that guide students' behavior in the classroom, but also have three value systems of choice, freedom and equality.

According to Sullivan (2000), everything that is embedded in the notion of pair work or group work has the idea of choice because students have a choice of partners or groups; the idea of freedom because learners in pairs or groups have a right to talk freely and expressed themselves freely and are also free from the teacher's control; and the question of equality comes in because all are given the opportunity to talk.

When learners do interact in their individual groups, they become active. 'Active learning' is used to describe a classroom approach which acknowledges that learners are active in the learning process either through the building of knowledge and responding to learning opportunities provided by the teacher. This approach can be contrasted with a model of instruction in which knowledge is imparted or transmitted from the teacher to students. To Cambridge, active learning means that learners take increasing responsibility for their learning, and that teachers are enablers and activators of learning, rather than lecturers or deliverers of ideas.

This concept as seen by vygotsky in his theory of constructivism refers to the fact that, learners do construct or build their own knowledge or understanding. Implying that, learners do replace or adapt their existing knowledge and understanding with deeper and more skilled levels of understanding. Skilled teaching is active method which provides interaction opportunities, suitable learning environment, tasks and instructions that can enhances deep learning.

Equally, vygotsky (1896–1934), in his Social constructivism learning theory sees active learning as the learning that occurs through social interaction with others such as teachers as well as other learners or peers. In his zone of proximal development, focused is on between what the learner can achieve independently and what the learner can achieve with the teacher's expert guidance and providing support to learner's challenges based on their current ability, and through providing rich feedback using assessment for learning. This idea equally developed by the philosopher Jean-Jacques Rousseau (1712–1778), has influenced numerous educators in the early 20th century such as John Dewey (1859–1952) and Maria

Montessori (1870–1952), which led to inquiry-based and Discovery learning models. The major idea reiterated here is that, learners can learn best when they can see the importance or usefulness of what they learn and can also connect what they have learnt to the real world.

Other approaches and terminology that are associated with active learning include: the Student-centered or learner-centered learning; where students play an active role in their learning, with the teacher as an activator of learning, rather than an instructor. Also, there is the Enquiry-based, problem-based or discovery learning; where learners learn by addressing and asking scientific questions, analyzing evidence, connecting such evidence to pre-existing theoretical knowledge, drawing conclusions, and reflecting upon their findings. We equally have the experiential learning; it broadly describes someone learning from direct experience.

Group interaction equally develops appropriate social skills in the learners**.** McClelland and Morrison (2003), say teachers of young children have recognized the importance of children's social development. The development of social skills lays a critical foundation for later academic achievement as well as work-related skills. According to Ladd (2005) in order to teach social skills, the following techniques might come in direct instruction; learning from peers, prevention of problem behaviors, and children's books. Many social behaviors are better learned among peers. Ladd (2005) says the teacher is in the unique position to promote social learning in their classrooms. Social skills are important according to Ladd & Burgess (2001); Ladd, Kochenderfer, & Coleman (1996), Social skills are behaviors that promote positive interaction with others and the environment. Some of these skills include:

- showing empathy,
- Participation in group activities,
- Generosity,
- Helpfulness,
- Communicating with others,
- Negotiating,
- Problem solving.

Learners learn these skills from the adults and children in their environment who model and explain how to behave in particular circumstances. The social skills that children learn when they are young form the basis for subsequent relationships that they develop in later childhood

and adulthood. McEvoy (1990) says Social interaction brings about smooth transitions, and social communication. Learning areas can be large enough to give children the space they need to play together, but small enough to provide an intimate setting for social interaction.

GROUP MANAGEMENT TECHNIQUES

For better management of the individual groups, members in the groups have to be accountable to the different tasks given to them. Individual's accountability according to Johnson, (1999), is one of the primary purposes of collaborative learning group; is to make members to be strong individuals. Exploring cooperative learning as a pedagogical approach implies that you must also explore the methods for enforcing individual accountability for learning. How do you make sure that each individual learns each course objective when the students work in teams? How do you prevent the "social loafer" who is content to let everyone else do the work while receiving the same grade? How do you prevent the over-bearing member who so dominates group discussions so much so that others stop attempting to contribute?

In order to attain accountability**,** Slavin (1980), says when cooperative learning is employed properly, it can result in improved conventional academic achievement such as; performance on standardized tests. Also a well constructed cooperative learning environment can contribute to developing conceptual skills needed for problems requiring critical thought. It can also improve social and leadership skills gained through group member interaction. According to Johnson (1991), these benefits however, are not automatically achieved, but rather teachers must place considerable thought into how they implement the technique. Several key elements that must be present in order for students to learn in a cooperative environment are:

1**. Positive interdependence**. Students within a group must be forced to rely on one another to be successful on their project or homework. The scope of the work must be such that it is impossible for the team to do well (finish the work and receive a good grade) without considerable contributions from each group members.

2. **Individual Accountability.** Instructors or the teacher and group members must have a method of holding each person accountable for his or her contribution. Moreover, each student must learn all of the course objectives; learning only a subset is not sufficient.

3. **Face-to-face interaction**. Some work can, and should, be separated out and completed in parallel, but members of the group must be forced to interact directly with one another. The nature of the tasks for the work should give the opportunity or room for a division of labor; but they must also require a degree of integration that can only be accomplished collectively.

4. **Appropriate use of collaborative skills**. Group members must learn how to interact with others and develop leadership, decision-making, communication, and conflict-resolution skills that will be required by learners upon graduation.

5. Group processing. The team has to approach the overall work from a group perspective. The members must establish mutual goals, a collective timeline, and group policies to keep the team focused. Additionally, they must periodically assess their collective performance and make adjustments as need be.

How to avoid individual accountability problems

The first step in promoting individual accountability in an environment suitable for constructive cooperative learning is to build the teams in a productive manner. Placing students in effective teams requires considerable forethought, in order to account for each of the elements of a successful cooperative learning endeavor. According to Oakley (2004), teachers should form heterogeneous groups consisting of about 3-5 learners in a group. Teams should be selected by the classroom teacher who knows the different students well, because if the learners are left on their own to group themselves they might likely not keep their individual learning as their primary goal. Stronger students may gravitate to one another leaving the weaker students to flounder, or students may overly weight the significance of friendships and social acquaintances.

Oakley (2004) says the actual size of the group also has a critical impact on individual accountability. The right sized team can maximize collaborative effort while minimizing potential problems. To him, a group of 3-5 is good for a team because if the group is too small, individuals can easily dominate group sessions, or there may be insufficient diversity of insight or skills to enhance learning. On the other hand, if the group is too large, then some group members can easily avoid working, some quieter members may simply be ignored, or there may be insufficient work to keep all members occupied.

Using Peer Assessments

According to Kaufman (2000), When the learners have already been grouped, teacher must continual observe team's progress as well as provide them with direction and guidance. In order for learners to embrace the constructive cooperative learning environment, they must feel that there is a method of ensuring fairness in grading. Nothing will demoralize learners quickly, than for a non-contributing student to receive a high grade based solely on the other group members' efforts. Research shows that students derive a much greater sense of satisfaction and higher test scores from groups that have the ability to provide a peer assessment that is factored into grade calculation. Group member assessment should reflect the degree of contribution each team member makes toward the collective effort.

Giving Individual Exams

To Cooper (1990), Peer evaluations will assist a teacher in determining if individual group members are contributing to the group effort, but they can be misleading. Group members may find it socially difficult to provide an accurate assessment of their peers (even in an anonymous setting), resulting in peer evaluations that provide a false representation of the individual effort. Also, while the peer assessments help to ensure that everyone is contributing toward the group goals, this does not necessarily mean that each student understands each objective for the course. Thus the teacher may need an additional tool which could be the administration of individual exams that covers all of the objectives. Thus avoiding a situation where only a group product or demonstration as well as performance are evaluated. The results of the exam will serve as a clear indicator of who understands the material and who does not.

Using Group Roles

Johnson (1999) says for learners to succeed while taking a comprehensive exam, teachers need to make sure that individuals are learning each objective. Students must assume some responsibility for their own learning, but teachers must steer their group interaction in a positive direction. The teacher should see in to it that there is proper distribution of work rather than isolating tasks to particular individuals. Keeping in mind that many students will naturally gravitate toward a "divide and conquer" approach, teachers insist that in the

different groups members should assume particular roles during portions of the course and that they rotate periodically. This makes group members to be implicated to the breadth of the problem that the group is trying to solve. Johnson (1999) adds that each individual should assume each of the following roles or some suitable variation during the course of the assignment: coordinator (organizes tasks and assigns responsibilities), checker (monitors the team's solution for correctness, completeness and accuracy), recorder (writes the solution), and skeptic (plays devil's advocate to ensure various perspectives are considered in determining the final solution). These administrative responsibilities are in addition to performing work toward the actual solution.

Student Motivation

A final method that teachers can use to provide a cooperative learning environment that promotes individual accountability is to factor in student motivation Slavin, (1995), motivation should be derived from both internal and external factors. The importance of a student being truly interested in a particular topic cannot be overstated. Teachers can provide learners with the latitude of choosing a project they will like to work on, so that they will be motivated and implicated in the tasks. This is because, if learners are forced to work on a project that they don't fine interesting, it will require considerable self-discipline just to get the work done. If the learners are flexibility in selecting a problem they find intriguing, working toward the solution will be less of a chore and there will be an increased potential for insightful discussion, deeper research, and true learning.

To Slavin (1995), Instructors can also provide external motivation by offering incentives for exercising effective teamwork. Individual accountability and group goals must be intertwined so that there is an incentive for individuals to put forth their best effort. For example, one individual may present a group's work and all members of the group receive the same grade.

The size of the group also influences management. Felder & Brent (1994); Felder & Brent (2001), propose forming three- to four-person teams for most assignments, attempting to observe the following two guidelines to the greatest extent possible: Firstly, form teams whose members are diverse in ability levels and who have common blocks of time to meet outside class and secondly, in the first two years of a curriculum, avoid isolating at risk minority students on teams. There is no consensus in the literature on the optimal team size,

but most authors agree that the minimum for most team assignments is three and the maximum is five. (There are obvious exceptions to these rules, such as laboratories with two-person work stations.) With only two people on a team, there may not be a sufficient variety of ideas, skills, and approaches to problem solving for the full benefits of group work to be realized.

According to Gillies (2003), for group work to be successful, group members need to have the skills to communicate effectively through listening, explaining and sharing ideas. But effective group-work involves more than this; members have to learn to trust and respect each other according to (Galton, 1990; Kutnick, 1988), and they need skills on how to plan, organise and evaluate their group work.

Cooperative learning equally can be referred to as small- group learning, according to Johnson and Johnson (1999), it is an instructional strategy where by students are regroup in small group to work together to accomplish a common task. The task could be simple or complex and may require that in some cases each group member is individually accountable for part of the task or group members work together without formal role assignments. Moreover for small group learning to be successful, the following five elements are necessary.

i. Positive interdependence: Students feel responsible for their own and the group's effort.
ii. Face-to-face interaction: Students encourage and support one another; the environment encourages discussion and eye contact.
iii. Individual and group accountability: Each student is responsible for doing their part; the group is accountable for meeting its goal.
iv. Group behaviors: Group members gain direct instruction in the interpersonal, social, and collaborative skills needed to work with others.
v. Group processing: Group members analyze their own and the group's ability to work

Group processing according to Johnson et al (1994, p.33) is reflecting on group session to help student *(1) "What member actions were helpful and unhelpful and (2) make decision about what action to continue or change. Through the reflection on learning process, group member in contributing to the shared effort to achieve their goals. Group processing can be seen at two levels that is the small group and whole class*." Yamark (2007), says the purpose

of group processing is to clarify and improve the effectiveness of member in contributing to the joint effort to achieve group goals.

According to Johnson et al. (1994,p.33),when dealing with small group processing; (1) *the teacher should allocate some time at the end of the class for cooperative group to process how effectively members work together, when the group is processed it enable the maintenance of relationship of cooperative members (2) facilitates cooperative skills of group members (3) examines the group's task and give students' feedback on their participation (4) examines student's knowledge on their own learning parts and (5) celebrates the success of the small group and reinforce group members' positive behavior.''* When dealing with the whole class processing, teachers should observe groups, give feedback to each group and shared results of observation in class through a whole class processing session at the end of the class period together.

Group Expectations

According to Patrick (2008), in his book 'The Five Dysfunctions of a team" a group where there is ambiguity about its priorities and direction fails. Thus in managing a group, clear expectation should be stated in order to avoid members asking question concerning what is expected of them as a group. In order for the group to meet up with its expectations, it is necessary that they state clear objectives (goals) which orientates how the work should be done and where member's attention should be focused

According to Grant (2012*),* goal setting involves the development of an action plan designed to motivate and guide a person or group toward a goal. Studies have shown that more specific and ambitious goals lead to more performance improvement than easy or general goals. Studies by Locke, Edwin et al (2006), says as long as the person accepts the goal; has the ability to attain it, and does not have conflicting goals, there is a positive linear relationship between goal difficulty and task performance. Locke et al (2002) say if goals (objectives) are clearly stated, they affect out comes in other words classroom productivity in four ways:

-Choice: Goals narrow attention and direct efforts to goal-relevant activities, and away from goal-irrelevant actions.

-Effort: Goals can lead to more effort; for example, if one typically produces 4 widgets an hour and has the goal of producing 6, one may work more intensely towards the goal than one would otherwise.

-Persistence: Someone becomes more likely to work through setbacks if pursuing a goal.

-Cognition: Goals can lead individuals to develop and change their behavior.

This only means that with group having a fix objective (goal), members 'actions will be oriented towards the attainment of group goals which will go a long way to affect classroom productivity. If members' activities are oriented, their attentions will be narrow and relevant activities will be realized and this will equally influence classroom productivity.

Harrison, Price and Bell (1998), for a group to have a good orientation as well as work better, they must share a common goal; that is working towards the stated objectives of the group. Group members must have a high level of commitment towards attaining the objectives of the group by understanding that, working together as a group is better than what they can do on their own. According to Stogdill (1972) when group members have high commitment towards attaining group goals (objectives) they tend to perform better, thus increasing classroom productivity. Without a purpose or objective (goal) groups will eventually splinter in to separate individuals working towards their own personal agenda or better still, members become less committed to group's task and not for the common good of the group which will intend influence class room productivity. Thus member knows what is expected of them and knowing that they will be held accountable by other group members, they will stay committed to the objectives of the group.

Moreover Locke et al (2006) say the relationship between group goals and individual goals influences group performance that is classroom productivity, when goals are compatible there is a positive effect, but when goals are incompatible the effects can be detrimental to the group's performance. In order words all group members have to work towards the common good of the group that is accomplishing the objectives (goals) of the group. Locke et al (2006) also talk of another factor at work in groups, which is known as the sharing factor; is a positive correlation that exists between sharing information within the group and group

performance. In the case of group goals, feedback needs to be related to the group, not individuals, in order for it to improve the group's performance as well as classroom productivity. Locke (2002) says people perform better when they are committed to achieving certain goals. If goals are certain it's because from the onset the group set the objectives and work towards the attainment of the goals or objectives.

History equally holds that, Cooperative learning was developed as a strategy to reduced competition in American Schools. This is because competition was seen as a negative component of the educational system. Coleman (1959), who carried out a study on students in 9 high schools in the Midwest. From his findings, he suggested that instead of encouraging competition in academic settings, instead this approach to teach in schools should be encouraged because according to him competition impedes the process of education.

Stephen (1992) sees cooperative learning as a successful teaching strategy which groups learners with different level of abilities in to small team. The learners in the team use a variety of learning activity to improve their understanding of the subject. That is to say, learners or team mates are not only responsible for learning that which is taught, but equally help other team mates learn ,thus creating an atmosphere of achievement. Formal cooperative learning according to Johnson, Johnson and Holubec (2008), consists of learners working in group or together for a period or let say one class period to several weeks to achieve share learning goals as well as complete jointly specific task and assignments. The teacher performs the following role in for cooperative learning.

1) Making pre instructional decision: Here the teacher performs the following , he formulation the objectives which could be academic and social skills, he decides on the size of the group, chooses a method for assigning learners to particular group which establishes role independence. He equally arranges the classroom or working environment as well as the didactic material learners need to accomplish the task, thus the establishment of environmental interdependence and resource interdependence. The above enables the teacher to easily observe each group which brings about an increase in individual accountability and equally provides data for group processing.

2) Explaining instructional task and cooperative structure; the teacher plays the role of explaining the academic assignment to learners, he equally explains the criteria for success, he

structure positive interdependence, he structure individual accountability, he explain behavior to be used by the learner and emphasizes intergroup cooperation. By so doing it eliminates the aspect of competition amongst the learners and brings about positive goal interdependence to the class as a whole.

3) Monitoring student's learning and intervening to provide assistance; To complete the given task successfully, the teacher plays the following role, the teacher monitors each learning group and intervene when needed to improve task work an d team work, through monitoring individual accountability, because whenever the teacher monitors a group, it make the member to tend to feel accountable to be constructive members, also teacher collects specific data on promotive interaction.

4) Assessing students' learning and helping student process how well their group functioned; This could be done through the teacher bringing closure to the lesson, assessing and evaluating the quality and quantity of learner's achievement, ensure students to discuss the effectiveness of their learning group or how they worked together, have students make a plan for improvement as well as have the learners celebrate the hard work of group members. students achievement assessment brings about individual and group accountability that is how well each student performed, thus indicating whether each group achieve its goals that is focusing on positive goal interdependence. The feedback given during group procession is aimed at improving learner's use of social skills as well as bringing about individual accountability.

Informal cooperative learning: according to Johnson, Johnson and Holubic (2008), It consist of making learners to work together to achieve a joint learning goal in temporary, ad-hoc groups' that last from a few minutes to one class period. This instructional method could be use during lessons such as lecture, demonstration or film in order to focus learner's attention to that which is to be learnt. The teacher has to set a conducive learning mood, set the expectation of what will be covered in a class session, ensure that student cognitively process and rehearse the material being taught, summarized all that was learnt and provide closure to instructional session. To keep learners focused through the use of informal cooperative learning entails having focused discussion before and after the lesson. Two important aspects of using informal cooperative learning groups are to make the task and

instructions explicit and précised and also to produce a specific product (such as written answer). To achieve these two important aspects the teacher uses the following procedure.

1) Introductory focused discussion; Here the teacher assign students to pair and explains to them what it takes to answer the questions in 4-5 minutes time period and the positive goal interdependence of reaching census. Discussion here enables the learners to organize what they already know in advanced concerning the topic to be presented and establishing expectation about what the lecture will cover.

2) Intermittent focused discussions; here lecture is divided by the teacher in to about 10-15 minutes segment for it is believed that are such length of time, motivated adult can concentrate on information being presented. That is to say, after every segment of 10-15 minutes learners are asked to turn to the person next to them and work cooperatively in answering a question. The question should be specific enough so that it can be answered in about 3minutes.

Closure focused discussion; learners are given an ending discussion task lasting for about 4-minutes by the teacher. The task learners are to carry out here is to summarize what they have learnt from lecture and integrate in to existing conceptual frame works. Informal cooperative learning ensures that students are actively involved in understanding what is being presented. It also provides time for teachers to move around the class listening to what students are saying. Listening to student discussions can give instructors direction and insight into how well students understand the concepts and material as well as increase the individual accountability of participating in the discussions.

Cooperative Based Group; they are long-term, heterogeneous cooperative learning groups with stable membership. Learners that constitute the group have the following primary responsibilities to see to it that all members of the group are making academic progress (that is positive goal interdependence): hold each other accountable for striving to learn (individual Accountability) as well as support, encourage and assist each other in completing assignment (that is promotive interaction). In order to ensure that this cooperative based group functions effectively and periodically, teachers should educate group members on needed social skills and have the group's process how effectively they are functioning. This type of group is heterogeneous in membership especially in terms of achievement, motivation and task

orientation. Such groups meet regularly, it could be daily or bi weekly and last for the duration of the class which could be a semester or a year or preferable for several years. Here the teacher plays the following roles; forms heterogeneous groups of about 3-4 persons, schedule their regular meeting time which could equally be at the beginning and end of each class session or beginning and end of the week.

