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SECTION OF GUIDANCE AND  
COUNSELLING

**CLASSROOM INTERACTION AND ITS EFFECTS  
ON THE ACADEMIC PERFORMANCE OF  
STUDENTS: the case of some selected public schools in  
Yaounde.**

*A dissertation submitted in partial fulfillment of the requirements for the award of  
A Post Graduate Diploma in Guidance and Counseling  
(DIPCO)*

By

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# CERTIFICATION

We here by certify that this work entitled “classroom interaction and its effects on the academic performance of students “The case of some public schools in Yaounde I. it was carried out by **FOLEFACELIZABETHNKENGAFACK**.

It has been corrected in accordance with the comments of the Jury to our satisfaction. We therefore recommend that this dissertation be bound and copies deposited in the department of sciences of education of ENS Yaounde.

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**Date**\_\_\_\_\_/\_\_\_\_\_**2016**

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**Dedicated to my mother, daughter and sister**

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## **LIST OF ABBRAVATION**

**DSCE:**Growth and Employment Strategy Paper

**SBA :** Skill Based Approach

**CBA:** Competence Based Approach

**TCA:** Teacher's Centered Approach

**LCA:** Learner's Centered Approach

**DP:** Dependent Variable

**ID:** Independent variable

**ICT:** Information and Communication technology

**HBT:** Harourt Brace Jovanovich

**DF:** Degree of freedom

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## ABSTRACT

The main focus of this study is to investigate on the effects of classroom interaction on students' academic performance. Also, to verify the extent to which there is a relationship between two way communication, one way and laissez-faire communication in classroom on students outcome. Following the objectives of this study, the research questions were also put in place to lead the study. Some theories and related literature were reviewed to justify the study and the main hypothesis whereas the secondary hypotheses were raised to measure the significant relationships between the two variables. Two instruments were used in collecting data from two public schools in the central region of Cameroon (Yaoundé).questionnaires and observation were used to collect data and data analysis was done with the used of descriptive and inferential statistics. The hypotheses were verified using Chi-square test. The final reveal of this study indicates that *there is no statistically significant relationship between two way communication and the outcome of students at the selected schools. The second hypothesis reveals that there is no significant relationship between one way communication and the outcome of students at the selected school and the third hypothesis also reveals that there is no significant relationship between laissez faire communication and the outcome of students at the selected schools.* Recommendations were made and teachers were advised not to stay focus on one aspect of the transmission process of knowledge but seek to find the best communicative strategies that will suit their classrooms thereby maximizing the growth in performance of their learners. Better still, the government, parents and school administrators were not kept aside for the recommendations of this study but advised to put in new strategies to improve education in Cameroon by organising seminars and workshops.

## RESUME

Le but principal de cette étude est de faire une investigation sur les effets d'interaction entre les élèves et l'influence sur leurs performances scolaires. Elle permet aussi d'étudier l'étendue à laquelle il y a une relation entre 'two way communication, one way communication' et 'laisser faire communication' entre les élèves d'une salle de classe. Suivant les objectifs de cette étude, des questions adaptées pour la recherche ont été mises en place. Certaines études littéraires ont été reçues pour justifier l'étude. L'hypothèse générale et l'hypothèse secondaire ont soulevé l'importance d'une relation entre ces deux variables. La collecte des données s'est faite dans deux écoles de la ville de Yaoundé à l'aide d'un questionnaire et de l'observation. Les données ont été analysées à l'aide de statistiques descriptive et inférentielle. Les hypothèses ont été vérifiées à l'aide du test de chi-square test. L'étude révèle qu'il n'y a pas une relation significative entre les interactions des élèves dans une salle de classe et leurs effets sur les performances académiques. Des recommandations spécifiques ont été faites, et les enseignants ont été avisés de rester ouvert à plusieurs aspects des procédés de transmission de connaissances, l'importance a été aussi mise sur le fait de trouver des apprenants. À noter aussi que le gouvernement, les parents et les administrateurs d'établissements n'étaient pas écartés concernant les recommandations de cette étude.

## **GENERAL INTRODUCTION**

Education is a social process which brings positive changes in the behavior, character and knowledge of the students. A school is one of the social institutes established to achieve specific goals of bringing changes in the behavior, knowledge and character of the students. The teacher is not a mere a transmitter of Knowledge; it is rather supposed to play quite a significant role in modifying the modes of thinking and acquitting among students. In this regard instructions towards purposeful direction are quite necessary for the success and fecundity of learning process.

However; Education is one of the fundamental aspects where by teaching learning easily takes place. There are several agencies of education but the school takes the lead in formal education. Teachers are the pillars of education, they passes knowledge to the learners [students] through classroom interaction. It is through these interactions in classroom that determines the academic performance of students

The destiny or future of every student is geared towards the education that he\she receives in school. Therefore the success of every student to acquire quality education depend on his/her interaction in classroom. Interaction is seen in two ways as long as teaching/learning is concerned. There is teachers/students interaction in classroom as well as students /student's interaction in classroom [peer group]. Teachers would only have positive results if they actually used positive communicative technique appropriately. Teachers should always have in mind that they are the pillars of education since they are the ones who passes knowledge to students, thus appropriate methods of communication should be taken into consideration (verbal and non-verbal communication).

Teachers as well, should always have in mind that education entails children from different backgrounds, culture, religion as well as nations. They are some students who may be so timid in classroom and would not like participating in class simply because their background or the environment they grew up has made them timid or inferior. Teachers should be sensitive enough to identify and involve such classes of students in classroom participation.

Also, communication in classroom should be both verbal and non-verbal through interaction between teachers and students. Teachers should be able to use both verbal and non-verbal communication in classroom to maintain a conducive atmosphere for effective teaching/learning process.

Lastly, teachers/students should remember that education is the cornerstone of every society and thus should be done with joy. This is simply because every successful student (80%) must pass through the classroom interaction which is the open gate towards academic achievements. Thus education should be done without bias. I.e. the interaction (communication) in classroom should be balance, so as to achieve a greater input. The teacher plays the dominant role. (David. F1985). This study entitled “effect of classroom interaction on student achievement at secondary level” was thus initiated to know the effectuality of classroom interaction on student ’outcome.

This study therefore identifies the various communicative strategies that teachers use to facilitate teaching\ learning as well as the students themselves in classroom to enhance their performances. Also, it seeks to the identification of supportive theories and related literature. Better still, questionnaires and observation are used as instruments of data collection where by the data is analyzed and recommendations made to the various agencies of education as discussed in the subsequent chapters



# CHAPTER ONE: FORMULATION OF THE PROBLEM

## 1 Introduction

The first chapter of this research is aimed at situating the reader adequately within the framework of the research. The broader range of the research covers include

- Background of the study
- Formulation of the problem
- The Research question
- Research objective
- Interest of study
- Delimitation of study

### 1.1 background of the study

According to the Law N<sup>0</sup>98/004 of April 1998 to lay down guidelines for education in Cameroon, the syllabuses that were drawn up by the inspector general of education in the ministry of secondary education since 2012 are in accordance with the major guidelines for education in general and secondary education in particular as they are enshrined both in the 1998 law to lay down guidelines of education in Cameroon and in the 2009 Growth and Employment Strategy Paper (DSCE). Conceived in the various inspectorates of pedagogy and later introduced for training for secondary and high schools during the 2012/2013 school year, these syllabuses were developed with the contributions of the classroom teachers and teachers trade unionists. The new syllabus has to undergo many changes:

- Shift from a skill based approach to a competence based approach through real life situations
- Shift from a school cut off of society to the one that prepares citizens for a smooth insertion into a socio cultural and economic activity.

- A shift from an evaluation of knowledge to that of competence necessary to sustainable development.

When these new changes and orientation were taken into account, they naturally led into a shift of paradigm within the curriculum reform process. The option adopted is the Skill Based Approach (SBP) to the Competence Based Approach (CBA).the SBP expected the teacher to act mainly as a facilitator, motivator, collaborator, supervisor, observer, trainer, consultant, managers, and organizer. This approach was centered mostly on the teacher; teacher's centered approach (TCP) where interaction in classroom was limited. Thanks to evolution in education for the introduction of the competence based approach (CBA) were the learners are empowered as the main actors in the learning process. Here, they are expected to act as researchers, achievers, creative persons, free thinkers, project managers, autonomous learners, leaders, good team members, problem solvers and above all, active learners. Here, learning is geared towards the learners, learner's centered approach (LCP) where by interaction in classroom is permitted and learners are expected to talk much and the teacher take less for better performance.