The longer a cooperative group exists, the more caring their relationships will tend to be, the greater the social support they will provide for each other, the more committed they will be to each other's success, and the more influence members will have over each other. Permanent cooperative base groups provide the arena in which caring and committed relationships can be created that provide the social support needed to improve attendance, personalize the educational experience, increase achievement, and improve the quality of school life.

According to Gilles (2003), basic elements of cooperative learning will not only end at the learners sitting side by side each other or on the same desk and doing their own tasks. Neither does it mean learners be put in the same room, asking them to sit together, Johnson and Johnson (1998), and telling them that they are a cooperative group and thus advising them to cooperate. It is only when group members can coordinate activities so much that other group members learning are facilitated Ballantine and Larres (2007). In other to engage students in cooperative learning, Johnson and Johnson (2008), say the following five elements must be present;

- Positive interdependence

- Face to Face interaction

- Individual accountability

- Interpersonal and social skills

- Group processing.

Thomas (1957), says positive interdependence needs to be constructed in cooperative learning groups so as to help students to work and learn together. Positive interdependence

can be seen through the assignment of complementary task, group contingencies according to Skinner (1968), dividing information into separate pieces according to Aronson et al (1979) or division of labor according to Johnson and Johnson (2008).

Research has shown positive effect of a positive interdependence on productivity and achievement. According to Hwong, Caswell, Johnson and Johnson (1993) and Johnson and Johnson (2005) positive interdependence produces higher achievement and productivity. This is due to the fact that group member's performance affects the success of other group members and tend to create "Responsibility of force" that indicates an increase in each member's effort to achieve (Mesch, Johnson and Johnson, 1998).

Also when positive interdependence is clearly perceived according to Kerr and Bruun (1983) group members will come to the awareness that their personal efforts are very much needed for the success of the group. This will make the members to know that it will not be possible for them to get a" a free-ride" as each has a unique contribution to make to the group's effort.

Face to Face Promotive Interaction

Face to face promotive interaction comes into play in cooperative learning as group members encourage and facilitates each other effort to accomplish group goal. Here the learners interact verbally with one another on learning task which is even one of the conditions for a successful cooperative learning .Johnson and Johnson (2008), said the quality of interaction depends on the size of the group and the frequency of student's cooperation on their learning tasks. That is to say groups have to be small when students begin learning together in order to facilitate the development of cooperative learning skills.

Moreover, the quality of group interaction depends on the academic level of all members in the group. The learning abilities of all group members should be identified to help them to give feedback and to support one another in their learning. Also, the quality of the group interaction depends on the learning environment. Slavin (2011), says if a positive learning environment is established, students in cooperative group work learn together effectively.

Individual accountability

Johnson and Johnson (2009), sees students individual responsibility as the students ask for assistance, do their best work, present their ideas, learn as much as possible, take their task seriously, help the group operate well and take care of one another. Slavin (1996), sees individual accountability in terms of the extent to which group's achievement is depended on individual learning of each group member, this will motivate group members to see into it that everyone should have a good mastery of the material which is being studied. According to Kagan (1985), he says it is necessary for other group members in the group to provide assistance to group members who are unable to finish the work given to them.

According to Hooper, et al (1989), examining cooperative learning on students learning, it was noticed that cooperation resulted in higher achievement when individual accountability is structure than when it was not. They equally argued that, lack of individual accountability may reduce feeling of personal responsibility. According to Yamark (2007), for cooperative activities to be effective, members must be assigned to a specific task and all members must take individual accountability for their group member's achievement. Johnson and Johnson (1994), Individual accountability can be maintained through the size of the group, because the smaller the size of the group, the greater the individual accountability may be. Gerard, Wilhelmy et al (1965) and Messick and Brewer (1983), say the smaller the size of the group, the better the communication amongst group members for they will tend to communicate more frequently and this might increase the amount of information that will be used in arriving a decision.

Interpersonal and social skills

Johnson and Johnson (2006) say they cannot be the production of any effective work if socially unskilled learners are arranged in to one group. Haran (1990) says basic skills on cooperative interaction must be taught to group members in order for them to work effectively to finish their tasks .To Slavin (1996) group members should know how to manage group, how to make decisions and how to solve conflict that arise amongst them, that is to say if such skills are not taught, then cooperative learning activities will hardly succeed.

Studies on long-term implementation of cooperative teams Mesch et al (1988) and Johnson and Johnson (1986) found out the combination of positive goal independence, a contingency for high performance by all group members and a social skills contingency, promoted the highest achievement and productivity. Putnam, Rynders, Johnson and Johnson (1989) say the more skilful participants are, the more social skills are taught and rewarded and the more individual feedback participants receive on their use of skills, the higher the achievement and productivity of the cooperative groups tend to be. Social skills do not only promote higher achievement but equally contribute to the building of a more positive relationship among group members.

Cooperative learning visual concept

Figure 1.1 Cooperative learning visual concepts. Source: Slavin (1990)

According to Slavin (1990), cooperative learning is collaborative in nature because it provides opportunities for learners to work in groups or team towards the accomplishment of a set of given objectives. That is to say each group member is accountable for the success of the work. Through cooperative learning, group members tend to acquire nurturance and social interaction skills. As a teaching strategy cooperative learning is based on the following:

- Learners are assigned to small groups or teams (ideally no more than 4 members in a group),
- Teams are comprised of Learners with different ability levels such that group members may complement each other in the attained of the set goals.

The immediate reason is that each group or team member should accept the responsibility to work towards the achievement of goals of instruction while helping team mates who need assistance. Tasks given may vary depending on member's level or grade. The ultimate goal is to promote positive relationship as well as mutual respect amongst members in the group, equally to foster accountability in both the individual and group.

Barry and King (2002) says the findings regarding small group cooperative learning are generally positive, especially in studies comparing this teaching strategy with more traditional approaches such as whole class teaching. These generally positive effects have been found both with cognitive or academic achievement and various affective and other non-cognitive factors. Kagan (1999), equally sees cooperative learning as a learner centered approach to teaching ,that is to say emphasis is been laid on the learners. In the same light, the learners do not only learn subject area expose to them by the teacher but equally develop interpersonal skills, working which consists of working in team with others, development of language and communication skills .Thus cooperative learning has the following advantages:

-Cooperative learning benefits all types of learning and all abilities of learners.

-Through cooperative learning, teachers can easily gain control over his or her classroom by engaging learners in classroom work Cohen (1994).

-Everyone participates in classroom work unlike in the case of individual learning where only those who voluntarily raise their hands to talk or answer questions.

-Cooperative learning develops empathy according to Topping (1988) due to the fact that learners do defend team work and in doing this, they are equally defending the opinions of others.

-Learners equally gain communication skills due to the fact that, as they are working together they are communicating among themselves.

-It increases self confidence in group members, taking in to consideration that student ideas are accepted by peers.

-It also fosters student's responsibilities for learning.

Johnson and Johnson (1998), say that there are many benefit of cooperative learning such as the increase of students participation during the lesson, the development of communication skills, familiarity amongst class mates as they work together not leaving out the fact that it provides a support system in the classroom as well as outside the school. Slavin (1985), equally supports the fact that cooperative learning has a positive effect on social relationship amongst the learners. Moreover all the learners can always benefit from cooperative experience regardless of their ability. This goes further to explain that minorities will tend to benefit from learning as a result of working in group. Slavin equally upholds the fact that this type of learning promotes higher achievement and greater motivation than individual learning for some learners have more self –esteem and better social skills when they learn in group.

Despite the non-exhaustive list of strength, Cooperative learning equally, it has some short comings that make it application difficult in many situations Barry and King (2002). Note should be taken that some of these weaknesses can be overcome with proper planning and preparation. Amongst the short comings, we have the following:

-Cooperative learning may led to noise making if there is lack of proper instruction and guidance. Lack of proper guidance and instruction may equally bring about un socially behavior such as all group members talking at the same time, others trying to dominate, others trying to impose their views or members contribution can even be ignored.

-Cooperative learning might cause the learners to depend on each other if it is frequently used, so much so that learners may be affected negatively in cases where they are required to work individually.

-It takes a lot of time coming out with the strategy for preparation as well as its implementation. It does requires a lot of time for the teacher to cover his work load

-It is usually difficult to come to a consensus amongst group members when dealing with matters of emotion

- A pupil who did his share of work honestly and would deserve a very good grade otherwise may be under graded for work not done by others in the group.

- Bad experience working in a group may leave a bad impression about team work on pupils and this may affect negatively their working life later. They may not be likely to work well in teams.

Group Working according to Forsyth (2006), is when "two or more individuals are connected to one another by social relationship". To him this definition has the advantage of bringing 3 elements together. These three elements are; the number of individuals involved, connection and relationship. Secondly groups constitute fundamental part of human experience. They allow people to develop more complex and large scale activities; are significant site of socialization and education; and provide settings where relationship can form and grow, and where people can find help and support. Rely on diligent group members to complete their work without putting any effort. Thus we do not only have an uneven distribution of work load but equally, unequal learning experiences because some learners are left behind. This is equally true for evaluation as learners would be evaluated as a group not individually, thus every member will have the same marks regardless the fact that not ever body contributed.

1.2 Formulation of the Problem of Study

All over the years the improvement of the instruction process and learners performance continue to generate concerns amongst the major stake holders such as the learners, teachers, lecturers ,school administrators, policy makers and the state. (Brophy, 2000; Seidel and Shavelson 2007; Hatties, 2009; Creemers and Kyriakids 2008) hold that, what the teacher does in the classroom is a good predictor of their students' achievement. Vygotsky's Socio cultural approach to learning reiterates the fact that, teaching should incorporates real life situations that necessitates communication, teachers should make use of situations that learners may encountered in their everyday life and which renders learning interesting. Tornbeg (2009) says since life experiences change all the time, teachers should prepare to vary their teaching methodologies to make learners interested as well as enable

them suit the changing society. Taking in to consideration that, Teacher Training Colleges are institutions that admit men, women, boys and girls who have long left school, Parents who have other preoccupations, adults having other duties and jobs to perform apart from being students; most often these learners are not stable and are slow to understand; taking into consideration that they have long left school and are having divided attention which intend influences their productivity, as this can be observed in their results. Also, with respect to the fact that in professional institutions, to say an individual has succeeded, he/she should be able to score an average of 12. But the researcher observed that most of the students that managed to succeed fall within the range of 10 and 11 as averages which is not the best. This is partly due to the fact that, most learners do not always have a good mastery of their work as can be judged from their presentations and responses given at the end of presentations and also from their test papers. It is in this view that the researcher seeks to determine if constructive cooperative learning can enable the learners to have a good mastery of their learning contents and influence their productivity.

1.3 Objectives

The objectives will be stated both in the general and specific form

1.3.1 General objectives

To find out if constructive cooperative learning influences classroom productivity

1.3.2 Specific objectives

1) To investigate if group interaction techniques influences classroom productivity
2) To verify the link between group management techniques and classroom productivity
3) To find out if group expectations influences school productivity

1.4 Research Question.

It can be divided in to two types, that is the general research question and the specific research question

1.4.1 General Research question

What is the link between constructive cooperative learning and classroom productivity?

1.4.2 Specific Research Questions

1) To what extent does group interaction techniques influences classroom productivity?
2) What is the link between group management techniques and classroom productivity?

3) To what extent does group expectations influences classroom productivity?

1.5 Research Hypotheses

Here we will look at the general and specific hypothesis

1.5.1 General hypothesis

There is a significantly relationship between constructive cooperative learning and classroom productivity

1.5.2 Specific Hypothesis

1) Group interaction techniques influences classroom productivity
2) Group management techniques influences classroom productivity
3) Group expectations influences classroom productivity

1.6 Significance of the Study

A study like this one will contribute to the achievement of classroom productivity. The study will be of great importance to the teachers, school administrators, students, and in the curriculum and evaluation processes.

To Teachers: this study is going to enlightened them on the instructional method to use in other to facilitate the acquisition of knowledge as well as the comprehension of learners in the different disciplines and subject matters. It is equally going to give them an understanding on how to use constructive cooperative learning to enhance learner's out put through the different techniques used by cooperative learning examined in this study.

To the school administrators: concerned with the general management of school, they will encourage their collaborator who are the teachers to use this method of instruction. This could be done by training the teachers on the use of this teaching method through pedagogic seminars as well as inviting resource persons to train the teachers. They can equally encourage the use of cooperative learning through providing the necessary equipments for the implementation of cooperative learning in the institutions.

To Students: With an understanding that constructive cooperative learning will influence their performances, the will take work given to them seriously. They will be conscious and

motivated to work in their different groups were they are assigned, being aware of its important. Thus working in group will not be the moment for idle talk or irrelevant conversations but the moment to be responsible and efficiently carry out task assigned to them.

To Policy makers and the state: This study will help government to understand the importance of using constructive cooperative learning in classroom and its influence on learner's productivity, thereby impacting the quality of education. Thus the state and policy makers who are concerned with the drawing up of school syllabuses will see into it that, instructional methods used in exploiting teaching and learning contents should utilise constructive cooperative learning techniques.

Curriculum and Evaluation Process: Curriculum consists of the learning contents as well as the manner in which instruction is carried out. Looking at the fact that constructive cooperative learning is an instructional method of transmitting the said learning contents, studies like this will enlightened stake holders on how to better use this instructional method so as to bring out fruitful results. With regards to evaluation, a study like this will throw more light on how to evaluate the individual members in a group and also educate them on aspects that should be taken in to consideration when evaluating learners in a group.

1.7 Scope and delimitations of the Study

There are many factors that can influence learner's productivity but this research is limited to constructive cooperative under which aspects like group interaction techniques, group management techniques and group expectations were examine to see how these elements do influence classroom productivity. This research is carried out in Nlongkak a neighborhood in Yaounde one in the Government bilingual Teacher Training College Yaounde. The study was carried out during the 2016/2017. The sample population consisted of 75 student teachers of Government Bilingual Teacher Training College Yaounde. All of them are holders of the GCE Advance level or its equivalence; the Baccalaureate who were tested on the same subject; General pedagogy.

1.8 Definition of Concepts

Cooperative learning: Johnson and Johnson (1999) explain Cooperative learning as an instruction that involves students working in team to accomplish a common goal. According to them, elements involved in cooperative learning consist of:

i. **Positive interdependence**; group members rely on each other for the accomplishment or achievement of goals. Thus every one suffers the consequences if team members fail to do their part;
ii. **Individual accountability**: members are held accountable for doing their own part of the work as well as the mastery of all the materials to be learnt;
iii. **Face to face promotive interaction** : some work may be done individually but some must be done interactively so that group members should provide feedbacks ,challenge reasoning and conclusions and equally teaching and encouraging one another;
iv. **Appropriate use of collaborative skills**: group members are encouraged to help develop in each other leadership, decision –making, communication and conflict management skills;
v. **Group processing**: Team members set group goals, periodically assess what they are doing well as a team, and identify changes they will make to function more effectively in the future.

A group: According to Shaw (1971), a group refers to two or more persons interacting with one another in a manner that each person influences and is influenced by each other person. To him, for a collection of people to be referred to as a group, the members must interact with each other, be socially attracted to each other, share goals or objectives and equally have a shared identity which distinguishes them from other groups. To this, Brown (1992) defines group work as providing a context in which individuals help each other; it is a method of helping groups as well as helping individuals; and it can enable individuals and groups to influence and change personal, group organizational and community problems.

Group interaction techniques: According to Shaw (1971) it refers to a situation where by group member's act, converse or exchange with one another in such a manner that each person influences and is influenced by each other person. In order words it is the process by which three or more members of a group exchange verbal and nonverbal messages in an attempt to influence one another. Meaning that learners might either interact amongst

themselves as they work in their individual groups, they might equally interact with the teacher. In the course of interacting the question of active learning comes in. **Active learning** according to vygotsky Social constructivism learning theory (1896-1934) is the learning that occurs through social interaction with others such as teachers as well as other learners or peers. To the researcher, active learning refers to participation of the learners in the task given, either by interacting with the teacher or group members or peers to accomplish the said task. In order for there to be meaningful interaction learners do need social skills.

Social skills according to Ladd & Burgess (2001); Ladd, Kochenderfer, & Coleman (1996) are behaviors that promote positive interaction with others and the environment. Some of these skills include: showing empathy, participation in group activities, generosity, and helpfulness, communicating with others, negotiating and problem solving. To the researcher, social skills refer to those behaviours manifested by group members to enhance smooth communication and functioning of the group.

Group Management techniques: According to Henri (2008) "to manage is to forecast and to plan, to organise, to command, to co-ordinate and to control." To the researcher Group management has to deal with how the work is been organized or shared amongst group member to complete the task given. For better management individuals have to be accountable.

Individual accountability; according to Johnson (1991) refers to when Instructors or the teacher and group members have a method of holding each person responsible for his or her contribution. Moreover, each student must learn all of the course objectives; learning only a subset is not sufficient. To the researcher individual accountability means individual group members are responsible for the portion of work given as they need to answer to group members if there is a problem. For there to be group management, **Group processing** is required. According to Johnson et al (1994) it refers to what member's actions were helpful and those that were not in the realization of the task, so as to arrive at a decision on what action should be changed or continued.

Group expectations: According to Patrick (2000) in his book 'The Five Dsyfunctions of a team" a group where there is ambiguity about its priorities and direction fails. Thus in managing a group, clear expectation should be stated in order to avoid members asking question concerning what is expected of them as a group. In order for the group to meet up

with its expectations, it is necessary that they state clear objectives (goal) which orientates how the work should be done as well as where member's attention should be focused. To Grant (2012), goal setting refers to the development of an action plan designed to motivate and guide a person or group toward a goal. Studies have shown that more specific and ambitious goals lead to more performance improvement than easy or general goals. This implies that if groups have to meet up with their expectations, they will need to set objectives (goal) that directs the action of group members so as to complete the task given them.

Collaborative learning: It can be seen as a personal philosophy and not only as a technique of instruction according to Panitz (1997). He sees collaborative learning to be concern with people coming together in groups. This instructional technique equally suggests a way of dealing with people which respects and highlights individual group membership and contribution. This instructional technique is based on the consensus built through cooperation by group members.

Productivity: Shavelson et al (1987) Productivity in education consists of three components which are: inputs that comprises of fiscal and other resources, teacher quality, and student background. The second element is processes or transaction and comprises of school quality, curriculum quality and teaching and instruction quality. The last element is outcomes and comprises of students participation, aspiration, attitudes and achievement. Productivity here will be concerned with learners performance or score which is measured through their interaction in their individual groups, management of their individual groups to enhance better performance as well as working towards the same objectives to accomplish tasks given.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is going to examine theories related to Constructive cooperative learning, as well as the conceptual frame work which examines what others have written in relation to the topic under study in order to enhance the understanding of the topic under study.

2.1.0 CONCEPTUAL FRAME WORK

This section will examine the following: What cooperative learning is all about, Group interaction under which we are going to look at interaction amongst the learners and interaction between learners and their teacher, active learning and the development of social skills. Also, the researcher is going to examine Group management taking in to consideration elements like: individual's accountability, the size of the group, discipline and group processing. More, a review will be carried out on Group expectation under which aspects like group objectives will be examined. Notwithstanding the researcher equally examine the recommendations for improving group work, some key elements of cooperative learning, strength and weaknesses of cooperative learning, the differences that exist between cooperative learning and collaborative learning, Difficulties faced in the implementation of cooperative learning, the influence of cooperative learning on learner's outcome and the techniques of cooperative learning.

2.1.1 What is cooperative learning?

According to Gilles (2003), basic elements of cooperative learning will not only entail the learners sitting side by side each other or on the same desk and doing their own tasks. Neither does it mean that learners are put in the same room and are asked to sit together, Johnson and Johnson (1998) and are told they are a cooperative group and advising them to cooperate. To Ballantine and Larres (2007) it is only when group members can coordinate activities so much so that other group members learning are facilitate. In other to engage students in cooperative learning, Johnson and Johnson (2008) say the following five elements must be present;

- positive interdependence
- Face to Face interaction
- Individual accountability
- Interpersonal and social skills
- Group processing.

To Thomas (1957), positive interdependence needs to be constructed in cooperative learning groups so as to help students to work and learn together. According to Skinner (1968), Positive interdependence can be seen through the assignment of complementary task, group contingencies. Positive interdependence entails dividing information into separate pieces according to Aronson et al (1979) or division of labor according to Johnson and Johnson (2008).

Research has shown that there is a positive effect of a positive interdependence on productivity and achievement. According to Hwong, Caswell et al (1993) and Johnson and Johnson (2005), positive interdependence produces higher achievement and productivity. This is due to the fact that group member's performance affects the success of other group members and tend to create "Responsibility of force" that indicates an increase in each member's effort to achieve (Mesch, Johnson and Johnson1998). According to Kerr and Bruun (1983), group members will come to the awareness that their personal efforts are very much needed for the success of the group. This will make the members to know that it will not be possible for them to get" a free-ride" as each has a unique contribution to make to the group's effort.

Face to Face Promotive Interaction; According to Johnson and Johnson (2008), Face to face promotive interaction comes into play in cooperative learning, as group members encourage and facilitates each other effort to accomplish group goal. Here the learners interact verbally with one another on learning task which is even one of the conditions for a successful cooperative learning. Johnson and Johnson (2008), equally holds that, the quality of interaction depends on the size of the group and the frequency of student's cooperation on their learning tasks. That is to say groups have to be small when students begin learning together in order to facilitate the development of cooperative learning skills.

Moreover, the quality of group interaction depends on the academic level of all members in the group. The learning abilities of all group members should be identified, in order to help them to give feedback and to support one another in their learning. Also, the quality of the group interaction depends on the learning environment. Slavin (2011), says when there is a positive learning environment, students in cooperative group work learn together effectively.

Individual accountability; Johnson and Johnson (2009), sees students individual responsibility as the students ask for assistance, that is; do their best work, present their ideas, learn as much as possible, take their task seriously, help the group operate well and take care of one another. Slavin (1996), sees individual accountability in terms of the extent to which group's achievement is depended on individual learning of each group member, this will motivate group members to see into it that everyone should have a good mastery of the material which is being studied. According to Kagan (1985), it is necessary for other group members in the group to provide assistance to group members unable to finish the work given to them.

According to Hooper, Ward, Hamatin et al (1989), examining cooperative learning on students learning, it was noticed that cooperation resulted in higher achievement when individual accountability is structure than when it was not. They equally argued that, lack of individual accountability may reduce feeling of personal responsibility. According to Yamark (2007), for cooperative activities to be effective, members must be assigned to a specific task and all members must take individual accountability for their group member's achievement. Johnson and Johnson (1994), Individual accountability can be maintained through the size of the group, because the smaller the size of the group, the greater the individual accountability may be. Gerard, Wilhelmy et al (1965) and Messick and Brewer (1983), say the smaller the size of the group, the better the communication amongst group members for they will tend to communicate more frequently and this might increase the amount of information that will be used in arriving a decision

Interpersonal and social skills: To Johnson and Johnson (2006), they cannot be the production of any effective work if socially unskilled learners are arranged in to one group. Sharan (1990), says basic skills on cooperative interaction must be taught to group members in order for them to work effectively to finish their tasks .To Slavin (1996), group members

should know how to manage group, how to make decisions and how to solve conflict that arise amongst them, that is to say if such skills are not taught, then cooperative learning activities will hardly succeed.

Studies on long-term implementation of cooperative teams according to Mesch et al (1988) and Johnson and Johnson (1986) show that, the combination of positive goal independence, a contingency for high performance by all group members and social skills contingency, promoted the highest achievement and productivity. Putnam, Rynders, Johnson and Johnson (1989), say the more skilful participants are, the more social skills are taught and rewarded and the more individual feedback participants receive on their use of skills, the higher the achievement and productivity of the cooperative groups will tend to be. Social skills do not only promote higher achievement but equally contribute to the building of a more positive relationship among group members.

Group processing; Cooperative learning is group processing. Johnson et al (1994, p.33) define group processing as reflecting on group session to help student *(1) "What member actions were helpful and unhelpful and (2) make decision about what action to continue or change. Through the reflection on learning process, group member in contributing to the shared effort to achieve their goals. Group processing can be seen at two levels that is the small group and whole class*." Yamark (2007), says the purpose of group processing is to clarify and improve the effectiveness of member in contributing to the joint effort to achieve group goals.

According to Johnson et al (1994 p.33),when dealing with small group processing; '' (1) *the teacher should allocate some time at the end of the class for cooperative group to process how effectively members work together, when the group is processed it enable the maintenance of relationship of cooperative members (2) facilitates cooperative skills of group members (3) examines the group's task and give students' feedback on their participation (4) examines student's knowledge on their own learning parts and (5) celebrates the success of the small group and reinforce group members' positive behavior.''* When dealing with the whole class processing, teachers should observe groups, give feedback to each group and shared results of observation in class through a whole class processing session at the end of the class period.

Research has shown that group processing have many positive effect such as examining cooperative learning with group processing, examining cooperative learner without any group processing and the examination of individualistic learning. Johnson, Johnson, Stanne and Garibaldi (1990), say studies show that comparing cooperation with no processing, cooperation with instructor processing, cooperation with instructors and participants processing and individualistic effect, the results show that all the three cooperative condition performed higher than individualistic condition. Archer –kath et al (1994) find out that group processing with individual feedback was more effective than group processing with whole group feedback.

2.1.2 Group Interaction Techniques

According to Shaw (1971), it refers to group members interacting with one another in such a manner that each person influences and is influenced by each other person. In order words it is the process by which three or more members of a group exchange verbal and nonverbal messages in an attempt to influence one another.

2.1.2.1Classroom Interaction

Generally, classroom interaction facilitates language development and communication competence in learners. Classroom interaction does not only contribute to language development but equally co-construction of learner's self and cognitive development. According to vygotsky (1985), in his social cultural theory, learning is to awaken a variety of internal developmental processes that are able to operate only when learners have the opportunity with other people in his environment as well as operate with peers. To him, classroom needs to reflect possible outside sociocultural and institutional realities. Vygotsky (1985), equally says when we talk of classroom interaction; we are looking at components such as collaboration, dialogue, negotiation and co-construction.

This implies that cooperative learning has an influence on the learner's performance taking into consideration that working in their small groups they are able to interact, thus awakening a variety of internal developmental processes.

According to Celce-Murcia (1987), interaction in the classroom is an essential part of teaching learning process. Interaction or human interaction has been defined as a process whereby two or more people engaged in reciprocal actions. This action may be verbal or

nonverbal. Diknas (2004) looks at how teachers can maintain classroom climate which is very crucial for the teaching and learning process. According to him, classroom climate is built up by the pattern of interaction between teacher and learners' verbal exchange, asking questions, responding and reacting. The most important factors in a classroom situation are the interactions and exchanges initiated by teacher and the learners.

Chaudron (1988), states that interaction is significant because, it is through interaction, that learner can decompose the teaching learning structures and derive meaning from classroom events. Moreover, Allwright and Bailey (1991), state that through classroom interaction, the plan produces outcomes (input, practice opportunities, and receptivity).Thus interaction has a great role to play in the teaching and learning process, thus affecting learner's productivity.

2.1.2.2 Components of Classroom Interaction

According to vygotsky (1985), collaborative dialogue is a component of interaction between learners and learners. Here Vygotsky was interested in the individual potential level of development than his/her current level of development. That is to say learners can be at the same time of actual development judged on their test scores, but may exhibit different levels of potential development as determined by their different abilities to solve the same problem with different degree of assistance from adults. Vygotsky (1978), in his Social Cultural theory sees learning as an aspect that awakens a variety of internal developmental processes that are able to operate only when learners interact with individuals in his/her environment, as well as cooperate with his peers.

The next component of interaction is negotiation. According to Ellis (1990), claims in Interaction Hypothesis that when learners who are faced with communicative problem and are given the opportunity to negotiate, they are able to come out with the solution. That is to say negotiated interactions are necessary for input to become comprehensible. The notion of negotiation is generally defined as 'discussion to reach agreement'. According to Allright (1984), Interactive negotiation should be person-to-person communication since the conditions would be satisfactory. Negotiation has a significant role to play in classroom interaction because it gives to the learners the opportunity to negotiate their problem in to comprehension, thus affecting learner's productivity as more success will be gained.

Co-construction is another component of interaction. Jacoby and Ochs (1995:171), co-construction is "the joint creation of a form, interpretation, stance, action, activity, identity, institution, Skill, ideology, emotion or other culturally-related reality". To them when talking of interaction, all the group members have as responsibility to see to it that they construct a successful and appropriate interaction for a given social context. As peers negotiate with other peers as well as tutors, learners become more consistent in the use of the target structure correctly in all contexts. This influences the productivity of learners.

2.12.3The Significance and Implications of Classroom Interaction techniques

According to Allright (1984), classroom interaction is a productive technique in which classroom learning is managed through the process of negotiation that can be seen in interaction. As far as the writer is concerned, interaction enhances learner's development as they are able to acquire knowledge and ability through interaction. That is to say interaction amongst the learner and teacher gives room for learning opportunity which motivates the learner's interest and potentials to communicate with others, which goes a long way to facilitates not only language development but also learners' development. Classroom interaction is equally productive for language development. There are many ways of attaining classroom interaction. They include group work, closed-ended teacher questioning, individual work, choral responses, collaboration, teacher initiates and student answers, full-class interaction, self-access and so on. Among these patterns, Pair or group work is considered the most interactive way. It does not only pay attention to the sociocultural and Personal experience that guide students' behavior in the classroom, but also have three value systems of choice, freedom and equality. According to Sullivan (2000), he says everything that is embedded in the notion of pair work or group work is the idea of choice because students have a choice of partners or groups; the idea of freedom because learners in pairs or groups have a right to talk freely and expressed themselves freely and are also free from the teacher's control; and the question of equality comes in because all are given the opportunity to talk.

2.1.3. Active Learning

'Active learning' is used to describe a classroom approach which acknowledges that learners are active in the learning process either through the building of knowledge and responding to learning opportunities provided by the teacher. This approach can be contrasted with a model of instruction in which knowledge is imparted or transmitted from the teacher to students. For

Cambridge, active learning means that learners take increasing responsibility for their learning, and that teachers are enablers and activators of learning, rather than lecturers or deliverers of ideas.

This concept as seen by vygotsky in his theory of constructivism refers to the fact that, learners do construct or build their own knowledge or understanding. Implying that, learners do replace or adapt their existing knowledge and understanding with deeper and more skilled levels of understanding. Skilled teaching is active method which provides interaction opportunities, suitable learning environment, tasks and instructions that can enhances deep learning.

Equally, vygotsky (1896–1934) in his Social constructivism learning theory sees active learning as the learning that occurs through social interaction with others such as teachers as well as other learners or peers. In his zone of proximal development, focused is on between what the learner can achieve independently and what the learner can achieve with the teacher's expert guidance and providing support to learner's challenges based on their current ability, and through providing rich feedback using assessment for learning. This idea equally developed by the philosopher Jean-Jacques Rousseau (1712–1778), has influenced numerous educators in the early 20th century such as John Dewey (1859–1952) and Maria Montessori (1870–1952). It led to inquiry-based and Discovery learning models. The major idea reiterated here is that, learners can learn best when they can see the importance or usefulness of what they learn and can also connect what they have learnt to the real world.

Other approaches and terminology that are associated with active learning include:

The Student-centered or learner-centered learning; where students play an active role in their learning, with the teacher as an activator of learning, rather than an instructor

Also, there is the Enquiry-based, problem-based or discovery learning; where learners learn by addressing and asking scientific questions, analyzing evidence, connecting such evidence to pre-existing theoretical knowledge, drawing conclusions, and reflecting upon their findings

We equally have the experiential learning; it broadly describes someone learning from direct experience.

2.1.3.1 Active Learning Activities

Class Discussion is an active learning activity according to Kapur (2012). To him, we can use discussion in any class size even though it is more efficient with smaller group

settings. Learners can evaluate their and other's positions through critical thinking on subject matter and the use of logic to evaluate.

Advantages of using discussion as a learning method consist of the following:

- Learners are able to explore a diversity of perspectives
- Intellectual agility is increased
- Student voices and experiences are being respected
- Collaborative learning attitudes are inculcates in the learners.
- More to the above , Brookfield (2005), sees activity learning as an advantage because it builds in the learners the skills of synthesis and integration
- It equally permits the learners to come for lesson prepared being aware of what is taking place in the classroom as they are actively engaged in activities by the teacher

According to Robertson and Kristina (2006), Think-pair-share is another active classroom activity. Here the learners do take some minutes to ponder on the previous lesson , after which the learners discusses it with one or more peers and then share it with the entire class as part of a formal discussion. While sharing with the entire class, the teacher clarifies misconceptions. This method also needs the learner to have sound background knowledge in order to converse in a meaningful way as well as identify and relate what they already know

to others. According to Bonwell and Eison (1991), this is not a good strategy to be used in a large class because of time and logistical constrains, despite the fact that some advantages have been advanced by Robertson and Kristina (2006) such as: Think – Pair –Share saves the teachers' teaching if well implemented, makes the learners to be more involved in class discussion and participation, it equally give teachers the opportunity to hear from all the learners even from quiet ones. Radhakrishna et al (2012), added other advantages like: it helps the teacher to organize content as well as tracking learners on where they are relative to the topic that is been discussed in class. To him also, think-pair –share saves time, makes the classroom more interactive, it equally gives learners the opportunity to interact with others.

Learning cell is another class room activity. According to Goldschmid (1971), this active classroom activity was developed by Marcel Goldschmid of Swiss Federal Institution of Technology in Lausanne. In this method, two learners who have read a common material ask and answer questions alternatively. To prepare for the assignment, the students read the

assignment and write down questions that they have about the reading. At the next class meeting, the teacher randomly puts students in pairs. The process begins by designating one student from each group to begin by asking one of their questions to the other. Once the two students discuss the question, the other student asks a question and they alternate accordingly. During this time, the teacher goes from group to group giving feedback and answering questions. This system is also called a student dyad.

Collaborative Learning group is also an active learning activity according to Mckinney, Kathleen (2010).Here learners are grouped in groups of 3-6 people and given a task or assignment to work together. This assignment can either take the form of answering questions to present to the whole class or a project. Also here one member is chosen as a leader or note taker in order to keep the group on track with the process. This is a good active example of active learning because students are made to review the work that is being required at an earlier time to participate

Students Debate according to McKinney, Kathleen (2010), is an active learning activity in which the learners are given the opportunity to take a position as well as look for facts to support their views to others. Such activity makes learners to gain some experience with giving verbal presentation

A Reaction to video is another form of active learning activity. McKinney, Kathleen (2010), say students love watching videos .The video watched should be related to the topic under study. After they must have finished watching the videos, learners should be grouped in small groups or pair so that they may discuss what they learned and write a review or reaction to the movie. It is equally important to note here that before the video is played, the teacher should ask few questions that will orientate the way they will watch the video

A **small group discussion** is also an example of active learning. Harmann, Kerstin (2015), say because it allows students to express themselves in the classroom. It is easier for students to participate in small group discussions than in a normal classroom lecture. This is because they are more comfortable amongst their peers. More, students get more opportunities to speak out when working in small groups. There are so many different ways a teacher can implement small group discussion in to the class, such as making a game out of it, a competition, or an assignment. Statistics show that small group discussions are more

beneficial to students than large group discussions. Especially when it comes to participation, expressing thoughts, understanding issues, applying issues, and overall status of knowledge.

2.1.3.2 Advantages of Active Method of Learning

According to O'Neill, and McMahon (2005), active learning enhances understanding rather than rote learning or memorization. Thus the learners can easily apply that which they have learnt in different context and situations. Active learning equally fosters students 'learning and their autonomy, giving them greater involvement and control over their learning and giving them skills to foster life-long learning. And finally, Learners will be able to better revise for examinations in the sense that revision really is 'revision' of the ideas that they already understand.

2.1.3.3 Criticisms of Active Learning

Some teachers perceive active learning as a form of progressive education, expecting the learner to learn by themselves or in groups with the teacher acting solely as a facilitator. As Professor Elizabeth Rata (2012), argues "A teacher who says 'I co-inquire with my students, learn from them', 'We construct knowledge together' does not deserve that status. Active learning requires highly skilled teaching that uses a wide range of instruction that incorporates scaffolding of tasks, a deep appreciation of how assessment can be used in support of learning and recognition of the need for differentiation as learners are at different levels. John Hattie believes equally that guided instruction is much more effective than unguided.

2.1.4 Social Skills

McClelland and Morrison (2003), say teachers of young children have recognized the importance of children's social development. The development of social skills lays a critical foundation for later academic achievement as well as work-related skills. According to Ladd (2005) in order to teach social skills, the following techniques might come in direct instruction; learning from peers, prevention of problem behaviors, and children's books. Many social behaviors are better learned among peers. Ladd (2005), says the teacher is in the unique position to promote social learning in their classrooms.

2.1.4.1 Importance of Social Skills

To Ladd & Burgess (2001); Ladd, Kochenderfer, & Coleman (1996), say Social skills are behaviors that promote positive interaction with others and the environment. Some of these skills include:

- Showing empathy
- Participation in group activities
- Generosity
- Helpfulness
- Communicating with others
- negotiating
- Problem solving.

Learners learn these skills from the adults and children in their environment who model and explain how to behave in particular circumstances. The social skills that children learn when they are young form the basis for subsequent relationships that they develop in later childhood and adulthood. McEvoy (1990), says Social interaction brings about smooth transitions, and social communication. Learning areas can be large enough to give children the space they need to play together, but small enough to provide an intimate setting for social interaction.

2.1.5.5 Group Processing

Cooperative learning is group processing. Johnson et al (1994, p.33), define group processing as reflecting on group session to help student *(1) "What member actions were helpful and unhelpful and (2) make decision about what action to continue or change. Through the reflection on learning process, group member in contributing to the shared effort to achieve their goals. Group processing can be seen at two levels that is the small group and whole class*." Yamark (2007), says the purpose of group processing is to clarify and improve the effectiveness of member in contributing to the joint effort to achieve group goals.

According to Johnson et al(1994 p.33),when dealing with small group processing; '' (1) *the teacher should allocate some time at the end of the class for cooperative group to process how effectively members work together, when the group is processed it enable the maintenance of relationship of cooperative members (2) facilitates cooperative skills of group members (3) examines the group's task and give students' feedback on their participation (4) examines student's knowledge on their own learning parts and (5) celebrates the success of the small group and reinforce group members' positive behavior.''* When

dealing with the whole class processing, teachers should observe groups, give feedback to each group and shared results of observation in class through a whole class processing session at the end of the class period.

Research has shown that group processing have many positive effect such as examining cooperative learning with group processing, examining cooperative learning without any group processing and the examination of individualistic learning. Johnson, Johnson, Stanne and Garibaldi (1990), say studies show that comparing cooperation with no processing, cooperation with instructor processing, cooperation with instructors and participants processing and individualistic effect, the results show that all the three cooperative condition performed higher than individualistic condition. Archer –kath et al (1994), find out that group processing with individual feedback was more effective than group processing with whole group feedback**.**

2.1.5 Group Management Techniques

According to Henri (2008) , management has to do with forecast, planning, organizing, command, coordinating and to control. This implies that group management would entails the planning and organization of work, amongst group members in order to achieve group goals

2.1.5.1 Individual's Accountability

According to Eric Johnson and Johnson (1989), over 600 studies in the past 90 years have been dedicated to validating the assertion that students learn better when working together in small group. This group can either be seen as collaborative learning, cooperative learning or group works. According to Davis (1993), research have proven that learners perform better, are able to retain knowledge longer and even appear with course materials when they learn in group .To him, establishing the appropriate conditions for learning in a group setting is a critical component for success. This is because, one of the conditions requires that the teacher should see in to it that, individual members in a group are actually working on the material given rather than, simply taking credits for other group members

According to Johnson (1999), he says one of the primary purposes of collaborative learning group is to make members to be strong individuals. Exploring cooperative learning as a pedagogical approach implies that you must also explore the methods for enforcing

individual accountability for learning. How do you make sure that each individual learns each course objective when the students work in teams? How do you prevent the "social loafer" who is content to let everyone else do the work while receiving the same grade? How do you prevent the over-bearing member who so dominates group discussions so much so that others stop attempting to contribute?