The social and contextual nature of human learning has received great emphasis in research on learning and instruction (Anderson, 1997; Greeno, 1997). Attention has been paid to the practices, processes and conditions leading to the social construction of knowledge in different learning situations Fisher, 1993; Lemke, 1990; Palincsar, 1986; Tuyay, Jennings, & Dixon, 1995). The focus of analysis has been extended from external factors influencing learning processes and achievements to the student's participation in and evolving interpretations of the learning activity (Grossen, 1994); Perret-Clermont, Perret, & Bell, 1991). In the midst of these changes in emphasis, new methodological questions concerning the analysis of classroom interaction and learning have arisen. Questions to which researchers have been trying to find answers for example:

- What qualitative differences can be found within and between interactive activities across a variety of learning contexts?
- What typically happens during classroom interaction?
- How can practitioners and researchers develop and strengthen their understandings about optimal learning within inherently social settings (e.g. classrooms)?

This study will review some approaches to studying and analyzing classroom interaction, and especially the discourse which characterizes this. It is based on an account of a programmed of research into classroom interaction and social learning, and uses the methodological decisions made during that program as a set of pegs on which to hang discussion of methodological issues in this field.

By the end of this study there must be a clear:

- Gained and understanding of the complexity of investigating socially shared learning practice within the Cameroon context.
- Considered some methodological issues emerging from researching classroom interaction and talk;
- Become aware of the need to move from an analysis of classroom talk to a more holistic analysis of classroom interaction;

This modified role of teachers requires that instruction should be an active process rather than passive one: It should be a two way communication and both the parties (students and teachers) should be actively engaged for its best accomplishment. Effective teaching learning process requires conscious efforts by the teacher and the taught Henry (1980). The above desired situation is achieved when a substantive Interaction between the students and teachers is established. This type of interaction requires that students should be tempted to participate actively in the process by the teacher. It should be acknowledged that the effectiveness of school education much depends upon the development of sound relationship between the teacher and his students. AT secondary level, the teaching learning process in the country is extremely week and it is totally based on rote. A proliferation of research from Eschenmann (1991) and other scholars suggests that if teachers take the time to build relationships they can motivate their students to learn. Further research (Whitaker, 2004) also suggests that teachers need to have a strong belief that building relationships are important to the motivation process. There is a need to capitalize on these beliefs for the child's benefit. It is important that educators recognize the impact they have on their students, and consider strongly their students' perceptions of them (Eschenmann, 1991). Teachers have to ensure that they are meeting student needs, both academically and emotionally. Creating classroom environments

that promote positive cultures with healthy interactions can motivate students to channel their energies and desires to reach their goals. It is therefore necessary following our context of education (Cameroon) for new reforms both at the basic and secondary level to be taken into consideration.

According to Whitaker (2004), the main variable in the classroom is not the student, but the teacher. Great teachers have high expectations for their students, but even higher expectations for themselves (2004). These teachers recognize the importance of connecting with their students, that if they are unable to connect with them emotionally then influencing their minds may be impossible. “Good teachers put snags in the path of children passing by, and over time, they redirect hundreds of lives... There is an innocence that conspires to hold humanity together ...” (Bolman & Deal, 2002,) and Whitaker (2004) suggests that teachers are the first and perhaps most important point of contact in a student’s life. Despite the countless reforms, educational movements, and programs implemented to improve education, no other element can be as profound as the human element. He urges, “It’s the people, not the programs” (Whitaker, 2004)) .More profoundly he states, “There are really two ways to improve a school significantly: Get better teachers and improve the teachers in the school. A fundamental question for a student is ‘Does my teacher like me?’ Given rigorous, aligned curriculum, the answer to that simple question is our best predictor of student achievement”— (Terry, 2008). Teacher knowledge and efficacy of student motivation and achievement are crucial components to creating relationships that motivate. Both teachers and students have to value their contribution. A student has to feel worthwhile and appreciated. A teacher needs to recognize that he or she can have a positive effect on their students. Wiseman and Hunt (2001) refer to this as “teacher efficacy” and note that the more the teacher believes in this, the more they will cause it to happen.

Research acknowledges (Whitaker, 2004), Tyler & Belter, 2008) teacher expectations as strong and reliable predictors of performance among elementary, middle and high school students. In fact, Parades and Miller (1994) purport that self-efficacy beliefs have stronger impact on behavior and performance than self-concept and self-esteem. Other research Walker (2004) revealed that for many Primary grade level students, the classroom environment and more specifically the teacher can influence a student’s desire to cheat academically, consider

or follow through on dropping out of school, as well as demonstrate a decline in academic motivation and performance. Students are influenced by perceptions of their teachers' evenhandedness, competence, caring and support as well as the nature of the teacher-student relationship that results (Stipek, 2002).

A student wants to feel connected to people and to feel as though he or she deserves to be loved and respected (Stipek, 2002). According to Stipek many of the children who are not doing well academically, are the same ones who have a poor relationship with their teachers. Typically, the more they fall behind academically, often, the more this relationship is weakened. If they are constantly reprimanded in class, the environment and the teacher-student relationship begin to hold negative associations. Therefore, students who perceived a more nurturing relationship with their teachers tended to have better attitudes towards academics and often did better than their peers who lacked the same support system. Stipek also referenced a Belmont and Skinner study conducted in 1993, which supported the idea that a good teacher-student relationship positively influenced learning. The more connected a child feels, the more they are willing to attempt tasks and to seek help when necessary. The student who feels this sense of connectedness may want to maintain it or please the teacher by doing well in class (2002).

According to Tyler and Boelter (2008), positive teacher expectations were associated with high academic performance or academic gains; whereas negative teacher expectations resulted in decrease in academic performance. The significance of knowing teachers' beliefs regarding their roles in student motivation is crucial due to the accepted correlation between this perception and actions (2008). Perhaps the most striking factor in this research is how communication is carried out in class following the Cameroon context. The Motivation Breakthrough: 6 secrets to turning on the tuned-out child" he told the story of an inflexible teacher arguing the need for passive instruction and passive learning. The teacher contended that his job was to provide his students with information and their job was to absorb that information. He continued his passiveness by arguing those who did not want to learn could sit in the back and sleep. The teacher's final comment "... that is not my problem...I'm a teacher not his cheerleader" suggests that there are teachers who still have a misunderstanding of their roles in the classroom. Teachers need to capitalize on the impact that their positive attitude

plays inside the classroom, “the genuine enthusiasm displayed by the instructor is always a major factor in motivation because it is contagious. It engenders a pleasant atmosphere in the classroom and contributes to high motivation.

According to Miller & Rose, (1975) “The quality of teacher–student relationships is the key for all other aspects of classroom management”. Reinforcement theorists argue that motivation is in the environment, not in the person such as the teacher (Stipek, 2002). However, it is the teacher who plays the greatest role in setting the atmosphere (Whitaker, 2004). Whitaker (2004) argues that it is better to create the relationship that will motivate the student to behave versus advertising the consequences. School climate and culture will enable or restrict classroom instruction and student teaching (Stewart, 2008), since students adapt to their environment. If educators create a culture where students are expected to succeed, many often conform. Researchers like Westhuizen, Mosoge, Swanepoel, and Coetzee, (2005) suggest that an effective organizational classroom can enhance academic achievement and lead to reduced student drop out and failure rates, effective discipline, and regular attendance.

According to Freiberg and Stein (1999), “school climate is the heart and soul of a school. Stewart (2008) identifies three facets of school climate: school culture, school organizational structure and the school social structure. The school’s culture influences students’ connectedness to their environment which research suggests affects academic achievement. The second element is school organizational structure, which Stewart uses to describe school and class sizes, both found to lead to positive behavioral and scholastic achievement. The third element Stewart explored was the schools social structure, which includes characteristics such as staff and student ethnicity, gender, socioeconomic status, teacher skill and preparation (Stewart, 2008). In the class while the students are given very less time for active participation and interaction:

According to Siddiqui H.M (2005) interaction between students and teachers is an essential part of teaching learning process. It promotes involvement, enhances learning and motivates the student sit promotes a shift from teacher centered to a student centered approach. However; Education is one of the fundamental aspects [where by teaching\ learning easily takes place. There are several agencies of education but the school takes the lead in formal education. Teachers are the pillar of education, they passes knowledge to the learners [students] through classroom interaction. It is through these interactions in classroom that

determines the academic performance of students following the opinions of the authors given above. Thus, the competence base approach should be evaluated and revised in Cameroon.

## **1.2 Formulation of the problem**

The introduction of the new pedagogic approach in Cameroon schools (Competence Base Approach) and the putting in place strategies to implement this approach has been a call for concern. **The Law N<sup>o</sup> 98/004 of April 1998** laid down guidelines for education in Cameroon. One of the guidelines states that there should be a shift from a skill base approach to a competence base approach.

Dunklin and BiddleS, (1974) are of the opinion that good teachers can stimulate interest in students especially when the classrooms are lively and interesting not dull and apathetic. There should be a lot of empathy within our classrooms if we are to be successful teachers, we must not only maintain a bright cheerful atmosphere, a discipline and orderly environment, but we must also teach. Thus, good teachers should always seek to discover teaching strategies that will maximize students' growth in terms of academic altitude towards learning. A good teacher is one who is democratic, integrative or learner-centered while a bad teacher is one who is autocratic, dominative or teacher centered. In an authoritarian classroom situation the effect of this type of classroom climate upon achievement in any school subjects will obviously be negative Dunklin and Buddle, (1974)

Students may not wish to participate if the teacher expects them simply to recite low level knowledge or the teacher sets low expectations for the students. Clarity, wait higher expectations are factors that influence the quality of teacher interaction with all students, but some factors permit more specifically to the participation of learners, Immigrant students may come from cultures that do not expect students to ask or answer questions during classroom discussions. To these students they prefer listening rather than talking in the company of their teacher.