2.1.5.2 Key Elements to Attain Accountability of Group Members

Cooperative learning occurs when students work together in small groups to accomplish a collective task. According to Slavin (1980), when cooperative learning is employed properly, it can result in improved conventional academic achievement such as; performance on standardized tests. Also a well-constructed cooperative learning environment can contribute to developing conceptual skills needed for problems requiring critical thought. It can also improve social and leadership skills gained through group member interaction. According to Johnson (1991), these benefits, however, are not automatically achieved, but rather teachers must place considerable thought into how they implement the technique. Several key elements that must be present in order for students to learn in a cooperative environment

1**. Positive interdependence**. Students within a group must be forced to rely on one another to be successful on their project or homework. The scope of the work must be such that it is impossible for the team to do well (finish the work and receive a good grade) without considerable contributions from each group member.

2. **Individual Accountability.** Instructors or the teacher and group members must have a method of holding each person accountable for his or her contribution. Moreover, each student must learn all of the course objectives; learning only a subset is not sufficient.

3**. Face-to-face interaction**. Some work can, and should, be separated out and completed in parallel, but members of the group must be forced to interact directly with one another. The nature of the tasks for the work should give the opportunity or room for a division of labor, but they must also require a degree of integration that can only be accomplished collectively.

4. **Appropriate use of collaborative skills**. Group members must learn how to interact with others and develop leadership, decision-making, communication, and conflict-resolution skills that will be required by learners upon graduation.

5. Group processing. The team has to approach the overall work from a group perspective. The members must establish mutual goals, a collective timeline, and group policies to keep the team focused.

Additionally, they must periodically assess their collective performance and make adjustments as need be.

How to avoid individual's accountability problem

The first step in promoting individual accountability in an environment suitable for cooperative learning is to build the teams in a productive manner. Placing students in effective teams requires considerable forethought in order to account for each of the elements of a successful cooperative learning endeavor. The research is consistent. According to Oakley (2004), teachers should form heterogeneous groups consisting of about 3-5 learners in a group. Teams should be selected by the classroom teacher who know the different students well because if the learners are left on their own to group themselves they might likely not keep their individual learning as their primary goal. Stronger students may gravitate to one another leaving the weaker students to flounder, or students may overly weight the significance of friendships and social acquaintances.

Oakley (2004) says the actual size of the group also has a critical impact on individual accountability. The right sized team can maximize collaborative effort while minimizing potential problems. To him, a group of 3-5 is good for a team because if the group is too small, individuals can easily dominate group sessions, or there may be insufficient diversity of insight or skills to enhance learning. On the other hand, if the group is too large, then some group members can easily avoid working, some quieter members may simply be ignored, or there may be insufficient work to keep all members occupied.

Using Peer Assessments

According to Kaufman et al (2000), When the learners have already been grouped, teacher must continual observe team's progress as well as provide them with direction and guidance. In order for learners to embrace the cooperative learning environment, they must feel that there is a method of ensuring fairness in grading. Nothing will demoralize learners quickly, than for a non-contributing student to receive a high grade based solely on the other group members' efforts. Research shows that students derive a much greater sense of

satisfaction and higher test scores from groups that have the ability to provide a peer assessment that is factored into grade calculation. Group member assessment should reflect the degree of contribution each team member makes toward the collective effort.

Giving Individual Exams

To Cooper (1990), Peer evaluations will assist a teacher in determining if individual group members are contributing to the group effort, but they can be misleading. Group members may find it socially difficult to provide an accurate assessment of their peers (even in an anonymous setting), resulting in peer evaluations that provide a false representation of the individual effort. Also, while the peer assessments help to ensure that everyone is contributing toward the group goals, this does not necessarily mean that each student understands each objective for the course. Thus the teacher may need an additional tool which could be the administration of individual exams that covers all of the objectives. Thus avoiding a situation where only a group product or demonstration as well as performance are evaluated. The results of the exam will serve as a clear indicator of who understands the material and who does not.

Using Group Roles

Johnson (1999) says for learners to succeed while taking a comprehensive exam, teachers need to make sure that individuals are learning each objective. Students must assume some responsibility for their own learning, but teachers must steer their group interaction in a positive direction. The teacher should see in to it that there is proper distribution of work rather than isolating tasks to particular individuals. Keeping in mind that many students will naturally gravitate toward a "divide and conquer" approach, teachers insist that in the different groups members should assume particular roles during portions of the course and that they rotate periodically. This makes group members to be implicated to the breadth of the problem that the group is trying to solve. Johnson (1999), adds that each individual should assume each of the following roles or some suitable variation during the course of the assignment: coordinator (organizes tasks and assigns responsibilities), checker (monitors the team's solution for correctness, completeness and accuracy), recorder (writes the solution), and skeptic (plays devil's advocate to ensure various perspectives are considered in determining the final solution). These administrative responsibilities are in addition to performing work toward the actual solution,

Student Motivation

A final method that teachers can use to provide a cooperative learning environment that promotes individual accountability is to factor in student motivation Slavin, (1995), motivation should be derived from both internal and external factors. The importance of a student being truly interested in a particular topic cannot be overstated. Teachers can provide learners with the latitude of choosing a project they will like to work on, so that they will be motivated and implicated in the tasks. This is because, if learners are forced to work on a project that they don't fine interesting, it will require considerable self-discipline just to get the work done. If the learners are flexibility in selecting a problem they find intriguing, working toward the solution will be less of a chore and there will be an increased potential for insightful discussion, deeper research, and true learning.

To Slavin (1995), Instructors can also provide external motivation by offering incentives for exercising effective teamwork. Individual accountability and group goals must be intertwined so that there is an incentive for individuals to put forth their best effort. For example, one individual may present a group's work and all members of the group receive the same grade.

2.1.5.3 Size of the Group

Felder & Brent (1994); Felder & Brent (2001), propose forming three- to four-person teams for most assignments, attempting to observe the following two guidelines to the greatest extent possible: Firstly, form teams whose members are diverse in ability levels and who have common blocks of time to meet outside class and secondly, in the first two years of a curriculum, avoid isolating at risk minority students on teams. There is no consensus in the literature on the optimal team size, but most authors agree that the minimum for most team assignments is three and the maximum is five. (There are obvious exceptions to these rules, such as laboratories with two-person work stations.) With only two people on a team, there may not be a sufficient variety of ideas, skills, and approaches to problem solving for the full benefits of group work to be realized.

According to Gillies (2003), for group work to be successful, group members need to have the skills to communicate effectively through listening, explaining and sharing ideas. But effective group-work involves more than this; members have to learn to trust and respect

each other according to (Galton, 1990; Kutnick, 1988), and they need skills in how to plan, organise and evaluate their group work.

2.1.5.4 Some Recommendations for Improving Group Work

According to Hansen, R.S. (2006), Group work is mostly used by many faculties. Learners working in group may be assigned to prepare a report, collect as well as analyze data, a presentation supported with visuals etc. in order to produced quality work rather than if the learners had to work alone. Thus learners should learn to work productively with others. The following are suggestions for improving group work:

Firstly the importance of team work should be emphasized**.** Hansen (2006), before the groups are formed and the tasks are assigned, teachers should explained clearly why they said assignment is being done in groups .For example the teachers explanation may go thus Most of us are using groups because employers in many fields want employees who can work with others they don't know, may not like, who hold different views, and possess different skills and capabilities.

Also, Hansen (2006) says team work skills should be taught, most students don't come to group work knowing how to function effectively in groups. Whether in handouts, online resources, or discussions in class, teachers need to educate learners on their differently responsibilities towards the group (such as some of the sacrifices individual learners must do in order to attain group goals) and about what members have the right to expect from their groups. Students need strategies for dealing with members who are not doing their fair share. They need ideas about constructively resolving disagreement. They need advice on time management.

Moreover, the teacher should use team-building exercises to build cohesive groups. Members need the chance to get to know each other, and they should be encouraged to talk about how they'd like to work together. Hansen, (2006), also denotes that, Sometimes a discussion of worst group experiences makes clear to everyone that there are behaviors to avoid. This might be followed with a discussion of what individual members need from the group in order to do their best work. Things like picking a group name and creating a logo

also help create a sense of identity for the group, which in turn fosters the commitment groups need from their members in order to succeed.

The teacher should equally, thoughtfully consider group formation. To Hansen (2006), most learners prefer forming their own group. Studies have shown that on the one hand, such groups are more productive even though on the other hand, they might not always get a lot done since they might spend of their time discussing. In most professional contexts, people don't get to choose their group members. If the goal is for learners to learn how to work with others whom they don't know, then the teacher should form the groups. There are many ways groups can be formed and many criteria that can be used to assemble groups. Groups should be formed in a way that furthers the learning goals of the group activity.

Tasks or work load assigned to the learners should be reasonable and clear**.** Whatever the task, the teacher's goals and objectives should be clear. Learners shouldn't have to spend a lot of time trying to figure out what they are supposed to be doing. (Hansen, 2006).

Interim reports and group process feedback should be given according to Hansen (2006), One of the group's first tasks should be to create a time line that is what they expect to have done by when. That time line should guide instructor requests for progress reports from the group. Students should report individually on how well the group is working together, including their contributions to the group. Ask learners what else they to make the group function even more effectively.

Hansen, (2006), Individual members are to keep track of their contributions .The work should include a report from every member identifying their contribution to the project. If two members report contributing the same thing, the teacher defers to the student who has evidence that supports what the student claims to have done.

Peer assessment should also be involved in the evaluation process **.**What learners claim to have contributed to the group and its final product can also be verified with a peer assessment in which members rate or rank (or both) the contributions of others. A formative peer assessment early in the process can help members redress what the group might identify as problems they are experiencing at this stage. (Hansen, 2006).

According to Gillies (2003), for group work to be successful, group members need to have the skills to communicate effectively through listening, explaining and sharing ideas. But effective group-work involves more than this; members have to learn to trust and respect each other (Galton, 1990; Kutnick, 1988), and they need skills on how to plan, organise and evaluate their group work.

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According to Johnson et al(1994 p.33),when dealing with small group processing; '' (1) *the teacher should allocate some time at the end of the class for cooperative group to process how effectively members work together, when the group is processed it enable the maintenance of relationship of cooperative members (2) facilitates cooperative skills of group members (3) examines the group's task and give students' feedback on their participation (4) examines student's knowledge on their own learning parts and (5) celebrates the success of the small group and reinforce group members' positive behavior.''* When dealing with the whole class processing, teachers should observe groups, give feedback to each group and shared results of observation in class through a whole class processing session at the end of the class period.

Research as shown that group processing have many positive effect such as examining cooperative learning with group processing, examining cooperative learner without any group processing and the examination of individualistic learning. Johnson, Johnson, Stanne and Garibaldi (1990), say studies show that comparing cooperation with no processing, cooperation with instructor processing, cooperation with instructors and participants processing and individualistic effect, the results show that all the three cooperative condition

performed higher than individualistic condition. Archer –kath et al (1994), find out that group processing with individual feedback was more effective than group processing with whole group feedback**.**

2.1.6 Group Expectations

According to Patrick in his book 'The Five Dsyfunctions of a team" a group where there is ambiguity about its priorities and direction fails. Thus in managing a group, clear expectation should be stated in order to avoid members asking question concerning what is expected of them as a group

2.1.6.1 Group Objectives

According to Grant (2012), goal setting involves the development of an action plan designed to motivate and guide a person or group toward a goal. Studies have shown that more specific and ambitious goals lead to more performance improvement than easy or general goals. Studies by Locke, Edwine et al (2006), says as long as the person accepts the goal, has the ability to attain it, and does not have conflicting goals, there is a positive linear relationship between goal difficulty and task performance.

Locke et al (2002) say if goals (objectives) are clearly stated, they affect out comes that is classroom productivity in four ways:

-Choice: Goals narrow attention and direct efforts to goal-relevant activities, and away from goal-irrelevant actions.

-Effort: Goals can lead to more effort; for example, if one typically produces 4 widgets an hour, and has the goal of producing 6, one may work more intensely towards the goal than one would otherwise.

-Persistence: Someone becomes more likely to work through setbacks if pursuing a goal.

-Cognition: Goals can lead individuals to develop and change their behavior.

This only means that with group having a fix objective (goal) members actions will be oriented towards the attainment of group goals which will affect classroom productivity. If

members activities are oriented, their attentions will be narrow which will in turn led to relevant activities that will be realized and this will go a long way influence classroom productivity.

Harrison, Price and Bell (1998), for a group to have a good orientation as well as work better, they must share a common goal that is working towards the stated objectives of the group. Group members must have a high level of commitment towards the attaining the objectives of the group by understanding that working together as a group is better than what they can do on their own. According to Stogdill (1972), when group members have high commitment towards attaining group goals (objectives) they tend to perform better, thus increasing classroom productivity. Without a purpose or objective (goal) groups will eventually splinter in to separate individuals working towards their own personal agenda or better still members become less committed to group's task and not for the common good of the group will intend influence class room productivity. Thus member's knowing what is expected of them and knowing that they will be held accountable by other group members they will stay committed to the objectives of the group.

Moreover Locke et al (2006) say the relationship between group goals and individual goals influences group performance that is classroom productivity when goals are compatible there is a positive effect, but when goals are incompatible the effects can be detrimental to the group's performance. In order words all group members have to work towards the common good of the group that is accomplishing the objectives (goals) of the group. Locke et al (2006), also talk of another factor at work in groups, which is known as the sharing factor which is a positive correlation that exists between sharing information within the group and group performance. In the case of group goals, feedback needs to be related to the group, not individuals, in order for it to improve the group's performance as well as classroom productivity. Locke (2002) say people perform better when they are committed to achieving certain goals. If goals are certain it's because from the onset the group set the objectives and work towards the attainment of these goal or objectives.

2.1.7 Key Elements of Constructive Cooperative Learning

To Duplass (2006), the following are most commonly associated to the characteristics of cooperative learning

- Teacher supervision; the teacher should monitor and follow up learners to ensure that learners don't go off task, answer learners worries and guide group discussion where need be
- Heterogeneous group: when creating groups the teachers should make when grouping the learner the teacher should group learners together having different ability levels , skills and background
- -positive interdependence: that is to say group members should be able to set goals together, and work together towards the attainment or final learning out come
- Face to face interaction: here, group members should employ both verbal and nonverbal means of communication to explain learning materials and equally to solve problems
- Individual accountability: individual have to play their own role for the success of the task. Thus individual group members must be accountable for their task and for helping the whole group meet learning goals
- Social skills: the teacher needs to establish rules and regulation for the groups so as to enhance mutual respect among members of the group, speaking in an appropriate manner to classroom setting and the judicious use of time
- Group procession :learners are on reflect on the better functioning of group during activities
- Evaluation: assessment should be carried out on both the individual members as well as in group.

2.1.7.1Tthe Difference between Cooperative Learning and Collaborative

Even though some people believe that cooperative learning and collaborative learning are similar, there is a slight difference between them even though both method use division of labor

- According to Dillenbourgh, P., Baker, et al (1995), Collaborative Learning method requires mutual engagement of all the learners or participants in order to solve problem or the task given them, but with cooperative learning learners take up responsibilities for specific section in the task given and they coordinate their respective parts together.

- Cooperative learning is typically used for children because it is used in understanding the foundation of knowledge, whereas collaborative learning is mostly applied to colleges and universities to teach non foundation of learning.
- According to Kyndt, E., Raes, E. et al (2013), Cooperative Learning is a philosophy of interaction whereas Collaborative Learning is a structure of interaction.

However, many psychologists have defined cooperative learning and collaborative learning similarly. Both are group learning mechanisms for learners to obtain a set of skills or knowledge. Some notable psychologists that use this definition for both collaborative and cooperative learning are Johnson & Johnson, Slavin, Cooper and more.

2.1.7.2 The Influence of Constructive Cooperative Learning on Students Out comes

To Fosnot (1989), Cooperative learning can be used in various ways, including formal cooperative learning, informal cooperative learning, cooperative base groups, and cooperative structures.

Influence of Formal cooperative learning

This types of cooperative learning deals with learners working together with duration of one class period to several weeks, in order to achieved shared goals through ensuring that group mates have completed tasks given to them successfully. The teacher plays the following roles:

- Specifies lessons objectives
- Make a number of pre-instructional decisions
- Explains the task to be carried out as well as positive interdependence
- Monitor the learners learning and intervene within the groups so as to provide assistance or to increase learners' interpersonal and grouped skills
- Evaluates learners' learning as well as help them process how their groups functioned

Influence of Informal Cooperative Learning

The use of cooperative learning does not mean that teachers cannot longer lecture, use video tapes, film shows as well as give demonstration, for the above teaching methods can be use effectively with informal cooperative learning in which learners work together to achieve a joint learning goal in temporary, ad-hoc groups that last from a few minutes to one class

period. Film projection as well as demonstration could be used here to draw learners' attention on that which they are to learn, set a learning conducive mood, to help set expectations as to what will be covered in a class session. Informal cooperative learning helps teachers ensure that students do the intellectual work of organizing, explaining, summarizing, and integrating material into existing conceptual structures during direct teaching. Informal cooperative learning groups are often organized so that students engage in a three- to five-minute focused discussion before and after a lecture and two- to three-minute turn-to-your-partner discussions throughout a lecture.

Influence of Cooperative Base Groups

Not all of the types of cooperative group are temporary, lasting for a short period of time. Cooperative based group are long-term, heterogeneous and with stable membership that can last even for a year or till when members graduate. Learners are provided with permanent, committed relationships that allows member to give needed support, encouragement, assistance to consistently work hard in school as well as make academic progress. Johnson, Johnson and Holubec (1992); Johnson, Johnson, and smith (1991), equally reiterated the fact that this long term groups enable the learners to develop cognitively and socially healthy. Base groups meet formally each day in elementary school and twice a week in secondary school (or whenever the class meets). Informally, members interact every day within and between classes, discussing assignments and helping each other with homework. The use of base groups tends to improve attendance, personalize the work required and the school experience, and improve the quality and quantity of learning. The larger the class or school and the more complex and difficult the subject matter, the more important it is to have base groups. Base groups are also helpful in structuring homerooms and when a teacher meets with a number of advices.

2.1.7.3 Challenges in the Implementation of Constructive Cooperative Learning

According to Khon (1992), teachers face the reluctance in the implementation of cooperative learning in the classroom, because it poses some problems to them; such as the control channel of communication and equally its arrangement on curriculum organization. In addition to this, Gillies (2008), says teachers may find difficulties in implementing cooperative learning in their classrooms due to the lack of understanding how the pedagogic

practice works. To him, studies have shown that learners will perform better in classes where teachers have been trained on how to establish cooperative learning activities in their curricula and students are provided with the opportunity to participate in these activities on regular basis unlike those in schools where teachers have not been trained.

Moreover, Gilles (2008), says one of the challenges of cooperative learning is it reliance on positive group dynamic to function at its highest efficiency, conflicts amongst group members will always affect their ability to work together especially if members are still young and have not conflict resolution skills . Equally mismatch personalities can also lead to unsatisfactory cooperative learning even when there is no conflict.

What is more, cooperative learning can bring uneven workloads and evaluation because at times more advanced learners do take up the project for the sake of trying to finished up in time rather than helping the slow learners . What is more, indolent students might deliberately.

2.1.7.4 Techniques of Constructive Cooperative Learning

There are some many techniques of cooperative learning. Some of these learning techniques use student pairing while others use small groups in which learners may be group from 4-5 persons. Thus, so far many techniques have been created so as to be used in different content area and the Reciprocal Teaching Technique.

Think Pair Share Jigsaw.

The Jigsaw method was developed by Elliot Aronson in 1978. Here, students are assigned to multi-member teams to work on academic material or task given which is normally divided into sections. Each member of the group is assigned a section of study on which he or she becomes an expert. Experts are then assigned to expert groups in which the members of the group discuss the information and decide on the best way to present the material to members of their home teams. After the students have mastered the material, group members return to their home teams to teach the other members the material. Jigsaw teaching is an appropriate strategy for social studies because there is often not always one answer to a question (Slavin, 1995). Rhetorical and open-minded questions are confronted

more easily when students have exposure to a plethora of perspectives. Concept development is usually one of the main goals in a social studies lesson.

Learning together: Learning together is a cooperative learning strategy created by David W. Johnson and Roger T. Johnson in 1989. Learning together was originally designed to help train teachers how to use cooperative learning groups in the classroom at the University of Minnesota in 1966. In the learning together strategy, cooperative effort includes five basic elements: face-to-face interaction, social skills, group processing, positive interdependence, and individual accountability Johnson & Johnson (1989). Here, Learners complete worksheets in groups of four or five. Emphasis is placed on team building and group self-reflection. The teacher determines each team grade.

Team-games-tournament: David Devries, Keith Edwards, and Robert Slavin are the authors of this cooperative learning strategy. This strategy is similar to Student Teach –Achievement Division But for the fact that they do not take individual quizzes. Instead, learners participate in academic games with members of other teams and contribute points to their team scores.

Student-teams-achievement division: This cooperative strategy was created by Robert Slavin in 1995 where in, learners are grouped in fours within their team in order to master a lesson presented by the teacher. The learners take individualized quizzes, which are compared to the past performances, and then team scores are put together based on the extent to which the student in the group meet or surpass past performance (Slavin,1995).

2.1.7.5 Strength and Weaknesses of Cooperative Learning

To Barry, k and King, L (2002), cooperative learning are generally positive especially in cases where it is compared to traditional approaches such as whole class teaching. These positive effect influences both the cognitive or academic achievement as well as various affective and non-cognitive factors.

Barry and King (2002), reiterate the fact that because cooperative learning is a learner centered approach it focuses on learner's development. Thus apart of the subject that is being taught by the teacher, through cooperative learning, learners develop many social and interpersonal skills such as acceptance and respect for others, language proficiency as well as working with others in a team. Skills which are becoming important in today's world of globalization.

According to Kagan (1999), over 500 research studies accept the fact that cooperative learning brings about gains across all content areas, all grade levels, and among all types of learners such as learners with special needs ,gifted children, high achieving, rural, urban and all ethnic and racial groups.

Kagan (1999) put forward the following arguments as strength of cooperative learning:

- Cooperative learning benefits all types of learning and all abilities of learners.
- Given students' views and ideas are accepted by peers, it helps increase their self-esteem.
- Interracial friendship in a group work develops interracial and intercultural harmony.
- Given the learners are working in group, communicating among learners become easier and also helps in gaining communication skills.
- Interpersonal skills are developed since learners are to interact with each other.
- Through cooperative learning, learners learn discipline like waiting for their turn to talk and talk one at a time.
- By listening to and accepting critics from team members, students get to learn more about themselves and may even improve.
- Fosters student's responsibility for learning.
- Allows every learner to participate in class as compared to volunteering where always the same learners raise their hand and participate.
- More Topping (1988) sees defending the teams work as also defending the views of other persons.
- Cohen (1994) says cooperative learning helps the teacher in keeping the students engaged in classroom work.

Weaknesses of Cooperative Learning

According to Kagan (1999), despite the non-exhaustive list of strengths, cooperative learning also has some weaknesses that hinder its application in many situations. However, some of these weaknesses may be overcome with proper planning and preparation. Here are some of the weaknesses he advanced:

- Lack of proper instructions and guidance may lead to unsocial behaviors like all members talk at the same time, some members not participating, some members trying to dominate others as well as impose their views or some members can be ignored.

- Lack of supervision may lead to lots of noise making and unnecessary discussion rather than the topic to be learnt, which will only make cooperative a waste of time.
- A learner who did his share of work honestly and would deserve a very good grade otherwise may be under graded for work not done by others in the group.
- Bad experience working in a group may leave a bad impression about team work on pupils and this may negatively affect their working life in future.
- Consistent use of cooperative learning may cause learners to be dependent on each other and may negatively impact them when required to work individually.
- Consensus becomes difficult especially when it comes to matters that involve emotions
- It is a time consuming strategy both for preparation and implementation. Therefore, the teacher may not have enough time to complete his syllabus.

2.2.0 THEORITICAL FRAME WORK

According to Mbua (2003), a theory is a systematic and deductive manner of thinking about the reality in order to better understand and describe such reality. It implies facts, models laws or principles about a phenomenon. To Luma (1983), a theory is "a related assumption or conceptions fields in some way to the real world of unknown properties or behaviors which can be subjected to experimentation and revision as well as reserve to guide in the search for more truth hither to unknown".

The study under investigation examined the following theories:

- Social constructivism by Vygotsky
- Social Independence theory by Lewins
- Social Learning theory by Bandura

2.2.1 Social Constructivism by Lev Vygotsky 1962

Social learning theories help us to understand how people learn in social contexts (learn from each other) and informs us on how we as teachers, construct active learning communities through Interactions and communications with others. Vygotsky (1962) examined how our social environments influence the learning process. He suggested that learning takes place through the interactions students have with their peers, teachers, and other experts. Consequently, teachers can create a learning environment that maximizes the learner's ability to interact with each other through discussion, collaboration, and feedback. Vygotsky theories lay emphasis on the role of social interaction in cognitive development (vygotsky, 1978) To him, the community plays a vital role in the process of 'making meaning' In this theory, Vygotsky (1978), considered the role played by culture and the society, language and interaction are very important in enhancing understanding of how human beings learn. Using his socio-cultural approach in his study of children, he asserted that language, thoughts, reasoning and the development of individual is as a result of culture and social interaction with other (especially parents and teacher). Studying the growth of children in their environment he notices that what happens in the social environment such as dialogue, action and activities help children learn, develop and grow. This explains the fact that, in cooperative Learning students interact with each other in the same group to acquire and practice the elements of a subject matter in order to solve a problem, complete a task or achieve a goal.

One of the most important principle invoke in Vygotsky (1978), work is the zone of proximal development .Zone of Proximal Development relates the difference between what the learners can achieve independently and that which can be achieved through the help of skilled partners. That is to say that cognitive development of learners greatly depends on social interaction thus reiterating the aspect of cooperative learning. This further explains the example of Shaffers (1996), of the little girl who could not solve the jigsaw puzzle by herself and would have equally taken her a lot of time to do so. But thanks to her father she was able to do so and at the end of the day acquire skill to solve jigsaw puzzle next time without her father's help.

To Vygotsky (1978), the Zone of Proximal Development should be the area where the most sensitive guidance or instruction should be given in order to allow the learners to developed skills they will use individually; because through this they will be developing their

higher mental functions. To him peer interaction is an important way of developing skills and strategies. Thus encourages Teachers to use cooperative learning exercises where in less competent children will develop through the help of skillful peers within the Zone of Proximal Development.

Vygotsky (1972), in his theory equally invokes the aspect of Zone of Proximal Development which is very important. This he explains that children have actual development which can be assessed by testing them individually on the one hand, and on the other hand, there is an immediate potential for development within each domain. The difference between these two situations is what vygotsky (1972), refers to as Zone of Proximal Development. Meaning that, tasks which are difficult to be mastered alone by the learners at the actual development level can be learnt with guidance and assistance from adults, more skilled learners or more knowledgeable learners. The Zone of Proximal Development captures the child cognitive skills that are in the process of maturing and the skills can only be honed with assistance of more skilled persons.

Looking at Vygotsky (1972), Zone of Proximal Development, attention is placed on the fact that when learners work in team or small groups the weaker students benefit from the more knowledgeable ones. That is to say through collaboration or interaction, learner's cognitive skills that is in the process of maturing can be honed. This explains why Vygotsky (1972), further explains that the upper limit in the Zone of Proximal Development can only be fruitful through social interactive support from peers and teachers.

Vygotsky (1978), in his theory states that cognitive development comes from social interaction, from guided learning within the zone of proximal development as the learners and partners or group members construct knowledge. In this light, one can say that cooperative learning enhances cognitive development, thus when there is collaboration ,learners learn and cross over to their zone of proximal development through ideas and interactions from other group members since ideas are been shared and discuss together for better understanding . Vygotsky (1978), states that cognition comes from guided learning. This is equally true drawn from the fact that cooperative learning is guided by the teacher or facilitator in order to orientate the work of learners in their small teams or groups. If the knowledge is not guided learners may easily go out of topic or the desired work expected of them.

Vygotsky (1978), in his theory illustrates that much important learning of a child occurs through social interaction with skillful tutor, this imply there have to be collaboration or cooperative dialogue in which the tutor or teacher provides verbal instruction to the learners. This is because the tutor provides guidance in order to model the learner's behavior. Learners are able to model their own performance from instruction given by parents or teachers. Shaffer (1996) equally supports this idea through his example of a young girl who is given her first jigsaw. We notice here that on her first attempt she behaved poorly to solve the puzzle, but after the farther demonstrated to her some basic strategies like finding the edge piece as well as providing a couple of piece for the child to put it together alone, the child became competent and worked independently. Thus vygotsky (1978), is simply reiterating the fact that collaboration or cooperative learning enhances better understanding, hence cognitive develop which should also take place under the guidance of a teacher ,parent ,facilitator, peers with higher intellectual abilities etc.

Vygotsky (1978), also views peer interaction as an effective way of developing skills and strategies. He suggests that teachers use cooperative learning exercises where less competent children develop with help from more skillful peers - within the zone of proximal development. This will equally influence their learning as there will be interactions in their little groups in which weaker learners will be drawn up by the stronger ones.

2.2.2 Social Independence Theory by Lewins 1945

Johnson and Johnson (2005), say Social independence theory is based on the fact that, individuals goals can be accomplished or achieved through action of others. Slavin (2011), says this perspective is based on the fact that the learners or group members help each other learn taking in to consideration that they care about their group and its members and they come to derive self-identity benefit from group membership. In this light, Johnson and Johnson (2005), see this as a strong relationship between cooperative learning and social interdependence theory. According to Deutch (1949), Johnson (1970) and Johnson and Johnson (1989), social independence can further be divided in to two parts, namely: positive cooperation and negative competition.

When they talk of positive interdependence according to Deutsch (1949), it is when individuals perceive that they can only attain their goals if the individuals whom they are cooperatively linked also reach or attain their goals that is to say the promote each other's

effort to attained goals. This led to cooperative learning with regards to the fact that individual goals can be accomplished through the action of others Johnson and Johnson (2005). This idea is further reinforced through Slavin (2011), who says group members derive self identity benefit from group membership.

According to Johnson and Johnson (2008), the fact that positive interdependence brings about promotive interaction as group members encourage and facilitates each other's effort to complete task as well as accomplish their group goal. Promotive interaction comprises of mutual help and assistance, exchange of needed resources, effective communication, mutual influence, trust and constructive management of conflict. Thus, throwing light to the fact that cooperative learning will enhance learning as well as their productivity.

According to Deutsch (1948 and 1962) the psychological processes that comes to play when we talk of positive independence includes: Substitutability which is the degree to which the action of one person substitute for the action of another person. It equally includes the openness to be influence and to influence others and finally it consists of Positive Cathexis which means the investment of positive psychological energy in object outside of oneself. Now going back to Social Independence Theory, we noticed that the processes try to explain how self-interest is expanded to join interest and how new goals and motives are created in cooperative and competitive situation. Throwing more light to the fact that, when learners work in teams or groups their interest and focused is not on themselves any longer but shifted to other group members because they all work for the accomplishment of a common goal thus interests are expanded to mutual interest through the actions of other group member's actions substituting for one's own.

Cooperative learning is further reiterated here through the emotional investment in achieving goals for one self is generalized to caring and committed relationships with those with whom learners are working with for the same purposes and goals (Deutsch 1949). That is to say the weaker learners are helped by the stronger ones taking into consideration that learners are grouped heterogeneously

Moreover, group members are open to be influence so that joint efforts become more effective. That is to say it is not individual's opinion that counts but what group members jointly comes out with, taking in to consideration that they lay down the task to be

accomplished in their different groups and discussed jointly on the possible solution so much so that ideas of one another influences others since they are open and flexible. The author rightly puts it when he talked of the fact that these psychological processes demonstrates the transition from self-interest to mutual interest is a very important aspect of the Social Interdependence Theory.

Johnson and Johnson (2008), equally reiterates the fact that, when there is positive interdependence we will have variables such as mutual help and assistance, exchange of needed resources, effective communication, mutual influence, trust and a constructive management of conflict. That is to say when dealing with cooperative learning, group members as they work in collaboration ends up helping each other mutually as they exchange ideas together to accomplish a common task. It is equally true that if there is not trust members cannot work together because nobody will look in to others opinions taking into consideration those members have to be open to be influenced by others. Thus if members have to work together to attain or accomplish the same goal they ought to be able to communicate effectively, there have to be influence mutual by each other, trust and constructively managed conflict amongst themselves as the work, there need to be exchanged of resources amongst group members considering the fact that they are working for a common goal as well as mutual help and assist each other.

To Johnson and Johnson (1989)," greater performance is obtained by cooperation than competitive or individuals effort. This is because with cooperative situation, performance has been constructed in terms of achievement and productivity, long term retention on- task behavior, use of higher- level reasoning strategies, generation of new ideas and solutions, transfer of what is learnt within one situation to another, intrinsic motivation, achievement motivation, continuing motivation to learn and positive attitudes towards learning and school"

2.2.3 Social Learning Theory 1977 by Albert Bandura

Bandura's theory of social learning bridges the gap between behavioral and cognitive learning theories by taking in to account how imitable behaviors are affected by cognitive constructs such as attention reduction and motivation (Bandura, 1977).

Bandura (1977) further illustrates that much learning takes place through observing, and imitating models. The major premise of social learning theory is that learners can improve their knowledge as well as retention through observing and modeling the desired behaviors,

attitudes and reaction of others. Cooperative learning on its own part put learners in groups and teams to work towards the accomplishment of a common goal. Thus through interaction in their little groups, members have the opportunity to learn from others by observing, imitating and model desired behaviors put up by team members or group members which may equally influence their learning.

According to Schunk (2007), this theory equally highlights the fact that, much learning occurs when we observe, model and imitates models, with this learners can be able to retain knowledge by observing and modeling the desired behaviors, attitudes and reactions of others due to the fact that human thoughts processes are central to understanding personality. Learning together in small groups and teams (cooperative learning) permit group members to observe, to model desired behaviors and reaction of group members as they interact which enhances much learning.

Moreover to Schunk (2007), most learning takes place in a social environment in which the learners obtain skills, strategies, beliefs and attitudes by observing others. Schunk (2007), equally says that the social learning theory places human behavior within a frame work of three reciprocal interactions: persons, behavior and environment which influence one another. It is more of a triangle and needs the functioning of all three parts to keep the triangle in place. The fact that cooperative learning heterogeneously group learners , it is a possibility that in the course of interacting in their different subgroups, learners will be able to retain knowledge through observing and modeling desired behaviors, attitudes and reaction which will equally influence their learning outcome.

Bandura (1986:6), equally reports that “In a social cognitive theory, people are neither driven by inner forces or automatically shaped and controlled by the motivation, behavior and development within a network of reciprocally interacting influence. Persons are in terms of number of basic capabilities” That is to say learners are not just being motivated to work by an inner force but most especially they are able to learn through interaction in their different group as they observe, model and imitate desired attitudes and behaviors of group members or peers.

According to Johnson et al (2010), in the social learning theory, the learners will learn more through observation and imitation of the desired behaviors of other members or learners, thus there is a strong connection between this theory and practice of cooperative learning

because; social behaviors and actions of effective learners in the cooperative learning group are expected to be modeled and adopted by other learners through interaction between observed behaviors, cognitive factors and external environment.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter sets to describe the method and instrument used in collecting data for the study. It is going to examine the research design, area of study, population of the study, sample and sampling techniques, instrumentation, validation of research instruments, data collection (experimentation), data analysis and variables of the study.

3.1 Research Design

According to Amin (2005), "research design is a stated structure and process of conducting a research project, detailing the plan and method for systematically and scientifically obtaining the data to be analysed" Thus a research design is concerned with specifying how the data that is collected from the problem under investigation is analysed. The Quantitative and qualitative Research Design were used and this type of research design according Denzin (1978), which combines a number of methodologies in a study of the same phenomenon, is called triangulation. And to Campbell and Fiske (1959) in Amin (2005), triangulation has to do with collecting and analysing data using quantitative and qualitative methods. According to Amin (2005), quantitative research design are plans of carrying out research oriented towards quantification and are applied in order to describe current conditions or to investigate relationships including; cause and effect relationships. While qualitative design is diverse and used in studying multiple realities found in a complex field situation. Amin (2005), sees observation as method of collecting data that employs vision as its main means of data collection

The parallel experimental design was equally used because the researcher worked with two equivalent groups and productivity was measured from the results of the two treatments. The second served as the control group while the first served as the experimental group.

3.2 Area of the Study

This study was carried out in Yaoundé 1 Sub Division, Mfoundi Division, in the Centre Region of Cameroon. Yaoundé is the capital of the Republic of Cameroon, and the

head quarter of Mfoundi Division. The Mfoundi division consist of thirty (30) Teacher Training Colleges that is one (1) Government Teacher Training college situated at Nlongkak and twenty nine (29) private Teacher Training Colleges. The Government Bilingual Teacher Training College is located in the northwest from the Governor's, Divisional and Sub Divisional Officers offices, in the Nlongkak residential neighbourhood (camp SIC). The school shares the same campus with Government Technical Secondary School Nsam. The school has three GCE Ordinary Level classes (BEPC 1, 2 and 3) two classes; GCE Advance Level one paper (probatoire 1 and 2) and two Advanced level classes (BAC A and B). The administrative block is located in the southwest of the campus, and on its west is located the multimedia hall, bursars' office and the discipline office. The extreme west has a building that host the two GCE Advance Level classes (BAC A and B), the vice principal's office and a section of the Technical College. while the Northeast is occupied by a building that serve as classrooms for the GCE Ordinary level first year (BEPC1), two classes for GCE Advance Level one paper first and second year (PROBATOIRE 1 and 2) and the office of the service in charge of studies and internship. Behind this building are some classrooms used by the Technical College. The northwest of the campus is occupied by the a building that host the classes of the GCE Ordinary level holders second and third year (BEPC 2 and 3), while on the west of this building is another building that serve as classes to the technical college. At the centre there is a football pitch, and the south has the entrance to the college. The school is surrounded from north, east, west and south by the Nlongkak residential quarters.

The choice of G.B.T.T.C. Yaoundé is due to the fact that, the researcher has been working in this area and she is presently there; she is also based in Yaoundé. Also, this area possesses the characteristics of the problem under study. The choice of Government Bilingual Teachers Training College Yaoundé, in particular is due to the fact that it is the only pilot Teacher Training College for primary school teachers in Cameroon. Also, the existence of two advanced level classes made it easier to get the control and experimental groups for the quasi experimental design. Also, the school carries out team teaching which makes it easy to get teachers to part take in the study without influences activities and behaviour. The school has a student population of 329, 71 teaching staff and 40 administrative staff.

3.3 Population of the Study

Kanla (2000) defines population as a group of people living within a particular geographical location having common characteristics. Further, to Polit and Hungler (1999), population refers to the total number of all subjects that conforms or is within a set of specifications, representing the entire group of researcher's interest and from whom the results of the research can be generalized.The population of this study included the target and accessible populations.

3.3.1. The target population

The target population comprised all the 350 student teachers in Government Bilingual Training College (G.BT.T.C) Yaounde, in Mfoundi Division, of the Centre Region.

3.3.2. The accessible

The accessible population was made up of the "A" level classes of G.B.T.T.C Yaounde and the subjects used for the study was General Pedagogy. The classes concerned were BAC A and BAC B of G.B.T.T.C, Yaounde. These Advanced level classes consist of 125 students teachers, 65 in the A class (experimental group) and 60 in the B class (control group).