Research has indicated that teacher talk dominates classroom communication. Edward and Mercer 1987, documented that teachers perform 76/100 of classroom talk Ramirez, Yuen, Ramey and Merino(1986), categorized teacher talk consisting of explanations, questions, commend, modeling and feedback.

Aderson,Evertson and Brushy,(1982) argued that in addition to having the students read, ask them questions about the word and materials. This helps keep students alternative during classmate reading and allows calling their attention to key concepts or meanings.

Following the introduction of the competence base approach and the different views of classroom interaction given by different authors above, on classroom organization, classroom communication and classroom structure, the researcher became worried and decided to engage in this work of study. The researcher became disturbed because she went to the field and actually discovered that there is a problem. Following what the researcher observed in the field, it was discovered that some of the teachers used different communicative strategies in classroom. Some of the teachers used two way communications and some used one way communication. This was seen as a problem because the researcher became confused and does not know which particular method is practiced in respect to classroom interaction based on the Cameroon context of education.

### **1.3Research Questions**

#### **General research question**

To what extent does classroom interaction affect the academic performance of students?

#### **Specific research questions**

- What is the relationship between two way communication in classroom and student's out come?
- What is the relationship between one way communication in classroom and student's out come?
- What is the relationship between laissez-faire communication in classroom and student's out come?

### **1.4 objective or purpose of the study**

This study is set out to pursue the following objectives:



#### **1.4.1 General objective**

-The main objective of this study is to find out whether interactions in classroom affect the student's outcome.

#### **1.4.2. Specific objective**

- To verify the relationship between two way communication in classroom and students outcome.
- To verify the relationship between one way communication in classroom and student's outcome.
- To verify the relationship between laissez-faire communication in classroom and student's outcome.

### **1.5interest of study**

Every research is aimed at solving a stated problem. This study is significant to the following:

#### **1.5.1 Students**

This study will help the student to understand the significant of creating a cordial relationship with teachers and what roles it plays in their performances. Furthermore it will help students to be able to form group study ensuring every body's participation for better result. Also to understand that being active in class is one of the key factors to success.

#### **1.5.2 Teacher**

This study will help teachers to better understand the students and also to manage classroom effectively considering the fact that students are from different backgrounds. Also, to take into consideration that verbal and non-verbal communication is necessary in classroom.

- The findings of the study may be helpful in planning and organizing of classroom interaction in most effective way.
- The study may motivate the participating teachers to use the classroom interaction as a tool of success for the students.
- This research study may prove helpful in improving instructions by increasing the volume of student's participation in the activity

- The findings and conclusions of this research study may provide a guideline to all the practicing teachers for improvement of their teaching strategies

### **1.5.3 School authority**

This study is also important to the school administrators or school authority in that it helps them on how to evaluate teachers more effectively and as well be in the better position to guide and direct teachers on how to apply their functions effectively.

It is also significant to curriculum designers: with this study, curriculum designers will be able to make amendment and put up a better curriculum design so as to generally improve on the quality of education in Cameroon.

Better still, it will motivate them put up useful academic strategies that will go a long way to improve general performances. Putting up these strategies just like the NPA (new pedagogic approach) whereby learning is students centered. (By Jean-Jacques Rousseau), students will be aware of the strategy of communication in classroom thus, gearing them towards a positive performance.

The study will help in the provision of proper professional guidelines on education. Finally, this investigation could be of great value to future researchers who may be interested to extend their research in the domain of classroom interaction.

### **1.6 Delimitations**

This study basically focuses on classroom interaction and its effects on the academic performance of students. The study on classroom interaction and its effects on student's outcome was carried out in some selected public Bilingual High Schools in the central region of Cameroon. The schools selected for this study were Government Bilingual High School Ekol Eton and Lycee Bilingue du Application. The study was limited to teachers and student of the selected public bilingual schools in the central region of Cam

## **CHAPTER TWO: LITERATURE REVIEW**

### **INTRODUCTON**

This chapter contains definitions of concepts, review of related literature, theoretical frame work, formulation of hypothesis, definition of variables, and the synoptic table. Since the researcher is preoccupied with the investigation of classroom interaction and its effects on the academic performance of students in secondary school, this chapter gives a deep inside of interaction in classroom.

#### **2.1 Definition of concepts**

The researcher has deemed it necessary to define some terms for better clarification of the study. These terms are defined below as follow:

##### **2.1.1 Education**

According to CV Good, he defined education as the aggregate of all the processes by means of which people develop their, altitudes and forms of behavior which are of positive value to themselves and the society in which they live.

Education, as we understand, is the process of inviting truth and possibility, of encouraging and giving time to discovery. It is, as John Dewey (1916) put it, a social process, ‘a process of living and not a preparation for future living’. In this view educators look to act with people rather on them. Their task is to educate (related to the Greek notion of educere), to bring out or develop potential.

A definition for starters: Education is the wise, hopeful and respectful cultivation of learning undertaken in the belief that all should have the chance to share in life.

### **2.1.2 Teaching**

Teaching can be defined as the interaction that takes place between the teacher and the learners in order to facilitate the acquisition of knowledge.

*According to advance learners' dictionary, teaching is a job or profession of a teacher: something that is taught: the ideas and beliefs that are taught by a person, religion, etc.*

### **2.1.3 Teacher**

To Gabby Buganda (2009) in the broadest sense, a teacher is someone who doesn't just teach or impart knowledge, but also must importantly, someone responsible for shaping and molding the minds and hearts of all those whom they teach. A teacher has the power to yield a strong influence in his or her pupils. When coupled with certain definite skills, a good teacher has the potential of having a lifelong impact on the students.

### **2.1.4 Schooling**

It is former systems that occur logically in stages within a specific period of time. It is former because activities are programmed.

### **2.1.5 Academic performance**

This is the final output or achievements made at the end of studies.

### **2.1.6 Interaction**

According to advanced learners Dictionary, interaction is defined as working together or cooperatively with someone on something using communication.

### **2.1.7 Classroom interaction**

*According to Merriam-Webster's Learner's Dictionary, Classroom interaction involves all the ways in which participants in classrooms interact with one another, including oral interaction, non-verbal interaction and shared activity.*

### **2.1.8 Communication**

According to (Encarta 2009), communication is the exchange of information between people by means of speaking, writing or a common system of signs or behavior. Communication could still be verbal and non-verbal.

#### **2.1.8.1 One-way communication**

According to Fanner, (1982) in one-way communication, information is transferred in one direction only, from the sender to the receiver. There isn't any opportunity for the receiver to give feedback to the sender.

One-way communication is frequently used when the sender wants to give factual information or when they want to persuade or manipulate their audience and gain their cooperation.

In one-way communication, the learner listens to or reads the target language but does not respond. The communication is one-way, towards the learner, not from the learner. Examples: Listening to programs, speeches and radio watching films and most televisions programs, and reading books and magazines, sender message receiver.

#### **2.1.8.2 Two-way communication**

According to Fanner, (1982) two-way communication is when one person is the sender and they transmit a message to another person, who is the receiver. When the receiver gets the message, they send back a response, acknowledging the message was received.

Two-way communication always includes feedback from the receiver to the sender and lets the sender know the message has been received accurately both sender and receiver listens to each other, gathers information and is willing to make changes to work together in harmony Restricted two way communication: In restricted two-way communication, the learner responds orally to someone, but the learner does not use target language. The response may be in the learner's first language or some other non-target language and may include a nonverbal response such as nodding.

Full two way communications: In full two -way communication, the learner speaks in the target language, acting both recipient and sender of verbal messages. Most of the available

empirical research emphasizes the benefits of allowing one-way and restricted two-way communication during the early parts of the learning process and waiting until the student is ready to produce the target language before insisting on full two-way communication.

### **2.1.8.3 The laissez-faire communication**

The laissez-faire teacher places few demand or controls on the students. "Do your own thing". This teacher accepts the student's impulses and actions and is less likely to monitor their behavior. He strives to not hurt the student's feelings and has difficulty saying no to a student or enforcing rules. If a student disrupts the class, the teacher may assume that he is not giving that student enough attention. When a student interrupts a lecture, the teacher accepts the interruption with the belief that the student must surely have something valuable to add. When he does offer discipline, it is likely to be inconsistent.

The teacher is very involved with the students and cares for them very much. He is more concerned with the students' emotional well-being than he is with classroom control. He sometimes bases classroom decisions on his student's feelings rather than on their academic concerns. He wants to be the students' friend. He may even encourage contact outside the classroom. He has a difficult time establishing boundaries between his professional life and his personal life.