3.4 Sampling Procedure and Sample

Sampling according to Ogula (2005) is a process or technique used in choosing a subgroup from a population to participate in the study. Amin (2005) sees a sample as a subgroup drawn from a larger population and it's meant to represent all members. For this study, the probability sampling (Random sampling) was used. According to Henry (1990) it's a type of sampling procedure that is characterised by non-zero probability; implying that, every individual in the group under study has equal chances of being selected for the study. Other sampling procedures associated to the probability sampling includes: the simple random sampling; the stratified sampling and the clustered sampling that were equally used in this study.

The stratified sampling was used, taking in to consideration that most of the students were A' Level holders or its equivalence which is the Baccalaureate. The population of the study was divided (stratified) in to two groups that is experimental and control group. BAC A class was the experimental group and BAC B was the control group. The simple random

sampling was then used to select the student from each of the stratum be it the experimental or control group since the researcher did not work with all of the elements constituted in the stratum. Thus the experimental group was made up of 40 student teachers while the control group was made up of 35 student teachers. The researcher equally made used of the clustered sampling, taking in to consideration that the two stratums were in the same locality in order to reduce cost. Equally the groups occurred in their natural environment which is the school or better still the classroom which made it suitable for the quasi experiment.

3.5 Instrumentation

Seaman (1991) holds that data collection instruments denote devices used in collecting data, they include; questionnaires, .interview, observation, tests, and checklists. The research instruments that were used for data collection were achievement test and structured observation because it was a quasi-experimental study. Observation was also used to ease verification.

Achievement Test: Achievement tests are designed to show information on how well learners have learnt what they have been taught (Amin 2005). According to Hawaii Department of Education (1999), achievement test are test developed to measure skills and knowledge learned in a given grade level, usually through planned instructions such as training or classroom instruction. To NM Downue achievement test is any test that measures the accomplishments of an individual after a period of training or learning. Looking at the achievement test that was constructed for this study, it was based on all the work covered during the experimentation period and the learners of both the experimental and control group wrote individually.

Observation: Looking at observation as a method of collecting data, it employs vision as its main means of collecting information. Observation is equally an indirect method of collecting data because most often, the respondent is not fully aware, even if the respondent is aware that she is been observed, the nature and purpose is not fully known to her (Amin 2005). Observation is usually based on a checklist or form that outlines things to be observed. This instrument was considered necessary because it gives first-hand information to the researcher about the subject. It equally provides additional, unexpected information which may be

useful. To Amin (2005), Observation becomes scientific when it is systematically planned and carried out in relation to a certain goal. The researcher might either be a full participant, implying that the observer observes from inside by becoming one of the group member or be a non-participant, meaning the observer position is different from the environment of study. The observer here is invisible, not noticed and is outside the groups that she is observing. The observation in this study was equally a structured one. The observation guide used for this study was constructed in relation to the three hypothesis of the study as well as the different indicators of the hypothesis, it was created in such a way that the observed behaviour was tally each time it occurred until the end of the lesson. It was them calculated in percentages

3.6 Validation of Research Instruments

According to Amin (2005), validity refers to the ability to produce findings that are in agreement with theoretical and conceptual values, that is, to produce accurate results and to measure what is supposed to be measured. Furthermore, Mbua (2003) refers to validity as the accuracy with which an instrument measures what it intends to measure.

Furthermore, Mbua (2003) refers to validity as the accuracy with which an instrument measures what it intends to measure. The lesson on General Pedagogy was prepared together with the achievement test questions of the pre-test and post-test and presented to a team of experienced teachers of the said departments in G.B.T.T.C. Yaoundé for examination and correction. Corrections were made on the lesson and the achievement test based on the principles of suitability and clarity. These corrections were adopted by the researcher and they were then validated by the team of experienced teachers of the said departments. The supervisor checked to ensure that the instrument were appropriate for the collection of relevant data. Corrections were made before approval of instruments as good for final administration.

3.7. Experimentation

Objective: To find out if constructive cooperative learning influences classroom productivity

Requirements: The lessons on pedagogy to be taught, the structured observation guide, the didactics materials and the 4 trained colleagues who helped out with the observation phase.

3.7.1. The procedure used in data collection

The researcher taught selected lesson from the official syllabus to instruct both the experimental and control group; the teaching methods employed here constituted of the active teaching methods for the experimental group and the dogmatic methods for the control group in order to avoid the influence that different teachers can have on the study. The researcher equally trained four other teachers on how to use the observation schedule in order to help her observe as well as tally in the course of observation. Thus the teachers were trained in observation, identifying behaviour under observation, timing and tallying.

The same teacher were involved in the two groups (control and experimental) in order to avoided the impact of personality differences on the study. The same lessons were taught to the control and experimental groups with the experimental group learners worked in groups while with the control group it was a traditional class set up.

Firstly, the researcher proceeded by administering a pre-test to both the experimental and control group on the 17$^{th\ of}$ December 2016 to ensure that both groups were at the same level. The pre-test was based on what learners had already covered on the official syllabus from the 12 of September 2016 to the 14th of December 2016. To verify if the groups were at equal level, the difference between these two groups was measured through the mean, standard deviation and the (T) value of the identified variables. It is also important to note that all the student teachers were A' Level holders and had one year of training. From the result of the pre-test, it shows that the student teachers were equivalent on the bases of pre-academic achievement and previous knowledge on the lesson taught and that which will be taught in the study. General pedagogy is a discipline that is being taught three hours per week that is two hours every Tuesdays and one hour every Fridays; but observation was carried out for 60 minutes every Tuesday because Fridays had just an hour and most often the learners are not in time for lessons.

The above phase was followed by the presentation of the lessons from the 10 to the 13 of January because after the pre test students were about going on holidays so we did not have effective classes on the week of the 19th of Decembers since class councils and disciplinary councils were going on. On the 10-13 of January the researcher taught a lesson on 'the organisation and management of large and complex groups in the context of CBA'. The experimental group worked in average of about 8 people per group and more in the form of debate explaining to other group members which of the classroom is easier to handle (the multigrade classroom or an overcrowded classroom). Whereas in the control classroom, we

had normal lecture method where the teacher explained and asks question as she made progress in her lesson. It is also worthy of note that observation was equally going on every Tuesday for 60 minutes during the teaching process. In the second week, that is from the 17-20th of January 2017, lessons on the organisation and management of large and complex groups in the context of CBA continued since it's a broad theme. Here the experimental group worked in large groups (each column constituted a group) here, group members carried out presentation on the different techniques that could be used in handling large and complex classes and they also respond to the worries of the audience that was listening. In the control group lessons went on normally with the teacher standing in front of the class and explaining concepts, asking and answering questions on the different techniques that could be used in handling large and complex classes. On the third week, we had classes only on the 24th of January because students teacher were preparing for the launching of bilingualism activities and this distorted classes. Student teachers had a lesson on the theme "evaluation". Here Didactic material in a form of a text was handed to groups of about 6 persons (small group) to read and discuss in their groups what they gather from the text. This was equally followed by a series of question whose answers could be found only in the text given to them. Here each group presented its findings in relation to the question given; the students confronted their various answers under the guidance of the teacher and adopted the right response. In the control groups, each individual was given his own didactic material which was the text. The individuals read the text and answer the question that was posed by the teacher. The post-test covered the treatment that was introduced in the experimental group, where in learners worked in group with the help of charts and printed material. It is important to note here that while the researcher was teaching, the other four trained colleagues working with her were busy observing and tallying learners and teacher behaviours based on the observation schedule

Finally on the fourth week, that is on the 7th of March because after 24th of February, classes were distorted by bilingualism week, youth week and teaching practice. A post- test was administered to both the control and experimental group in order to verify if there was a difference in their productivity as well as compare the results of both groups in terms of their academic performance.

3.8 Method of Data Analysis

The inferential statistics was used to analyse the data collected using achievement tests. The Statistical Package (SPSS) was used for the analysis processes.Calculating Median and

Calculating the standard deviation; t-test was used as the most appropriate statistical test for analysing the data to examine the difference between the performance of the experimental group and the control groups.

3.9.0 Variables of the Study

Luma et al. (1999) sees a variable as a characteristic on which people or elements differ from one another.

3.9.1. Independent variables

For Mbua (2003), the independent variables refer to factors that provoke or caused an event. In this respect, the independent variables of this study are multimedia tools:

1. Group interaction techniques

-Interaction amongst learners

-Interaction between the teacher and the learners

-Active learning (participation)

-Social skills

2. Group Management techniques

-Individual accountability

-Size of the group

-Group processing

3. Group expectations

-Group objectives (goals)

3.9.2. Dependent variable

A dependent variable refers to the characteristic that is gotten from the statement of hypothesis (Luma et al. 1999). The dependent variable in this study is learners' productivity.

-Test scores

-Ability to express themselves and communicate

-Ability to manage themselves in their various group by respecting point of views of others

CHAPTER FOUR

PRESENTATION OF RESULTS AND DATA ANALYSIS

4.1. Introduction

This chapter examines the result obtained from the field. The results are presented with the help of tables showing the frequency, mean, standard deviation, percentages. It can be regrouped in to two sections. The first section presents the distribution of the sample population according to each variable and the second examines the verification of hypothesis. The sample population consisted of 75 student teachers of Government Bilingual Teacher Training Yaounde.

4.2. Presentation of the Distribution of the Target Population for each of the Variables

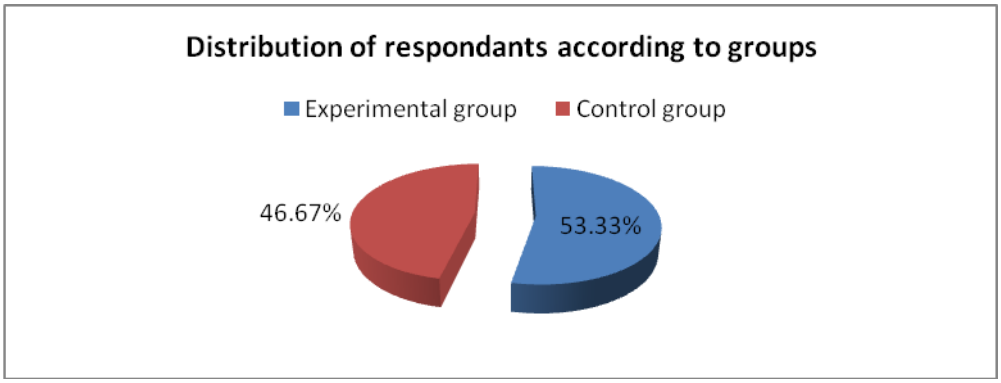
4.2.1. Background Information

Table 4.1: Distribution of the respondents according to groups

Groups	**Frequency**	**Percentage**
Control Group	35	46,67
Experimental Group	40	53,33
Total	**75**	**100,00**

From table 4.1, the control group is made up of 35 participants (student teachers) making a total of 46.67% of the sampled population, while the experimental group is made up 40 participants (student teachers) making up 53,33% of the sampled population. Making the majority of participants from the experimental group. As shown in figure 4.1.

Figure 4.1 Distribution of respondants according to groups



This figure shows that 46.6% constituted the control group and 53.33% constituted the experimental group.

Demographics characteristics of the population

The aim of this section is to be to provide a description of the population studied

Gender

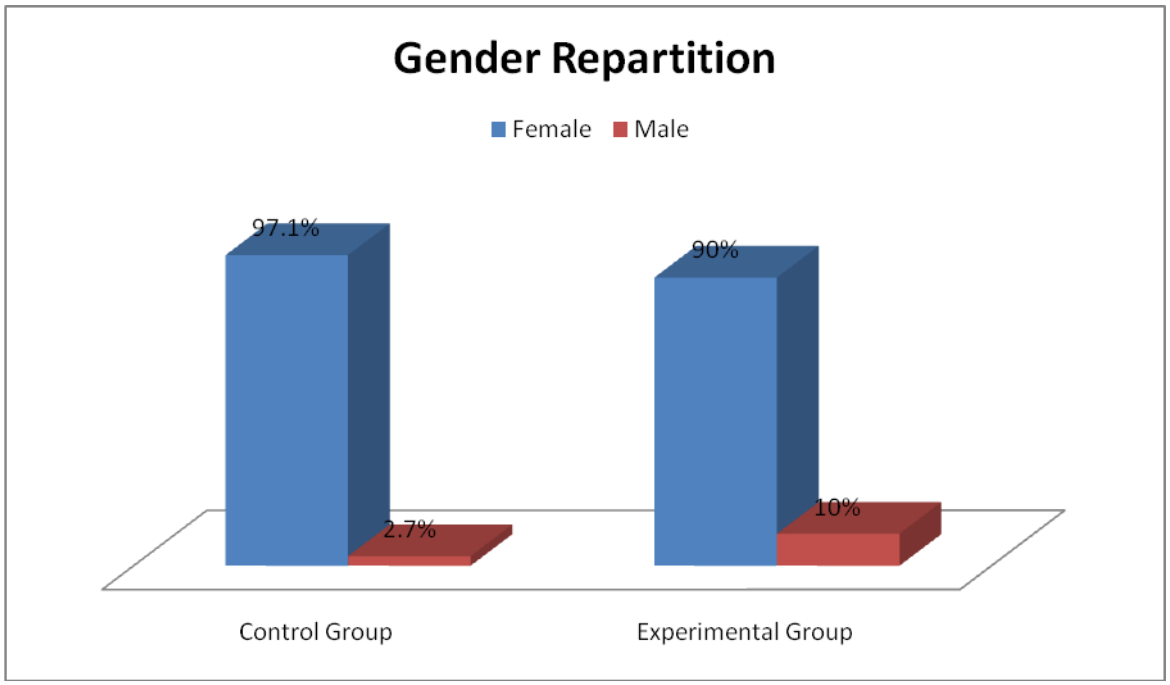
The gender repartition was studied and results highlighted in Table 1

Table 4.2: Gender Repartition

Gender	CONTROL		EXPERIMENTAL	
	Frequency	Percent	Frequency	Percent
Female	34	97.1	36	90
Male	1	2.9	4	10
Total	35	100.0	40	100.0

Table 1 reveals that majority of the respondents are female. In the control group, there are 97.1% of females against 2.9% of males and in the experimental group there are 90% of females against 10% of males as illustrated in figure 4.2

Figure 4.2: Gender repartition



From the figure, it shows that the majority of those who constituted the population of the study were females as can be seen in both the experimental group ; 90% of female against 10% of male and in the control group; 97% of female against 2.7% of males.

Region of Origin

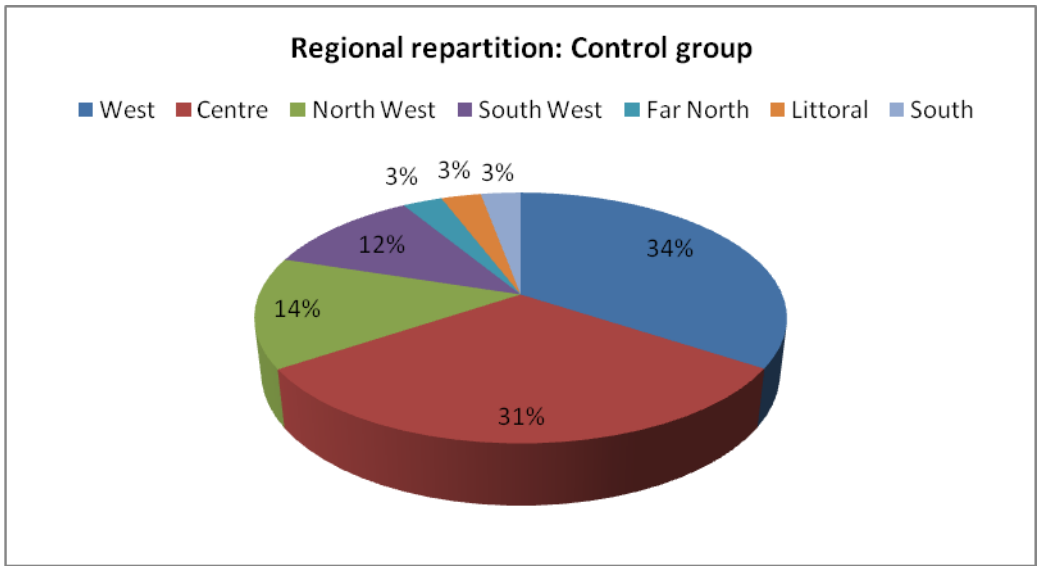
The study also sought to identify the region of origin of the respondents and findings were recorded in Table 2

Table 4.3: Regional repartition

Region	CONTROL		EXPERIMENTAL	
	Frequency	Percent	Frequency	Percent
West	12	34.3	19	47.5
Centre	11	31.4	8	20
North West	5	14.3	5	12.5
South West	4	11.4	3	7.5
Far North	1	2.9	1	2.5
Littoral	1	2.9	2	5
South	1	2.9	2	5
Total	**35**	**100.0**	**40**	**100.0**

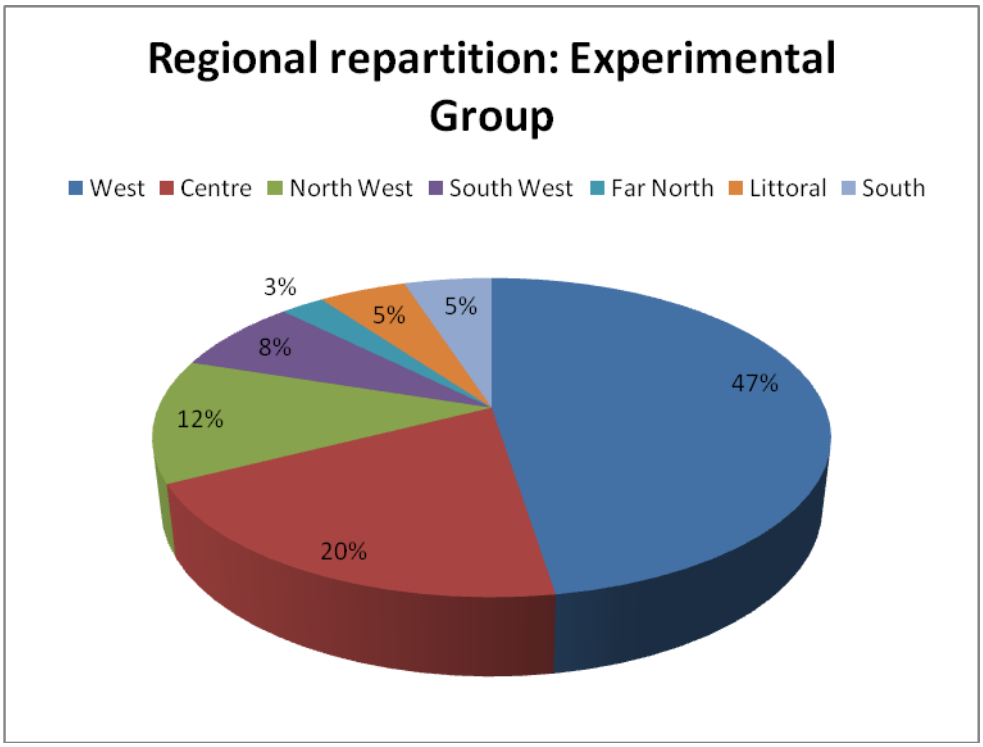
Findings in Table 2 show that in the control group 34.3% of the respondents are from the West, 31.4 from the Centre, 14.3% from the North West, 11.4% from the South West and the Far North, Littoral and South having 2.9% each. In the case of the experimental group, 47.5% are from the West, 20% from the Centre, 12.5% from the North West, 7.5% from the south west, 2.5% from the far North, 5% from littoral and 5 % from the South. As seen in figure 4.3.

Figure 4.3: Regional repartition of control group



From the figure, the majority of those who constituted the control group population of the study are from the west region with 31%, follow by the center consisting of31.4%, then comes the North West with 14.3%. This region is equally followed by the 11.4% for the south west, and the littoral, far north and south having 2.9% each.

Figure 4.4: Regional repartition of experimental group



From this figure, 47.5% are from the West, 20% from the Centre, 12.5% from the North West, 7.5% from the south west, 2.5% from the far North, 5% from littoral and 5 % from the South.