However, this overindulgent style is associated with students' lack of social competence and self-control. It is difficult for students to learn socially acceptable behavior when the teacher is so permissive. With few demands placed upon them, these students frequently have lower motivation to achieve.

Regardless, students often like this teacher, because they don't have to be serious throughout the class. But sometimes things get out of control and the students learn nothing at all. By Chandra (1996).

### **2.1.9 Variables**

A variable is any trait that changes from one condition to another. There are two types of variables, the dependent and the independent variables. The magnitude of a dependent variable depends on or is the function or value of another variable [other variables]. Its value is being estimated from one more independent variable.

### **2.1.9.1 Dependent variable (DV)**

It is the experimenter measures, after making changes to the independent variable that are assumed to affect the dependent variable. or example, we might change the type of information (e.g. organized or random) given to participants to see what effect this might have on the amount of information remembered.

### **2.1.9.2 An independent variable**

It is a variable that is manipulated to determine the value of a dependent variable s. The dependent variable is what is being measured in an experiment or evaluated in a mathematical equation and the independent variables are the inputs to that measurement. In a simple mathematical equation, for example:  $a = b/c$  the independent variables, b and c, determine the value of a.

Here's a simple example: A teacher wishes to compare the number of tardy students wearing black with the number of tardy students wearing pink. In this scenario, clothing color is the independent variable and the difference in the number of students, categorized by clothing color, is the dependent variable.

## **2.2 Review of related literature**

Next, is to briefly describe the literature supporting the domains of teacher-student interactions and outcome which is the focus of this study.

Amin 2005) holds that literature review involves location, reading and evaluating reports of research as well as reports of observation, discussions and opinions that are related to the individual's planned research project. More detailed descriptions of the research supporting the specific dimensions of classroom interaction are available elsewhere Hamre & Pianta, (2007). Teaching through Interactions Framework: Description of Domains and Dimensions

Domain	Dimension	Description
Emotional Support	Positive Climate	Reflects the overall emotional tone of the classroom and the connection between teachers and students
Negative Climate	Reflects	overall level of expressed negativity in the classroom between teachers and students (e.g., anger, aggression, irritability)
Teacher Sensitivity	Encompasses	teachers' responsiveness to students' needs and awareness of students' level of academic

emotional functioning Regard Perspectives The degree to which the teacher's interactions with students and classroom activities place an emphasis on students 'interests, motivations, and points of view, rather than being very teacher-driven Over control Assesses the extent to which the classroom is rigidly structured or regimented at the expense of student's interests and/or needs.

### **2.2.1. Proficiency and productivity in school**

Students or learners need many opportunities to interact in social and academic situations. Effective teachers involve their students to participate in classroom discussion, welcome their contributions and motivate them by such practices Cazden,(2001) Stipek,2002.However, many educators often allow their less proficient students to remain silent or to participate less than their English fluent peers Loasa (1977) Penfield (,1987] first author recently participated in a study focusing on how mainstream classroom teachers help students immigrants become successful at school .He said during the observation he noticed that the teachers missed many opportunities to help learners communicate in class, allowing them to be less involve in OA byproduct that was the analyses presented in this article. We considered what classroom teachers could do to more fully engaged learners in teacher's student's interaction, especially during teacher's led-questions and answers. Essentially, teachers can elicit more from the less proficient or reticent students if they consider various responses options and then enlarge their response repertoires in order to encourage student's participation.

There are several reasons why learners may struggle to respond appropriately to teachers prompt and questions. Certainly not all teacher questions are clearly understood by students, and if such is the case, teachers should rephrase or clarify question in order to facilitate student's comprehension. Teachers may also not wait long enough for students to consider a question and formulate a response, Kachure and Prendergast, (1997), Rowe, 1974 identified three motivational components and interact with the learners and an environment that support relationship between learners and proficient teachers.

Students may not wish to participate if the teacher expect them simply to recite low level knowledge or the teacher sets low expectation for the students. Clarity, wait higher expectations are factors that influence the quality of teacher interaction with all students, but



some factors permit more specifically to the participation of learners, Immigrant students may come from cultures that do not expect students to ask or answer questions during classroom discussions. To these students they prefer listening rather than talking in the company of their teacher. Research has indicated that teacher talk dominate classroom communication. Edward and Mercer (1987) documented that teachers per form 76/100 of classroom talk Merino (1986) categorized teacher talks consisting of explanations, questions, commend, modeling feedback. It is therefore clear that if teacher talk dominates classroom communication, the students will be bound to be less active in class.

### **2.2.2. The relationship between teachers and students in classroom**

Brophy and Evert (1980) carried out a study in a light of teachers-student relationship and came up with the following results. Teachers who produce the best achievements were business-like and task oriented. They enjoyed working within a teacher student relationship. They operated their classroom as learning environment, spending most time on academic activities. Teachers who produce first achievements were more concerned with personal relationship and effective objectives than with cognitive objectives.

Furthermore, teachers produce the most achievement also assumed personal responsibility for doing so, their interview feelings of efficacy and internal locus of control; a tendency to organize their classroom and to plan activities rather than they give up and make excuses for failure. These enthusiastic attention and teachers will redouble their effort providing slower students and more individualized instruction. Furthermore, Luma [1986-40], assured us that a teacher with a good behavior most understand that respect beget respect. Teachers should strive to always maintain a good relationship with their students and always make sure that slow learners are identified in classroom so as to attain equilibrium in order to maintain and improve students' performances.

### **2.2.3. Classroom Organization**

Behavior Management Encompasses teachers' ability to use effective methods to prevent and redirect misbehavior by presenting clear behavioral expectations and minimizing time spent on behavioral issues Productivity Considers how well teachers manage instructional time and routines so that students have number of opportunities to learn

Instructional Learning Formats. The degree to which teachers maximize students' engagement and ability to learn by providing interesting activities, instruction, centers, and materials  
Classroom Chaos The degree to which teachers ineffectively manage children in the classroom  
disruption and chaos predominate Instructional Support Concept Development. The degree to which instructional discussions and activities promote students' higher order thinking skills versus focus on rote and fact-based learning  
Quality of Feedback Considers teachers' provision of feedback focused on expanding learning and understanding (formative evaluation), not correctness or the end product (summative evaluation)  
Language Modeling .The quality and amount of teachers' use of language stimulation and language-facilitation techniques during individual, small-group, and large-group interactions with children, richness of Instructional Methods The extent to which teachers use a variety of strategies to promote children's thinking and understanding of material at a deeper and more complex level

#### **2.2.4. Emotional support**

Teacher efforts to support students' social and emotional functioning in the classroom, through positive facilitation of teacher-student and student-student interactions, are key elements of effective classroom practice. Two broad areas of developmental theory guide much of the work on emotional support in classrooms—attachment theory (Bowlby, 1969) and self-determination theory (Connell & Wellborn, 1991). Attachment theorists posit that when adults provide emotional support and a predictable, consistent, and safe environment, students become more self-reliant and are able to take risks as they explore the world because they know that an adult will be there to help them if they need it (Bowlby, 1969). Self-determination (or self-systems) theory (Connell & Wellborn, 1991) suggests that students are most motivated to learn when adults support their need to feel competent, positively related to others, and autonomous. Classroom Organization and Management ways in which classrooms help students organize their behavior and attention toward the pursuit of academic goals is another salient domain of classroom interactions. Recent work demonstrates the importance of children's self-regulatory executive functioning skills to learning and academic achievement (Blair, 2002) Pontz Brock, & Nathan son, 2009).

Classrooms that have clearer and more consistent routines for behavior and time use support children in developing these important skills (, Brophy & Everton, 1976) Emmer

& Strough (2001), Evertson, Emmer, Sanford, & Clements (1983), Ponitz, Rime-Kaufman, Grimm, Curby, (2009). The strongest evidence for the importance of classroom organization and management comes from intervention studies. Children in classrooms in which teachers participate in interventions designed to enhance these aspects of their teaching demonstrate improvements in teacher reported and observed self-regulatory skills Raver (2009). Instructional Support The theoretical foundation for the conceptualization of instructional supports in the Teaching through Interactions framework comes primarily from research on children's cognitive and language development (Rodriguez, 2003). This literature highlights the distinction between simply learning facts and gaining "usable knowledge" that is built upon learning how facts are interconnected, organized, and conditioned upon one another (Mayer, 2002). A student's cognitive and language development is contingent on the opportunities adults provide to express existing skills and scaffold more complex ones (Behnke, & Justice, 2004).

Furthermore, learning is strongest when teachers explicitly tie new information to students' background knowledge and real-world examples (Branford, Brown, & Cocking, 2000). In addition to these elements of instructional interactions intended to enhance knowledge of concepts and language, effective teaching includes feedback that is immediate, contingent, corrective and/or specific, and tied to natural settings Kulik, (1988). Such feedback serves to control frustration; increase interest, motivation, and effort; and promote learning and higher-order thinking (Butler, 1987; Good & Brophy, 2008) Rogoff, (1990). The Teaching through Interactions framework further differentiates between *general* and *content-specific* instructional supports. General instructional supports are those that are relevant and observable across content areas. Content specific instructional supports, in contrast, describe strategies for teaching students particular skills and knowledge such as reading, math, or science. This study focuses on general instructional supports because these are the interactions that can be assessed most similarly across large numbers of classrooms. Numerous studies link these types of instructional interactions to students' academic learning Catts (2001), Hamre & Pianta (2005), Taylor, (2003). However, the Mathematical Quality of Instruction (Hill 2008) or the Protocol for Language Arts Teaching Observation Plato (2010), which focus on teachers' interactions with students around content, may be aligned with the larger Teaching through Interactions framework.

Teacher-Student Interactions Account for Student Learning and developmental Gains

There is strong and consistent evidence that measures of classroom process informed by the Teaching through Interactions framework do indeed predict student performances. For example, observed Emotional Support predicts student performance in standardized tests of early literacy in preschool, lower levels of internalizing behaviors reported by mothers in kindergarten and students' behavioral engagement with classrooms across several elementary grades and appears to help protect children at risk of school failure due to behavioral problems. Gazelle,(2006). One recent study demonstrates that Emotional Support, as measured in class, is associated with gains in standardized achievement and that these associations are mediated by student engagement Alovey (2012). Students also learn more in classrooms in which teachers do a better job managing students' behavior, time, and attention Ponitzs(2009), partly due to children's development of better behavioral and cognitive self-control Brock, (2009).Finally, teachers' instructionally supportive interactions predict students' academic functioning (Hamre & Pianta, (200) and behavioral engagement in classroom activities The MET study demonstrated that the classroom measures aspects of effective teaching that are stable across class sections and that classroom observations made in one class section were associated with gains in student achievement in other class sections (Kane &Stagier, 2012). Although few studies have failed to demonstrate these associations the preponderance of evidence suggests that the Teaching through Interactions framework, as measured in the class room.

The implementation of these views by the various authors to this study is simply that Teacher should put more effort to be able to support students' social and emotional functioning in the classroom, through positive facilitation of teacher-student and student-student interactions. Better still, should understand that students are from different background thus, should be taught in respect to their culture.

A great deal of research has been conducted into the nature of effective classroom communication and education researchers have concluded that a systematic approach to providing instruction greatly improves student's achievement (Johana. 1979). The researchers also state that teachers can learn the specific components of an effective teaching systematic approach, for providing more purposeful instructions, and can modify and thereby enhance their teaching behavior. Use of this sort of a systematic approach with whatever is being

taught can only assist in further improvement of educational opportunities for all students, especially those who have learning disabilities .Rohnshine and Stevens (2002) identified common teaching practices of successful teachers, such as teaching in small steps, exercising after every step, guiding students during initial practice, and providing all students with opportunities for success. Englert (2000) pointed out that successful teachers use lesson strategies to provide students with both direct instructions and the opportunities for success practice. Sindelar(1997) added that the more time an actively engaged educator spends in the instructional process, the more positive student behavior and achievement will be. They further suggested that effective teacher limits seat work activities, provide ample opportunities for students over learning through teacher questioning and allow to socially interact with students. Research indicates that teacher directed rather than student directed activities provide for ineffective educational experience that is more likely to improve student's achievement Nowacek .2001). Higher level of student achievement occurs because teacher, using a systematic approach are more organized, have clearer student attention and provide immediate, corrective and constructive feedback

#### **2.2.5. Schools roles**

Promoting social competence should not be seen as a new or unfamiliar insert into the curriculum. Schools have been doing it for years. However, the approaches taken by schools to promote social competence are often still fragmentary. School have not always been able to readily accept information about the full range of approaches which have been develop elsewhere or how effective such approaches have proven to be.

When clear and consistent approaches are not in place the effort put in by individual teachers can be undermined by lack of progression and continuity and all children may not get an equal opportunity benefit. Sometimes social skill training is done individually with children, but often it is done in a small group.

A particular skill concept is discussed, and children may watch a short film or hear story that illustrate the usefulness of the skill. They then have the opportunity to practice the skill during activities or role-plays with other children in the group. A trained group leader

helps guide the children in their use of the skill and provides support and positive feedback to help children become more natural and spontaneous in social skill behavior. (Kagan, 1992)

Some children need a structured, smaller peer interaction setting in which an adult's support is available to guide positive peer interaction. Finding a good social niche for some children can be a difficult task, but an important one. Sometimes a teacher can organize cooperative learning that help an isolated child make friends in classroom. Sometimes parents can help by inviting potential friends over to play or by getting their children involved in a social activity outside of school that is rewarding (such as a church group, a sport group, or a scouting club). Providing positive opportunities for friendship development is important, as it provides children with an appropriate and positive learning environment for the development of fit social competence.

#### **2.2.6. Student-Student Classroom Interaction**

What is student-student classroom interaction and how does it affect learning?

This theme addresses how well students communicate with one another in class. Classes where students have opportunities to communicate with each other help students effectively construct their knowledge. By emphasizing the collaborative and cooperative nature of scientific work, students share responsibility for learning with each other, discuss divergent understandings, and shape the direction of the class. The Pedagogy in Action module on Cooperative Learning is a great place to learn more about structuring student-student interactions both in and out of the classroom. The Cutting Edge teaching method module on using concepts in the classroom also has tips for integrating think-pair-share activities into even large classrooms. Characteristics of classes with low and high student-student classroom interaction. Classes that have low interaction among students are more lecture-focused, often well-organized, and tend to present material clearly, with minimal text and well-chosen images. The instructor is usually well-versed in the content, but teaches in a way that does not provide an opportunity for interactions among students.

The implementation of this to the study is that, a more student-focused class provides multiple opportunities for students to discuss ideas in small groups and may support a whole class discussion. One simple measure of this is the proportion of the class dedicated to students talking to one another. The quality of the discussion is also important: tasks that have

the potential for more than one answer can generate deeper thinking processes and may also shift the direction of the lesson. Successful discussions are characterized by small group conversations that seek to give voice to all students and to provide sufficient time and opportunity to listen and consider the ideas of others.

Consider structuring your class so that provides opportunities for students to work in pairs and small groups and use multiple modes of communication (e.g., discussions, making presentations, and brainstorming).

- -Encourages students to work together as a class to contribute to a comprehensive answer to an open-ended problem should also be a matter of concern.
- -A significant proportion of class time (15-30%) to student interactions should also be apply in classroom settings.
- In-depth conversations among students (between students and instructor) should also be encouraged.
- Students should interact at different scales and be engaged in discussion in classroom. For instance, In-class assignments where students think individually about a question, talk to their peers about an idea, and then report their findings back to the class. These think-pair-share exercises work best when there are multiple answers to a question (nurturing and valuing divergent thinking).
- More structured discussion exercises such as jigsaw activities where students become experts in some facet of a topic and then work as teams of mixed experts to further explore a topic should also be encouraged.
- One or more cooperative learning techniques that encompass a variety of methods to encourage student-student interactions within classroom setting should be applied.
- Students should work on open-ended problems to encourage in-depth conversations. Open-ended questions are questions with more than one right answer and encourage students to make a judgment call. Sometimes such questions can foster in-class debates.
- Students should be able to present their ideas to others and to have all ideas respected especially when it comes to group work. Incorporating gallery walks to encourage groups of students to build a class response to an instructional prompt. Students are actively involved in synthesizing important concepts, consensus building, writing, and

public speaking to share their findings. This technique works best in small to medium-sized classes.

### **2.2.7. Teachers-student relationship**

Brophy and Evertson cited by Wittrock (1980) he carried out a study in a light of teachers-student relationship and he came up with the following results. Teachers who produce the best achievements were business-like and task oriented. They enjoyed working within a teacher student relationship. They operated their classroom as learning environment, spending most time on academic activities. Teachers who produce first achievements were more concerned with personal relationship and effective objectives than with cognitive objectives.

Furthermore, teachers produce the most achievement also assumed personal responsibility for doing so, their interview feelings of efficacy and internal locus of control; a tendency to organize their classroom and to plan activities rather than they give up and make excuses for failure. These enthusiastic attention and teachers will redouble their effort providing slower students and more individualized instruction. Furthermore, Luma [1986-40], assured us that a teacher with a good behavior most understand that respect beget respect

### **2.2.8. Stimulating classroom**

Dunklin and Biddle [1974-0], are of the opinion that good teachers can stimulate interest in pupils especially when our classroom are lively and interesting not dull and apathetic. There should be a lot of empathy within our classrooms.

If we are to be successful teachers, we must not only maintain a bright cheerful atmosphere, a discipline and orderly environment, but we must also teach. Thus, good teachers should always seek to discover teaching strategies that will maximize pupil's growth in terms of academic altitude towards learning.