Marital Status

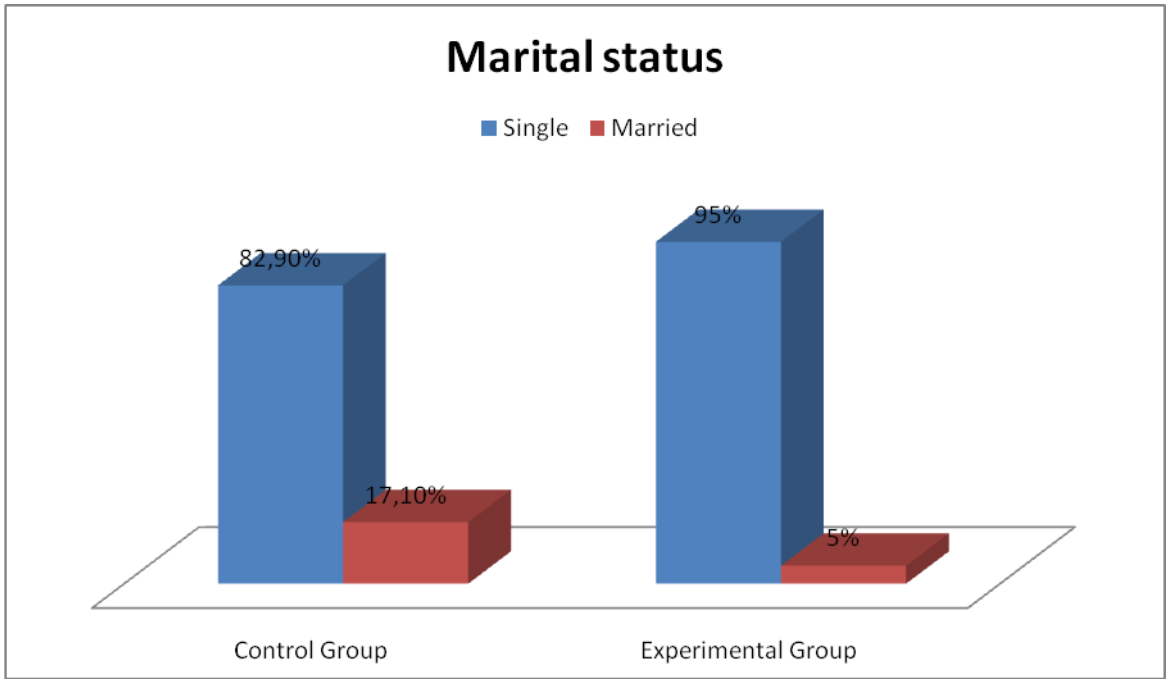
The marital status of the respondents is recorded in Table 3

Table 4.4: Marital Status

Status	CONTROL		EXPERIMENTAL	
	Frequency	Percent	Frequency	Percent
Single	29	82.9	38	95
Married	6	17.1	2	5
Total	35	100.0	40	100.0

Table 3 shows that majority of the respondents are single. This is explained by 82.9% of members of the control group being single and 95% of singles in the experimental group. This is illustrated in figure 4.5

Figure 4.5: Marital status



Highest Academic Achievement

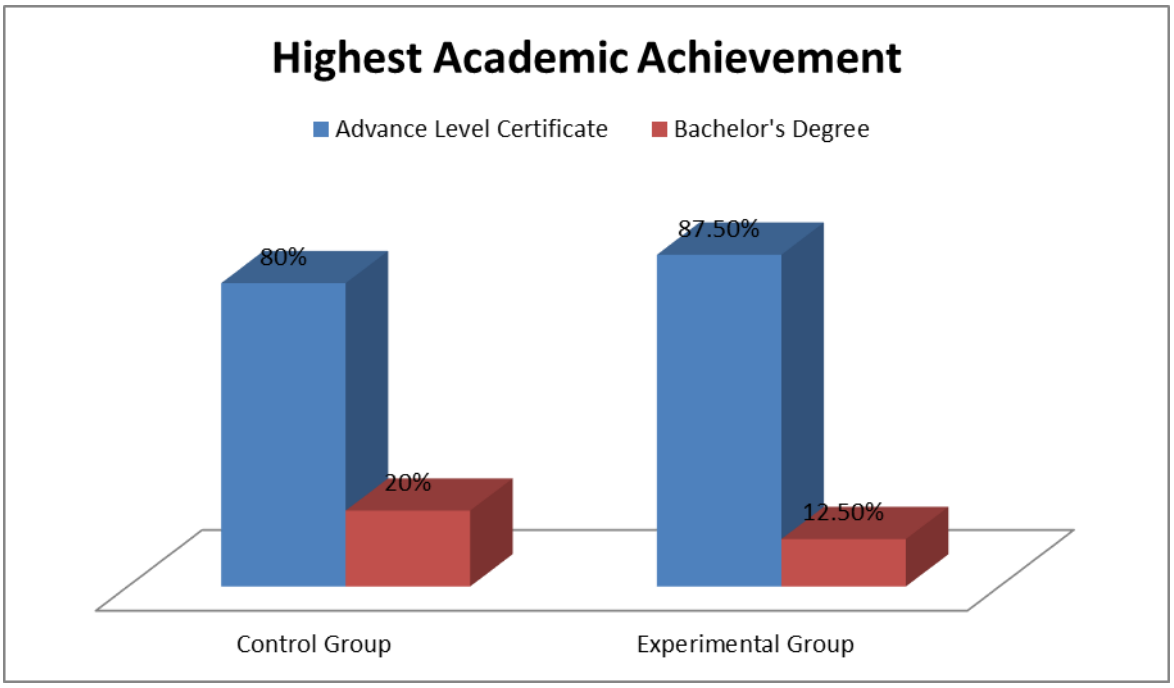
Table 4 shows the highest level of education of the respondents

Table 4.5: Highest Level of Education

Education	CONTROL		EXPERIMENTAL	
	Frequency	Percent	Frequency	Percent
Advance Level Certificate	28	80.0	35	87.5
Bachelor's Degree	7	20.0	5	12.5
Total	35	100.0	40	100.0

The minimum and most represented academic level is the Advance Level (Baccalaureate) which is at 80% in the control group against 87.5% in the experimental group. Whilst 20% of control group members have a Bachelor's Degree (or Licence) against 12.5% in the experimental group. As shown in figure 4.6

Figure 4.6: Highest academic achievement.



From this figure the minimum and most represented academic level is the Advance Level (Baccalaureate) which stood at 80% in the control group against 87.5% in the experimental group. While 20% of control group members have a Bachelor's Degree (or Licence) against 12.5% in the experimental group.

Test of Hypothesis

The test of hypothesis will be done at two levels, firstly, by comparing the difference between the pre-test and the post-test scores, then afterwards by also comparing the difference between the control group and the experimental group.

Comparing pretest-post test using the paired sample t-test

Table 4.6: Paired Samples Statistics

GROUP		Mean	N	Std. Deviation	Std. Error Mean
EXPERIMENTAL	Pretest	13.76	40	1.394	.239
	Posttest	12.41	40	3.552	.609
CONTROL	Pretest	14.21	34	1.548	.245
	Posttest	13.70	34	2.409	.381

The test reveals that in the case of the experimental group, there is a mean score of 13.76 for the pre-test against a mean score of 12.41 for the post-test. The standard errors affected to these values are 0.239 and 0.609 respectively. For the control group, there was a mean score of 14.21 in the pretest and 13.70 in the post test these with standard error of 0.245 and 0.381 respectively

The t-score of 2.207 (Appendix 2) was therefore obtained in the case of the experimental group. At a p-value of 0.03 (Smaller than 0.05) which in other words implied that there is a significant difference between the results of the pretest and those of the posttest in the case of the experimental group.

For the experimental group the t-test score obtained was 1.230 with a p-value of 0.22 (greater than 0.05) which means that there is no significant difference between the results of the pretest and those of the post test.

Hypothesis 1: There is no significant difference between students who have group interaction and those who do not have group interaction in terms of performance.

This hypothesis was tested using an independent samples t-test

Table 4.7: Group interaction results on t-test

Group Interaction	**N**	**Mean**	**Std. Error**	**T-value**	**Sig**
YES	40	15.325	.3623	-4.153	0.000
NO	35	12.543	.5846		

The results reveal a mean score of 15.33 for the group with interaction (experimental group) and a mean score of 12.54 for the group without interaction (control group). The resulting difference as portrayed in appendix 3 gives 2.78. The value of the t-statistic obtained is -4.153 with a p-value of 0.001 (smaller than 0.05). Base on the above, we reject the null hypothesis and conclude that there is a statistically significant difference between groups with interaction and groups without. In other words, group interaction influences classroom productivity.

Hypothesis 2: There is no significant difference between students who have group management and those who do not have group management in terms of performance

This hypothesis was tested using an independent samples t-test

Table 4.8: Group Management Statistics

GROUP	N	Mean	Std. Deviation	Std. Error Mean	**T-value**	**sig**
CONTROL	35	12.543	3.4585	.5846	-4.153	0.000
EXPERIMENTAL	40	16.325	2.2914	.3623		

The results reveal a mean score of 16.33 for the experimental group (with management) and a mean score of 12.54 for the control group (with no management). The resulting difference as portrayed in appendix 3 gives 3.78. The value of the t-statistic obtained is -4.153 with a p-value of 0.001 (smaller than 0.05). Base on the above, we reject the null hypothesis and conclude that there is a statistically significant difference between groups with management and groups without. In other words, group management influences classroom productivity.

Hypothesis 3: There is no significant difference between students who have group expectations and those who do not have group expectations in terms of performance.

This hypothesis was tested using an independent samples t-test

Table 4.9: Group Expectation Statistics

Objectives	N	Mean	Std. Deviation	Std. Error Mean	**T-value**	**sig**
No	35	12.543	3.4585	.5846	-4.153	0.000
Yes	40	15.325	2.2914	.3623		

The results reveal a mean score of 15.33 for the experimental group (with objectives/expectations) against a mean score of 12.54 for the control group (with no objectives/expectations). The resulting difference as portrayed in appendix 3 gives 2.78. The

value of the t-statistic obtained is -4.153 with a p-value of 0.001 (smaller than 0.05). Base on the above we reject the null hypothesis and conclude that there is a statistically significant difference between groups with management and groups without. In other words, group management influences classroom productivity.

Table 4.10Independent Samples Test group interaction Techniques

Independent Samples Test group interaction

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Posttest	Equal variances assumed	7.098	.009	-4.153	73	.000	-2.7821	.6699	-4.1172	-1.4471
	Equal variances not assumed			-4.045	57.712	.000	-2.7821	.6878	-4.1590	-1.4053

From the table above, t test= - 4.153, mean = -2.7821, P = .000 showing that there is a significant relation between group interaction techniques and classroom management

Table 4.11: Independent Samples Test group management techniques

Independent Samples Test group management

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Posttest	Equal variances assumed	7.098	.009	-4.153	73	.000	-3.7821	.6699	-4.1172	-1.4471
	Equal variances not assumed			-4.045	57.712	.000	-3.7821	.6878	-4.1590	-1.4053

From the table, the t-test = -4.153, mean = -3.7821, P = .00

Table 4.12: Independent Samples Test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pretest	Equal variances assumed	.840	.363	-1.298	72	.199	-.448	.345	-1.136	.240
	Equal variances not assumed			-1.309	71.742	.195	-.448	.342	-1.130	.234
Posttest	Equal variances assumed	6.368	.014	-1.806	73	.075	-1.243	.688	-2.614	.128
	Equal variances not assumed			-1.763	59.072	.083	-1.243	.705	-2.653	.168

From the table the t-test for the pre- test is -1,298, the mean is -.448 and the P= .199 and that of the post test; t-test= -1.806, the mean = 1.243, P= .075 showing that there is a significant relation between the pre and post test.

Table 4.13 Paired Samples Test

Paired Samples Test

GROUP			Paired Differences					t	df	Sig. (2-tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
CONTROL	Pair 1	Posttest – Pretest	1.2647	3.5189	.6035	-2.4925	-.0369	-2.096	33	.044
EXPERIMENTAL	Pair 1	Posttest – Pretest	1.5625	2.4734	.3911	.7715	2.3535	3.995	39	.000

From the table the t-test for the control group stands at 2.96, the mean = 1.2647 as compared to that of the experimental group whose t-test= 3.995, mean= 1.5625 and P= .000 showing that constructive cooperative learning significantly influences classroom productivity.

4.3 DISCUSSION OF STRUCTURE OBSERVAION RRESULTS

Table 4.13 showing results obtained from structures observation for the experimental group

VARIABLES	INDICATORS	Frequency	% of first observation	Frequency	% of 2nd observation	Frequency	% of 3rd observation	
Group interaction Techniques	Interaction between learners	40	16.66	40	16.66	45	18.75	Here, we can realize that classroom interaction was constant during the 1st and 2nd week but progress was made by the third week of observation. Teacher and student's interaction, participation and learners use of social skills increased respectively from the first to the third observation.
	learners interaction with teacher	50	20.83	45	18.75	54	22.5	
	Participation (active learning)	28	11.67	40	16.66	60	25	
	Appropriate use of social skills	26	10.83	30	12.5	40	16.67	
Group management Techniques	Individual accountability	25	10.44	30	12.5	30	12.5	Individual's accountability was on an increase from the 1st to the 2nd observation and became constant by the 3rd. The size of the group for the first observation was average, the 2nd was large and the 3rd small.
	Size of group (small, average and large)		average		large		Small	
	Group processing	19	7.91	24	10	30	12.5	

								Group processing also increased respectively
Group expectations	Group objective	20	8.33	20	8.34	24	10	Group objectives also increased respectively from the 1st to the 3rd observation.
Total	-	240 hours	100	240 hours	100	240 hours	100	

Here observation was carried out in three weeks respectively. The concerned discipline here was General pedagogy that is taught on Tuesdays for two hours and Fridays for one hour in a week. The observations were carried out on the 10 of January, 17th, of January and 24th of January. They were observed for 60 minutes every Tuesday of the week and the interval for observation was 15seconds. The observation guide consisted of the three hypotheses of the research, 9 indictors to assess classroom productivity and the observation interval was ten seconds. This form was used to evaluate productivity on both the experimental and control group. It is important to note here that learner was observed in groups not individually.

From the table above, we noticed progression from the first observation to the third as we look at the different indicators. Looking at the first hypothesis that deals with group interaction techniques, the following aspects were observed. In relation to interaction amongst the learners, they argued amongst themselves trying to make others reason with them as they debated on which of the complex group is easier to handled. Interaction amongst learners was equally observed in the second lesson during their presentations on the techniques of handling complex classes. Here, group members shared the presentation amongst themselves as it was not done by a single member. Interaction could also be seen in the third lesson where in, group members who were smart took time to explain the text (didactic materials) to members who did not understand as could be judged later on from their responses, which made the

researcher to conclude that the concepts were well understood in the same light and According to Allright (1984), classroom interaction is a productive technique in which classroom learning is managed through the process of negotiation that can be seen in interaction. As far as the writer is concerned, interaction enhances learner's development as they are able to acquire knowledge and ability through interaction. That is to say interaction amongst the learner and teacher gives room for learning opportunity which motivates the learner's interest and potentials to communicate with others, which goes a long way to facilitates not only language development but also learners' development. Classroom interaction is equally productive for language development. There are many ways of attaining classroom interaction t. This only implies that, they had first of all explained what the text was all about. Looking at student and teachers interaction, it was clear in all of the lessons as the teacher played the role of the facilitator. When learners argued out their worries the teacher led them to the final or correct answer as he made the group members to reason out with him. Questions were equally asked to group members during their presentations which could not be clearly answered and the teacher always intervened. Group members were equally actively participating in the different task given them. In the first lesson, group members were actively arguing either 'for or against' in relation to which complex group or classroom is easier to manage. Generally, classroom interaction facilitates language development and communication competence in learners. Classroom interaction does not only contribute to language development but equally co-construction of learner's self and cognitive development. According to vygotsky (1985), in his social cultural theory, learning is to awaken a variety of internal developmental processes that are able to operate only when learners have the opportunity with other people in his environment as well as operate with peers. To him, classroom needs to reflect possible outside sociocultural and institutional realities. Vygotsky (1985) equally says when we talk of classroom interaction; we are looking at components such as collaboration, dialogue, negotiation and co-construction.

This implies that cooperative learning has an influence on the learner's performance taking into consideration that working in their small groups they are able to interact, thus awakening a variety of internal developmental processes.

. In the second lesson group members were presenting their own portion of the presentation on techniques of managing complex classroom and in the third lesson, all took part in making their friends to better understand the text and responded to the questions that

were posed. Group members also made use of social skills as could been seen during the debate and the presentation. Here member members gave a listening ear to understand the different point of views, members equally talked only when the speech was given to them. So they did not hush other group members down, they did not make the scene also look as if it was a quarrel. They communicated what they had in mind when they were given the room to speak.

With regards to the second hypothesis, Individual accountability was clearly seen during the debate where in every group member had his point of view to put forward. Also in the presentation on the techniques of handling complex classes, each individual group members had his portion to present and expatiates where it was necessary. In all three lessons, student teachers were grouped be it in a large group, average or small group. But worthy of note here is that groups performed at their best when it came to small group. Group processing was equally observed .for example when the text was given members took upon themselves to help other group members that were not in line. Also from the text, arguments rose on the definition of some concepts such as (domain and level of ability of Bloom's Taxonomy). Group members, who understood better, were able to tell their friends which of the definitions were good and that which was not clear as they explained more. According to Eric Johnson and Johnson (1989), over 600 studies in the past 90 years have been dedicated to validating the assertion that students learn better when working together in small group. This group can either be seen as collaborative learning, cooperative learning or group works. According to Davis (1993), research has proven that learners perform better, are able to retain knowledge longer and even appear with course materials when they learn in group.

Looking at group expectations, from the beginning, members thought their contributions will be assessed as individuals and not as a group. But as time went by, they understood that they needed collective effort to succeed. This could be observed in the second lesson on the presentation of techniques in handling complex classroom. Here, a group member got stock in his presentation and was helped by another group member who took over and explained what the friend had difficulties in explaining and he equally presented his own portion of the work. This implies that all of them were working towards the attainment of a common objectives or goals. Research as shown that group processing have many positive effect such as examining cooperative learning with group processing, examining cooperative

learner without any group processing and the examination of individualistic learning. Johnson, Johnson, Stanne and Garibaldi (1990), say studies show that comparing cooperation with no processing, cooperation with instructor processing, cooperation with instructors and participants processing and individualistic effect, the results show that all the three cooperative condition performed higher than individualistic condition. Archer –kath et al (1994), find out that group processing with individual feedback was more effective than group processing with whole group feedback**.** Harrison, Price and Bell (1998), for a group to have a good orientation as well as work better, they must share a common goal that is working towards the stated objectives of the group. Group members must have a high level of commitment towards the attaining the objectives of the group by understanding that working together as a group is better than what they can do on their own. According to Stogdill (1972), when group members have high commitment towards attaining group goals (objectives) they tend to perform better, thus increasing classroom productivity.

From this observation, constructive cooperative learning influences classroom productivity. This is because learners were not left the same after being exposed to these different indicators.

Table 4.14 Showing Results obtained from structured observation of the control group

VARIABLES	INDICATORS	FREQUENCY			
		% of first observation	% of 2nd observation	% of 3rd observation	Remarks
Group interaction Techniques	- Interaction between learners	absent	absent	absent	Interaction between learners was absent because the learners did not work in group here. With interaction between learners and teachers started on an increased from the 1st observation but dropped drastically before the 3rd.Active learning increased respectively from the 1st to the 3rd observation. Appropriate use of social skills was absent because they did not work in groups
	- Interaction teacher and learners	59.29	59.05	34.15	
	- Participation (active learning)	13.95	16.87	18.29	
	- Appropriate use of social skills	absent	absent	absent	
Group management Techniques	- Individual accountability	12.5	47.56	20.08	Individual's accountability was rising and falling from the 1st to the 3rd observation. Size of group and group processing were absent.
	- Size of group (small, average and large)	absent	absent	absent	
	- Group processing	Absent	absent	absent	
Group expectations	- Group objective	absent	absent	absent	Group objectives were absent here too.