A good teacher is one who is democratic, integrative or learner-centered while a bad teacher is one who is autocratic, dominative or teacher centered. In an authoritarian classroom situation the effect of this type of classroom climate upon achievement in any school subjects



will obviously be negative [Dunklin and Buddle (1974-94) A good teacher as opposed to a bad teacher should possess the following characteristics

- integrative behavior
- flexibility
- Addictiveness. Anderson ([1939)Aderson, Evertson and Brophy,[1982] argued that in addition to having the students read, ask them questions about the word and materials. This helps keep students alternative during classmate reading and allows to call their attention to key concepts or meanings. Teachers according to Maria Montessori [1966] must their hearts of pride and anger and learn to humble themselves and be clothes with clarity. This virtue and successfully accomplish their job Luma (986-25)

### **2.2.9. Classroom organization**

California Achievement Test [CAT] found out that classroom organization and instruction variables correlated strongly achievements and measures of teachers personal quality correlated higher with student's altitudes. Infrequent teachers appears competent, confident and erodible, receptive, enthusiastic, to students input and clear in presentations, thus, encouragement concern for achievement and grade, preparedness used of available time for economic activities lead to high academic performance.

### **2.2.10. The concept of social competence.**

Put at a simple level, social competence could be said to be all about "being able to get on with other people". It involves the ability to establish, maintain and develop constructive social relationships with other people, in working context and in our own personal lives (Kagan, 1992)

Educationalist and psychologist are rapidly developing an increasingly clear understanding of the sorts of knowledge and skills which underlie social competence. These include, for example:

- The ability to understand other's point of view when different from your own.
- Knowledge of how to interpret other people's emotional states behavior

- Skill in suppressing immediate emotional responses in favor of more carefully – considered responses in social situations.

## **2.3. Related theories**

### **2.3.1. Vygotsky’s socio cultural theory**

Vygotsky’s socio cultural theory of human learning describes learning as a social process and the origination of human intelligence in society or culture. The major theme of Vygotsky’s theoretical is that social interaction plays a fundamental role in the development of cognition. Vygotsky believed that everything is learned in two levels; First, through interaction with others and then interaction into the individual mental structure.

Every function in the child’s cultural development appears twice; First, on the social level and later on individual level, first between people (inter psychological) and the inside the child (intrapsychological). This applies equally to voluntary intention, logical memory and to formation of concepts. All the higher functions originate as actual relationships between individuals Vygotsky, (1978:57) cited by Khvilon (2002:25).

- The theory advocates social network analysis as an element of the digital era. This is consistent with the theory because with ICTs, learners can interact with other people to analyze information.
- The theory advocates that the capacity to know is greater than what is already known. This ties with the studies since learners and teachers are expected to share what they know in classroom settings so as to know more.
- The theory advocates that accurate and up to date information is needed to update knowledge. This ties with the study because learners and teachers need to obtain current information so as to be able to flow well in classroom.
- The second aspect of this theory is limited to the zone of proximal development (ZPD). This zone is limited to the area of exploration where the students are cognitively prepared but requires help and social interaction to fully develop. Bruner, (1999) cited by khvilon, (2002).this is true in respect to this study because social interaction plays a fundamental role in the development of cognition.

The implementation of this theory is linked to the special hypothesis two which expects teachers to give the learners the opportunity to interact with peers. Teachers should allow learners to be able to explore their environments. This can be done by organizing interactive atmosphere to learners such as group work, asking and answering of questions in class and having cordial relationship with the student.

### **2.3.2. Constructivist learning theory**

Constructivism is a meta-concept. It is not just another way of knowing, but a way of thinking about knowing. It is a theory of communication and suggests that each listener or reader will potentially use the content and process of the communication in different ways. There are numerous constructivist perspectives, and the common thread that unites them is that learning is an active process, unique to the individual, and consists of constructing conceptual relationships and meaning from information and experiences already in the learner's repertoire. The core ideas were mentioned by John Dewey, so it is not a new idea. Constructivism claims that each learner constructs knowledge individually and socially. The "glue" that holds the constructs together is meaning. Knowledge is not "out there", as the realist philosophers such as Plato claimed. Knowledge is always an interpretation of reality, not a "true" representation of it. This theory links us to hypothesis two of the study (two way communication in classroom).by two way communication, learners are expected to become free thinkers, active learners and achievers.

#### **2.3.2.1. Principles of Constructivist Learning**

1. The learner uses sensory input and does something with it, ultimately making
2. Learning consists of both constructing meaning and constructing systems of meaning. Learning is layered.
3. Learning occurs in the mind. Physical activity may be necessary, but is not sufficient alone.
4. Learning involves language. Vygotsky believed that language and learning are inextricably intermeshed.
5. Learning is a social activity. Advocating from this principle, if learning is a social activity learners should be allowed to interact with their peer in order to gain knowledge for better outcome.

6. Learning is contextual. We do not isolate facts from the situations and environments in which

### **2.3.2.2. Schools of Constructivism**

#### **➤ Radical Constructivism**

Derived from Glaser Feld (1990). Von Glaser Feld put forth the notion that the learner's constructions do not necessarily reflect knowledge of a “real world.” Coming to know is a process of dynamic adaptation toward viable interpretations of experiences. We have no way of knowing what “real” reality might be, since input is filtered. Previous constructs also influence our perceptions of current experience. We construct “viable” models of what reality is based on social and physical constraints.

#### **➤ Social Constructivism**

This was the theory of Vygotsky in the late 1970's. Vygotsky's point of view was that acquisition and participation were synergistic strategies in learning situations. Aspects of participation involved teaching in contexts that could be meaningful to students based on their personal and social history, negotiating, class discussions, small group collaborative learning with projects and tasks, and valuing meaningful activity over correct answers. Social Constructivism emphasizes that learning takes place through interactions with other students, teachers, and the world-at-large. This still ties with the study since both learners and teachers are expected to be involved in classroom interaction for education to attain its goal.

#### **➤ Cultural Constructivism**

Brings in a wider context to learning, including customs, religion, language, physiology, tools available (Computers, books, etc.). Tools are used to redistribute the cognitive load between the learner and the tool, and can affect the mind beyond actual use by changing one's skills, perspectives, and responses. This is important in the sense that if instructional materials are brought in class, communication will flow especially when dealing with subjects like biology chemistry and physics. Here, the students learn better when they are involved in classroom participation.

### ➤ **Critical Constructivism**

Critical Constructivism adds a dimension of critical evaluation and cultural reform to the educational process. This approach incorporates the use of Communicative Ethics which defines the conditions for establishing dialog oriented toward mutual understanding among learners and teachers. Communicative Ethics promotes

- (1) Primary concern for maintaining empathetic, caring, and trusting relationships,
- (2) Commitment to achieve reciprocal understanding of goals, interests and Standards
- (3) Concern for and critical awareness of the often-invisible rules of the classroom, including social and cultural interaction.

Prevalent myths in today's educational system include Cold reason, the notion of knowledge as eternal truth, teachers as transmitter of objective truths, and curriculum as a product which is delivered, and hard control, the perspective of teachers as controller, in which there is a power differential between teachers and learners, and a dominance-subordinate relationship. Tenets of Constructivism for course design Bruner, (1999) Students come with a world view. Their world view acts as a filter to all their experiences and incoming observations .Changing a world view takes what Students learn from other students and the teacher Students learn by doing. When all participants have a voice, construction of new ideas is promoted Constructivism works best when the learner prepares something for others to see or hear. When the learner prepares visuals such as text, graphics, web sites, or activities in which another can participate, or endeavors to explain materials to other students, or works in a group context, leaning is especially powerful. This is still tie to hypothesis two of the study.

#### **2.3.2.3. Principles of constructivist course design**

Maintain a buffer between the learners and potentially damaging effects of instructional practices. Emphasize the affective domain, make instruction relevant to the learners, help learners develop attitudes and beliefs that ill support both present learning and lifelong learning, and balance teacher-control with personal autonomy in the learning environment.

- Provide contexts for both autonomous learning and learning within relationships to other students. Group discussion, projects, collaboration as well as independent.

- Provide reasons for learning within the learning activities themselves. Have students identify relevance and purpose.
- Promote and make conscious the skills and attitudes that enable a learner to assume responsibility for his/her cognitive and developmental processes.
- Use the strategic exploration of errors to strengthen the learner's involvement with intentional learning processes and self-feedback.