From the table above, we noticed that not all of the indicators were present because the learners did not work in group as we had in the experimental. This explains the cause of higher percentages since we had just few indicators to work on. With regards to the first

hypothesis, Interaction amongst the learners was absent because student teachers did not work in group. The interaction between the learners and teacher was observed in all three lessons as learners were given the opportunity to ask questions where they were not clear and equally responded to the teacher's questions. For example, after reading the text which served as didactic material on the theme 'Evaluation", Learners responded individually to the teachers as she posed questions. Implying that, interaction was mostly based on questions and answers as well as clarifications. The learners were actively involved by working on their individual didactic materials (text and the collective one that was put on the board) from which discussions on the lesson was based. There was individual's accountability because they exploited the didactic situation individually as well as respond to the teacher on individual's account. Appropriate use of social skills was equally absent because the learners worked individually. We equally observed that the learners were active to some given extend. They answered the teacher's question; they equally asked questions were they did not understand in all of the three lessons.

In relation to group management techniques, individual's accountability was high even though it was fluctuating. It is high because most of the activities carried out by learners were done individually; in all three lessons, the learners sought to understand and responded to questions individually based on their own worries. So individuals were accountable for the responses or solutions they proposed. Group size was absent as well as group processing; learners worked alone. Group expectations were absent. Each individual strived for his or herself; there was no common objective but every individual had their own objectives that they were struggling to attain.

From the above observation, it is clear that those who were exposed to more indicators learned better as it was easier for them to have a good mastery of that which was been taught than those exposed just to some few elements.

Experimental Group

Section one. Observation results on group management techniques and classroom productivity

Here the indicators examined were: interaction between the learner, teacher and student interaction, participation (active learning) and the use of appropriate social skills.

From the first week of observation, that is the week on the 9th of January to the last week, interaction between learners rose from 16.66-18.79% indicating that as time went on, learners became interested in working in their different groups as they could now share ideas. Learners' interaction with teacher equally increased up to 22.5% by the last week of observation, implying that the teacher was no longer the monopoly of knowledge as the learners were given room to expressed themselves as well as construct their own knowledge through the help of teacher. What is more, is learner's participation, learners were actively working in their individual group to complete the task given to them as this raised from 11.67% on the first observation to 25% by the third observation. Thus they all worked hard in their different groups to come out with results. Social skills were appropriately used to expressed ideas and make others understand the different views points of group members, in order to complete the task given. To this, there was an increased from 10.83-16.6% by the third week of the observation.

Section 2: observation results on group management techniques and classroom productivity.

The indicators used here were: individual's accountability, group size and group processing. Looking at individual's accountability, group members did the respective task assigned to them to complete the group task as there was an increased from 10.44-12.5% by the end of the observation phase. Thus as time went by, learners took the individual tasks given them in their respective groups seriously so as to contribute to the success of the group. With regards to the size of the group, the first week of observation saw group members working in average groups of about 8 persons, the second saw group members working in large groups of 10-12 persons and the last phase examined members working in small groups of 4-5 persons. It was equally noticed here that the smaller the group, the easier it was to work with them and the better their productivity. Examining group processing, we notice that, learners during the first week were not open and could not really share ideas as well as help other group members to better understand the task given to them. But by the end of the observation, group members became open and willing to help the slow learners in their individual groups so as to complete group's tasks successfully.

Section three: observation results on the group expectations and classroom productivity

Here the indicator that was examined was group objectives (goals). From the beginning of the observation phase, learners were not all willing to work for a common good for the group as the slow learners stayed behind and the fast learners forged ahead but by the third week of observation, group members understood that every body's point of view was necessary for the advancement of the group. Thus took up the task to respect the goals of the group through doing of what is expected of each and every one.

Control Group

Section one: observation results on the group interaction techniques and class productivity

The indicators examined here were: interaction amongst the learners, student and teacher interaction, active learning and appropriate use of social skills. Looking at interaction amongst the learners, it was absent as student did not work in group. There was somehow interaction between the learners and the teacher which was not consisted as it started from 59% in the first observation, 59.05% in the second and 34.15% in the third observation. Here the interaction took the form of the teacher posing some questions and the learners responding. In relation to active learning, were noticed that the learners were actively involved as they came up with different solutions from the didactic situation that was presented to them. As such they were active in providing answers to the problems posed to them; here progress was made as far as active learning is concerned as seen in the three different observation phases 13.95% for the 1st, 16.87% for the 2nd and 18.29% for the final phase. Appropriate use of social skills was equally absent for the learners worked individually

Section two: observation result on group interaction techniques and classroom productivity

Individual's accountability was rising and falling from the 1st to the 3rd observation. Size of group and group processing were absent. Here the learners worked individually based on the problems posed to them. So there was no consistency in the observation as the learners worked as they were inspired or how well the questions or problem situation was understood by them. Group size was equally absent as well as group process because learners worked individually.

Section three: observation result on group expectations and classroom productivity

The indicator that was been examined here is group objectives or goal. But because there was no group work with the control group, this aspect was absent.

Conclusion

From the above analysis, it is clear that cooperative learning influences class room productivity. With the use of cooperative learning, many aspects (indicators) come into play which cannot leave learners the same; where as in the control group, most of the indicators were absent exposing learners just to some few indicators. This only implies that, those who are exposed to many indicators stand a better chance of excelling and this will equally go a long way to influence productivity.

4.4. Verification of Hypotheses

4.4.1. Hypothesis I: Group interaction techniques significantly influence classroom productivity.

Table 4:15 t-test comparing the means of classroom productivity in relation to group interaction: Paired Samples Statistics.

Group Interaction	N	Mean	Std. Error	T-value	sig
Experimental group	40	15.325	.3623	-4.153	0.000
Control group	35	12.543	.5846		

The results reveal that, the mean score of the experimental group that is expose to classroom interaction stood at 15.33 and that of the control group without interaction scored a mean of 12.54. Thus resulting to a difference of 2.78 as can be seen in appendix 3. The value of the t-statistic obtained is -4.153 with a p-value of 0.001 (smaller than 0.05).The null hypothesis was rejected and the alternative retained. In other words, group interaction influences classroom productivity. Chaudron (1988), states that interaction is significant because, it is through interaction, that learner can decompose the teaching learning structures and derive meaning from classroom events. Moreover, Allwright and Bailey (1991), state that through classroom interaction, the plan produces outcomes (input, practice opportunities, and receptivity).Thus interaction has a great role to play in the teaching and learning process, thus

affecting learner's productivity. There is a significant relationship between group interaction techniques and classroom productivity.

4.4.2. Hypothesis 2: Group management techniques significantly influence classroom productivity.

Table 4.16 t-tests comparing the means of classroom productivity in relation to group management: Paired Samples Statistics.

GROUP	N	Mean	Std. Deviation	Std. Error Mean	**T-value**	**sig**
CONTROL	35	12.543	3.4585	.5846	-4.153	0.000
EXPERIMENTAL	40	16.325	2.2914	.3623		

From the table 4.16 above, the mean score of the experimental group with group management stands at16.325 while that of the control group without group management had a mean score of 12.54 bringing out a difference of 3.78 as seen in appendix 3. The value of the t-statistic obtained is -4.153 with a p-value of 0.001 (lesser than 0.05). With this, the null hypothesis was rejected and the alternative retained. Implying that group management techniques influences classroom productivity. According to Eric Johnson and Johnson (1989), over 600 studies in the past 90 years have been dedicated to validating the assertion that students learn better when working together in small group. This group can either be seen as collaborative learning, cooperative learning or group works. According to Davis (1993), research have proven that learners perform better, are able to retain knowledge longer and even appear with course materials when they learn in group .To him, establishing the appropriate conditions for learning in a group setting is a critical component for success. This is because, one of the conditions requires that the teacher should see in to it that, individual members in a group are actually working on the material given rather than, simply taking credits for other group members. Thus, there is significant relationship between group management techniques and classroom productivity.

4.4.3. Hypothesis 3: Group expectations significantly influence classroom productivity.

Table4 1.7: t-test comparing the means of classroom productivity in relation to group expectations: Paired Samples Statistics.

Objectives	N	Mean	Std. Deviation	Std. Error Mean	**T-value**	**sig**
Control group	35	12.543	3.4585	.5846	-4.153	0.000
Experimental group	40	15.325	2.2914	.3623		

From the table, the experimental group with group expectation had a mean of 15.33, against a mean score of 12.54 for the control group without group expectations. The resulting difference as portrayed in appendix 3 gives 2.78. The value of the t-statistic obtained is -4.153 with a p-value of 0.001 (lesser than 0.05). In this light, the null hypothesis was rejected and the alternative retained. Meaning group expectations influences classroom productivity. Moreover Locke et al (2006) say the relationship between group goals and individual goals influences group performance that is classroom productivity when goals are compatible there is a positive effect, but when goals are incompatible the effects can be detrimental to the group's performance. In order words all group members have to work towards the common good of the group that is accomplishing the objectives (goals) of the group. Harrison, Price and Bell (1998) say for a group to have a good orientation as well as work better, they must share a common goal that is working towards the stated objectives of the group. Group members must have a high level of commitment towards the attaining the objectives of the group by understanding that working together as a group is better than what they can do on their own. According to Stogdill (1972), when group members have high commitment towards attaining group goals (objectives) they tend to perform better, thus increasing classroom productivity. There exist a significant relationship between group expectations and classroom productivity.

CHAPTER FIVE

INTERPRETATION OF RESULTS, RECOMMENDATION AND CONCLUSION

This chapter focuses on the interpretation of results and discussion of findings of study, recommendations that could enhance better classroom productivity, practical implication of the study and suggestions for future research.

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5.1. Summary of Findings

The study was aimed at investigating the influence of Constructive cooperative learning on learner's productivity.

In this study, the researcher formulated three research hypotheses. The achievement tests and structured observation guides were the main research instruments used by the researcher. Data was collected and analyse using mean, standard deviation, ANOVA and t test. From the analysis the following were obtained:

a) Group interaction techniques significantly influence classroom productivity.
b) The use of group management techniques significantly influences classroom productivity.
c) Group expectations have significant influences on classroom productivity.
d) Observations equally show that, the use of group interaction techniques, group management techniques and group expectations influence classroom productivity. Thus, constructive cooperative learning significantly influences classroom productivity.

5.2. Interpretation of Results

This section discusses each hypothesis based on findings and backed views of authors.

5.2.1. The use of group interaction techniques significantly influences classroom productivity.

The findings show that group interaction techniques influences classroom productivity.The results reveal that, the mean score of the experimental group that is expose to classroom interaction stood at 15.33 and that of the control group without interaction scored a mean of 12.54. Thus resulting to a difference of 2.78 as can be seen in appendix 3. The value of the t-statistic obtained is -4.153 with a p-value of 0.001 (smaller than 0.05). The mean of the experimental group which was exposed to classroom interaction is higher than that of the control group. Implying that classroom productivity significantly increased. The null hypothesis was rejected and the alternative retained. It is in this light that Vygotsky (1972) in his Zone of Proximal Development reiterates the fact that when learners work in team or small groups; the weaker students benefit from the more knowledgeable ones. That is to say through collaboration or interaction, learner's cognitive skills that is in the process of maturing can be honed. This explains why Vygotsky (1972) further explains that the upper limit in the Zone of Proximal Development can only be fruitful through social interactive support from peers and teachers. This means that as learners interact together, their productivity is influence.

According to Allright (1984), classroom interaction is a productive technique in which classroom learning is managed through the process of negotiation that can be seen in interaction. As far as the writer is concerned, interaction enhances learner's development as they are able to acquire knowledge and ability through interaction. That is to say interaction amongst the learner and teacher gives room for learning opportunity, which motivates the learner's interest and potentials to communicate with others, and goes a long way to enhance classroom productivity.

5.2.2 Hypothesis 2: Group management techniques significantly influences classroom productivity

The findings confirm that, group management techniques influences classroom productivity**.** The mean score of the experimental group with group management techniques stood at16.325 while that of the control group without group management had a mean score of 12.54 bringing out a difference of 3.78 as seen in appendix 3. The mean score of the experimental group was higher than that of the control group. The value of the t-statistic obtained is -4.153

with a p-value of 0.001 (lesser than 0.05). With this, the null hypothesis was rejected and the alternative retained. Implying that group management techniques influences classroom productivity. It is in the same light that Davis (1993) says learners perform better and are able to retain knowledge longer and course materials when they learn in group .To him, establishing the appropriate conditions for learning in a group setting is a critical component for success. This is because, one of the conditions requires that the teacher should see in to it that, individual members in a group are actually working on the material given rather than, simply taking credits for other group members. If the group members properly managed, it's going to influence classroom productivity.

5.2.3. Group expectations significantly influence classroom productivity.

Based on the findings, it is confirmed that group expectations influence classroom productivity. The mean score of those with group expectations stood at 15.33, against a mean score of 12.54 for the control group without group expectations. The resulting difference as portrayed in appendix 3 gives 2.78. Thus, there was a significant increase in the mean of the experimental group that was exposed to groups expectations as compared to that of the control group; meaning there is a significant increase in classroom productivity .The value of the t-statistic obtained is -4.153 with a p-value of 0.001 (lesser than 0.05). In this light, the null hypothesis was rejected and the alternative retained. It is in the same view that Stogdill (1972) says when group members have high commitment towards attaining group goals (objectives) they tend to perform better and will influence classroom productivity. Without a purpose or objective (goal) groups will eventually splinter in to separate individuals working towards their own personal agenda or better still members become less committed to group's task; and not for the common good of the group which will have an influence on class room productivity. Members know what is expected of them and know that they will be held accountable by other group members will stay committed to the objectives of the group which will equally classroom productivity.

5.3. Limitations of the Study

The researcher faced some difficulties in the course of carrying out the study such as:

i) **Financial constrains**: The researcher had to print out most of the materials used for the experimental lesson. The researcher equally had to motivate the four trained teachers that

assisted her in carrying the experiment especially at the observation phase. The researcher also constantly went to Nlongkak, the area where she was carrying her experiment which was also costly for her.

ii) **Limited time:** to carry out the experiment at Government Teacher Training College was not easy for the researcher who had to deal with the fact that learners have to stay out of school for 3 weeks while taking part in teaching practice as well as the different sequence evaluations and co-curricular activities that perturbed classes and the researcher's work.

iii) **Mobilising assistants and absence of some of the sample population**. It was not always easy for the researcher to convince the train teachers to be in school and help her with the experiments. What is more, student teachers were not consistent in attending classes which affected the accessible population as planned by the researcher.

5.4. Recommendations

Based on the results of the findings, the researcher came out with some recommendation which can bring about improvement in class room productivity.

5.4.1. To Teachers:

Constructive cooperative learning influences classroom productivity so the teachers should be trained more on the use of it since one of the goals of teaching is to see the learners succeed. Moreover, observation schedule further illustrates that constructive cooperative learning builds other skills in the learners that does not only end at making the learners perform well but to equally help him integrate in the society. Thus, teachers should be trained on the skills and techniques that will enhance better use and management of cooperative learning so as to enhance learner's productivity. They should see in to that learner are given the opportunities to work in group to enable them develop other social skills.

5.4.2. To the Learners:

Let them be to exposed to such type of learning techniques right from their early days in school to enable them become use to so as they grow older; because from what the researcher observed, when the learners were put in the various groups to work from the first day, most of them were not too comfortable working as team and they were only struggling to project their own self-interest, which had an effect on the group's performances as well as on the students.

5.4.3. To the school administrators:

They should organize seminars for the teachers in order to equip them with skills and techniques that will enhance the use of cooperative learning. They should also provide teachers with the necessary facilities needed for the implementation of constructive cooperative learning .This is because if cooperative learning is effectively managed, it adds a plus to classroom productivity.

5.4.4. To Policy makers and the state:

They should try to come out with syllabuses that can make use of methods and techniques that can enhance the use of constructive cooperative learning so as to improve on the quality of education as well classroom productivity.

5.5 Practical Implication of the Study

5.5.1 Didactic implication

Didactics is the science and arts of teaching. A study like this will enlightened the teachers on how to manage the learners when they work in group through defining the different activities they have to do during the teaching and learning process to ensure that learners have learnt what is expected of them and as such improve classroom productivity.

5.5.2 Pedagogic Implications:

Classroom interaction techniques: There is an adage that goes thus: together we stand and divided we fall. From classroom interaction, learners will be aware that collective effort is necessary for success in life. Through classroom interactions, social skills like communication are inculcated in the learners which will be used back in the society since the school is a subset of the society. Interaction can also bring about division of labour as some members may opt to take up particular tasks which will in turn influence productivity be it even in accompany. Nobody has a monopoly of knowledge so the more we interact, the better the ideas the better the output of the school or company.

Group management techniques: such a study will make the learners to understand as well as the society the outcome if group members are not well managed; they will be a problem on learner's performance because the learners will work the way they are pleased and at their own convenient, which will influence productivity. Be it in a company, management must direct or guide the activities of employees, they should be able to manage the human and

financial capital if the economy must be boosted which will in turn led to an increase in output.

Group Expectations. It is equally true that if one does not know where he or she is coming from, he will eventually not know where he is going. With group expectations, the required performance is stated; it's been made known. The competence to develop is made know to all. In sum there are objectives that are to be met which orientates group members activities or workers in any given company. When individuals know what is expected of them be it in a group, company or organisation, activities will be carried out with precision and certainty thus influencing productivity.

5.5. Suggestions for Further Research

This study investigated the influence of constructive cooperative learning on classroom productivity in Government Teacher Training College. For further research; studies can be carried out in the following light:

- The same study can be carry out in primary school.
- Focus was more on the learners so future investigation should lay more emphasis on teacher's productivity.
- Cooperative learning and the development of appropriate social skills.

GENERAL CONCLUSION

To fit in the fast changing society of today, young people have to be flexible and creative so as to think critically, solve daily life problem, interact, communicate, and use social skills appropriately in order to contribute to the growth and development of the society. From the adage that goes thus 'one hand con not tie a bundle' and the school being a subset of the society in which we live, young people have to come to the understanding that they cannot succeed all by themselves for they need to work with others (cooperate) to succeed. Thus working with peers today in little group is orientating them for the larger society of tomorrow.

From the findings, there is a significant relationship between constructive cooperative learning and classroom productivity. Group interaction techniques, Group management techniques all go a long way in enhancing classroom performance as seen in the light of Barry, k and King, L (2002), cooperative learning are generally positive especially in cases where it is compared to traditional approaches such as whole class teaching. These positive effect influences both the cognitive or academic achievement as well as various affective and non-cognitive factors.

Barry and King (2002), reiterate the fact that because cooperative learning is a learner centered approach it focuses on learner's development. Thus apart of the subject that is being taught by the teacher, through cooperative learning, learners develop many social and interpersonal skills such as acceptance and respect for others, language proficiency as well as working with others in a team. Skills which are becoming important in today's world of globalization.

According to Kagan (1999), over 500 research studies accept the fact that cooperative learning brings about gains across all content areas, all grade levels, and among all types of learners such as learners with special needs ,gifted children, high achieving, rural, urban and all ethnic and racial groups.

Kagan (1999) put forward the following arguments as strength of cooperative learning:

- Given students' views and ideas are accepted by peers, it helps increase their self esteem.
- Interracial friendship in a group work develops interracial and intercultural harmony.
- Given the learners are working in group, communicating among learners become easier and also helps in gaining communication skills.

- Interpersonal skills are developed since learners are to interact with each other.
- Through cooperative learning, learners learn discipline like waiting for their turn to talk and talk one at a time.
- By listening to and accepting critics from team members, students get to learn more about themselves and may even improve.
- Fosters student's responsibility for learning.
- Allows every learner to participate in class as compared to volunteering where always the same learners raise their hand and participate. .

Constructive cooperative learning does not only influence academic performance but equally enhance the development of appropriate social skills. Let teachers and learners be educated more on the techniques of constructive cooperative learning to enhance efficient use and management of cooperative learning in the classroom so as to keep on improving on classroom productivity.

This work consists of 5 chapters. Chapter one examined the back ground to the study, chapter two looked at the review of related literature, chapter three examined the research methodology ,chapter four examined presentation of results and data analysis and finally chapter five was based on interpretation of results, recommendation and conclusion

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APPENDIXES