### **Implementations of the theory in classroom.**

- Teachers should serve as one of the many resources for students, not necessarily the primary source of information.
- Teachers should engage students in experiences that challenge previous conceptions of their existing knowledge.
- Teachers should be able to use student responses in the planning of next lessons and seek elaboration of students' initial responses. Linking it to this study, the teachers become empowered with knowledge by allowing students to share what they have in classroom settings.
- Also, teachers should be able to encourage questions and discussion among students by asking open-ended questions.
- Better still, teachers should assist students to understand their own cognitive processes (meta cognition) by using cognitive terminology such as classify, analyze, create, organize, hierarchy, etc. when framing tasks. The teachers should encourage and accept students' autonomy and initiative by being willing to let go of classroom control.
- The teachers should also make available raw data and primary resources, along with manipulative and interactive physical materials. The teachers should separate knowing from the process of finding out. Nouns and verbs.
- The teachers should facilitate clear communication from students in writing and verbal responses, from the point of view that communication comes from one's deep structural understanding of the concepts being communicated. When they can communicate

clearly and meaningfully, they have truly integrated the new learning thus, deter performance.

### **2.3.3. Constructivist theory (J. Bruner)**

A major theme in the theoretical framework of Bruner is that learning is an active process in which learners construct new ideas or concepts based upon their past/current past knowledge. The learners select and transform information, construct hypotheses, and makes decisions, relying on a cognitive structure to do so. Cognitive structure (schema, mental models) provides meaning and organization to experiences and allows the individual to “go beyond the information given”.

As far as instruction is concerned, the instructor should try and encourage student (pupils) to discover principles by themselves. The instructor and pupils should engage in dialogue (Socratic learning). The task of the instructor is to translate information to be learned into a format appropriate to the learner’s state of understanding. Curriculum should be organized in a spiral manner so that pupils continually build upon what they have already learned.

Bruner has expanded his theoretical framework to encompass the social and cultural aspects of learning as well as the practice of law.

In the constructivist theory the emphasis is placed on the learner rather than the teacher. It is the learner who interacts with objects and events and thereby gains an understanding of such objects or events. The learners individually discover and transform complex constructing their own conceptualizations and solution to problems. In constructivist thinking learning is also affected by the context and the beliefs and attitude of learner.

There are two major strands of the constructivist perspective: cognitive constructivism and social constructivism, although different in emphasis they share the same basic assumption about learning. (Jonas 1994) cited by Bruner (1996:26). Proposed eight characteristics would be supported by both social and cognitive constructivists:

1. Constructivist learning environments provide multiple representations of reality.

2. Multiple representations avoid oversimplification and represent the complexity of the real world.
3. Constructivist learning environments emphasize knowledge construction instead of knowledge reproduction.
4. Constructivist learning environments emphasize authentic task in a meaningful context rather than abstract instruction out of context.
5. Constructivist learning environment provide learning environments such as real world settings or case-based learning instead of predetermined sequences of instruction.
6. Constructivist learning environment encourage thoughtful reflection on knowledge.
7. Constructivist learning environments enable context and content dependent- knowledge construction”
8. Constructivist learning environments support “collaborative construction of knowledge through social negotiation, not completion among learners for recognition”.

Behaviorism is an approach to psychology based on the proposition that behavior can be researched scientifically without recourse to inner mental states. It is a form of materialism, denying any independent significance for mind. Its significance for psychological treatment has been profound, making it one of the pillars of pharmacological therapy. One of the assumptions of behaviorist thought is that free will is illusory, and that all behavior is determined by the environment either through association or reinforcement. The behaviorist school of thought ran concurrent with the psychoanalysis movement in psychology in the 20th century. Its main influences were Ivan Pavlov, who investigated classical conditioning, Watson (1878-1958) who rejected introspective methods and sought to restrict psychology to experimental laboratory methods. B.F. Skinner sought to give ethical grounding to behaviorism, relating it to pragmatism. Within that broad approach, there are different emphases. Some behaviorists argue simply that the observation of behavior is the best or most convenient way of investigating psychological and mental processes. Others believe that it is in fact the only way of investigating such processes, while still others argue that behavior itself is the only appropriate subject of psychology, and that common psychological term (belief, goals, etc.) have no referents and/or only refer to behavior. Those taking this point of view sometimes refer to their field of study as behavior analysis or behavioral science rather than psychology



Classical: The behaviorism of Watson; the objective study of behavior; no mental life, no internal states; thought is covert speech.

Methodological: The objective study of third-person behavior; the data of psychology must be inter-subjectively verifiable; no theoretical prescriptions have been absorbed into general experimental and cognitive psychology. Two popular subtypes are Neo-Hullian and post-Hullian, theoretical, group data, not dynamic, physiological, and Purposive: Tolman's behaviorist anticipation of cognitive psychology, Watson, (1978).

Early in the 20th century, John B. Watson argued in his book *Psychology from the Standpoint of a Behaviorist* for the value of a psychology which concerned itself with behavior in and of itself, not as a method of studying consciousness. This was a substantial break from the structuralist psychology of the time, which used the method of introspection and considered the study of behavior valueless. Watson, in contrast, studied the adjustment of organisms to their environments, more specifically the particular stimuli leading organisms to make their responses. Most of Watson's work was comparative, i.e., he studied the behavior of animals. Watson's approach was much influenced by the work of Russian physiologist Ivan Pavlov, who had stumbled upon the phenomenon of classical conditioning (learned reflexes) in his study of the digestive system of the dog, and subsequently investigated the phenomena in detail. Watson's approach emphasized physiology and the role of stimuli in producing conditioned responses - assimilating most or all function to reflex. For this reason, Watson may be described as an S-R (stimulus-response) psychologist. Methodological behaviorism

Watson's behaviorist manifest persuaded most academic researchers in experimental psychology of the importance of studying behavior. In the field of comparative psychology in particular, it was consistent with the warning note that had been struck by Lloyd Morgan's canon, against some of the more anthropomorphic work such as that of George Romanes, in which mental states had been freely attributed to animals. It was eagerly seized on by researchers such as Edward L. Thorndike (who had been studying cats' abilities to escape from puzzle boxes). However, most psychologists took up a position that is now called methodological behaviorism: they acknowledged that behavior was either the only or the easiest method of observation in psychology, but held that it could be used to draw conclusions about mental states. Among well-known twentieth-century behaviorists taking this kind of position were Clark L. Hull, who described his position as neo-behaviorism, and

Edward C. Tolman, who developed much of what would later become the cognitive program. Tolman argued that rats constructed cognitive maps of the mazes they learned even in the absence of reward, and that the connection between stimulus and response (S->R) was mediated by a third term - the organism (S->O->R). His approach has been called, among other things, purposive behaviorism.

Methodological behaviorism remains the position of most experimental psychologists today, including the vast majority of those who work in cognitive psychology – so long as behavior is defined as including speech, at least non-introspective speech. With the rise of interest in animal cognition since the 1980s, and the more unorthodox views of Donald Griffin among others, mentalist language including discussion of consciousness is increasingly used even in discussion of animal psychology, in both comparative psychology and ethnology; however this is in no way inconsistent with the position of methodological behaviorism.. This is also important to the study in that for a teacher to be a good communicator and gain the attention of each student, he n needs to understand the behavior of each student in class by observing his class keenly.

➤ **Laissez-faire communication**

The laissez-faire teacher places few demand or controls on the students. "Do your own thing" describes this classroom. This teacher accepts the student's impulses and actions and is less likely to monitor their behavior .Mr. Jones uses a laissez-faire style. He strives to not hurt the student's feelings and has difficulty saying no to a student or enforcing rules. If a student disrupts the class, Mr. Jones may assume that he is not giving that student enough attention. When a student interrupts a lecture, Mr. Jones accepts the interruption with the belief that the student must surely have something valuable to add. When he does offer discipline, it is likely to be inconsistent. Mr. Jones is very involved with his students and cares for them very much. He is more concerned with the students' emotional well-being than he is with classroom control. He sometimes bases classroom decisions in student's feelings rather than on their academic concerns.

Mr. Jones wants to be the students' friend. He may even encourage contact outside the classroom. He has a difficult time establishing boundaries between his professional life and his personal life.

However, this overindulgent style is associated with student's lack of social competence and self-control. It is difficult for students to learn socially acceptable behavior when the teacher is so permissive. With few demands placed upon them, these students frequently have lower motivation to achieve. Regardless, students often like this teacher. A Middle School student says: This is a pretty popular teacher. You don't have to be serious throughout the class. But sometimes things get out of control and we learn nothing at all. Return to what is your classroom management style. The implementation of this type of communication to this study is that, students on the contrary should be free to do what they want and teachers are not allowed to control them. In this type of class there is free movement of entry and exist. This type of communication does not tie with the Cameroon system of education which is the competence base approach. (CBA).

#### **2.3.4. A Theory of engagement within Classroom Settings**

We start with a brief description of a typical classroom experience in a school in the United States, public or private, regardless of grade or content area. Whether based on observations of teacher student interactions or youth reports, experiences in classrooms too often fail to capitalize on student interests, goals, and motivation and rather promote disengagement and alienation. One cannot read these accounts and escape the sense that school and classroom settings and the adults responsible for their quality are simply not involved relationally Crosnoe, (2000)Dornbuschet ,(1996) . Yet, despite this generally dismal picture of classrooms, it is also true that nearly every student can describe, with enthusiasm and passion, a relationship with teachers that they felt was meaningful and important to them, often with considerable evidence to back up those claims (Resnick1997) .The impressions gleaned from youth reports are confirmed in observations, some of which are ethnographic in nature while others rely on large-scale assessments of hundreds of classrooms. Example, evidence gleaned from observing large third, and fifth grades shows clearly that the nature and quality of adult-student interactions in classrooms are lacking in the kind of assets outlined in the NRC report. For example, in the NICHD Study of Early Child Care and Youth Development observations in more than 2,500elementary classrooms, of the opportunities for academic activities and learning to which a typical student is exposed, more than 85% of those

opportunities take place in the context of teacher directed whole group instruction or individual seatwork, in contrast to small-group work that might capitalize on teacher-student relationships as key mediators of engagement. The typical student interacted with their teacher (individually or in a small group) fewer than four times in an hour, and in most cases, these exchanges were perfunctory and compliance-directed.

Furthermore, most instructional exchanges had a pronounced and almost singular focus on performing basic skills, tasks that require a discrete answer that is correct or not rather than eliciting analysis, reasoning, or problem-solving around a more ambiguous challenge (Csikszentmihalyi & Schneider, (2000) Marks, (2000)). From a relational standpoint, these exchanges were devoid of personal, emotional, motivational properties that would engage the student in the task at hand's emphasis on meaningful challenges for cognitive development (as well as recent calls for raising standards for "twenty-first century skills"), this focus on basic skills neglects the ways in which reasoning, problem-solving, and more advanced cognition can be a force for engaging students in activities that are highly salient developmentally but which also require relational supports to sustain students' participation. Despite rhetoric that paints a picture of middle and high school as challenging and interesting, the actual experiences youth have in classroom settings (observed or reported) are often lacking in terms of meaningful challenges, supportive relationships, and competence-building opportunities (Crosnoe, (2001) Roeser (s 2000) . Schools all fundamentally rise or fall on the success of what occurs within the classroom (e.g. Crosnoe, 2001; Nye, Konstantz, Tupelos, & Hedges, 2004; Resnick et al., 1997) Ironically, close observation of most any secondary school in America reveals that adolescents—both at risk and high functioning—often display remarkably high degrees of motivation and engagement within the school setting. Rarely, however, does this occur *within* the classroom. High school hallways, playing fields, and lunchrooms literally brim over with youthful energy, excitement, and enthusiasm. Intense interactions occur in sports and extracurricular activities, and interactions with peers dominate students' perception of the social ecology of school. It is only when these students enter their classroom that energy levels decline precipitously, and it is rare that a given student will "connect" "with a teacher or material in classroom or subject area in such a way that they perform at high levels of capacity or "flow" (Csikszentmihaly & Schneider, 2000). The classroom setting looks equally bleak from the perspective of teachers, who are also dropping

out and becoming more disengaged. Fifteen percent of the entire teaching workforce turns over every year. Rates of teachers leaving the profession are increasing. And those who stay report a sense of malaise and frustration—they feel their job is getting *harder and they* have fewer tools with which to work and feel effective.

### **2.3.5. Vroom’s Expectancy Theory (1964/1999)**

This theory states that an individual’s choices are linked to the psychosomatic events occurring at the same time as the behavior (Vroom, 1964/1995). He establishes the relationship between one’s expectations that they have the ability to do what is required, that the outcome is desirable and that the promised Outcome will be delivered if they do their part. There has been expansive debate as to whether or not teachers can in fact motivate their students. This study investigates applying Vroom’s (1964/1995) theory to their students. As previously stated, expectancy is the individual’s belief as to whether or not the outcome is possible. Many seemingly “unmotivated” students display “learned Helplessness” where they simply stop trying or pretend to lack abilities (Burns, 1992). Teachers need to help their students to believe in the idea that they can be successful and create continuous opportunities for small successes upon which their students can build. To reiterate, educators have the distinct ability to influence the climate for their students. They can either make or break a child’s attitude to education, by the culture of achievement or the lack of such that they nurture. If the teacher believes in them, then tendency is generally that they will be more motivated to learn. Payne (2003) argues that in order to level the playing field for their students, educators will have to help their students to set higher standards for themselves, as well as teach the students to self-advocate and recognize the costs of the choices they make (Payne, 2003). If all the conditions of Vroom’s (1964/1995) theory are met, which means the student has the expectancy that hard work and application can lead to academic success (e.g. passing exit exams). The student’s academic success becomes positively violent, as well as that student’s belief in the idea that this academic success can lead to a more rewarding future as his teacher has suggested then the force to act should result. This force is called motivation.

According to Cross, (2001) motivation comes from within, yet she urges educators to expend the effort necessary to enhance student’s self-worth, teaching them how to set and surpass positive expectations based on their own abilities and teach them to value that success.

The combination and repetition of these actions should help to mobilize students toward being achievement motivated. Research by Hersey, Blanchard, and Johnson (1996) supports the argument that needs cause behavior or force action, and motivated behavior will increase if one perceives that they have both the ability (expectancy) to achieve a valued and are confident that they will be rewarded. To implement Vroom's (1964/1995) theory, a student in a classroom needs to be taught the depth of his abilities and how they correlate to his needs. He then needs to be provided with the tools to fulfill those expectancies and see the value in the reward. Much of this Force could be lost in classroom where the teacher sees no value in interacting with and diagnosing his or her students' potential. In his book Vroom interchanged the variables of Instrumentality and Force, as the third element.

## **1.5 Research hypotheses**

Research hypotheses are presented in two categories. The alternative and the null hypothesis. The hypotheses are presented by the statistical symbol  $H_a$  and the Null hypotheses are presented by the symbol  $H_o$ . Therefore the formulation of hypothesis and testing is an important aspect in research work because it provides the researcher with the necessary guides needed in seeking for the solution to the problem under investigation. The following hypothesis were formulated to guide the research work.

### **1.5.1 The general hypotheses**

- $H_{a1}$  There is a significant relationship between classroom interaction and its effects on student's outcome.
- $H_{o1}$  There is no significant relationship between classroom interaction and its effects on student's outcome

### **1.5.2 Specific hypotheses**

- $H_{a1}$  there is a significant relationship between two way communication in classroom and student's outcome
- $H_{o1}$  there is no significant relationship between two way communication and students outcome.

- H<sub>1</sub> there is a significant relationship between one way communication in classroom and student's outcome
- H<sub>0</sub> there is no significant relationship between one way communication and student's outcome.
- H<sub>1</sub> there is a significant relationship between laissez-faire communication in classroom and student's outcome
- H<sub>0</sub> there is no significant relationship between laissez-faire communication and student's outcome.

**Table 2.1.The Synoptic table**

<b>Research Title</b>	<b>Research questions</b>	<b>Research objectives</b>	<b>Research hypothesis</b>	<b>Variables</b>	<b>Indicators</b>	<b>Modalities</b>	<b>Indices</b>
<b>Classroom interactions and its effects on the academic performance of students</b>	To what extend does classroom interaction affect the academic performance of students?	-Is there any relation between a two way communication in classroom and the students out come?	-Ho1 There is a significant relationship between classroom interaction and its effects on student's outcome. -Ho1 There is no significant relationship between classroom interaction and its effects on student's outcome	<u>Independent variables:</u> <u>Classroom Interaction</u>  <u>Dependent Variables:</u> <u>Academic achievement of students</u>	-Learner's centered approach -motivate students approach -Position from the student is far -You are satisfied with your student's outcome. -Exam percentage high. -You do not adjust when there is a drop -Do not find out from students	-Good -Good -Poor -Average -Average -Poor -Poor	Section E and F Section H



	To what extend does classroom interaction affect the academic performance of students?	-Is there any relation between a two way communication in classroom and the students out come?	-Ha1 There is a significant relationship between classroom interaction and its effects on student's outcome. -Ho1 There is no significant relationship between classroom interaction and its effects on student's outcome	-Two way communication	-use Learner's centered approach -Use to motivate students in class -Friendly relations -Move round the class when teaching.	-Good -Good -Good -Good	Section E
	To what extend does classroom interaction affect the academic performance of students?	-Is there any relation between a two way communication in classroom and the students out come?	-Ha1 There is a significant relationship between classroom interaction and its effects on student's outcome. -Ho1 There is no significant relationship between classroom interaction and its effects on student's outcome	-One way communication	-Use traditional strategy during teaching -Do not call all student to participate in class -Find out if they understood -Position far from the students	-Average -Very poor -Good -Poor	Section H

## **CHAPTER THREE:**

### **RESEARCH METHODOLOGY**

#### **Introduction**

This chapter presents the methodology involved in the research work.

- The research type
- The research design
- Population of the study
- sampling size and sampling technique
- Description of the instruments of data collection
- Validations of instruments
- Procedure of data collection
- Method of data analysis

#### **3.1. The research type**

##### **Correlation research**

The research is correlation because it has a significant relationship with the two variables. That is interaction in classroom and students outcome.

#### **3.2. The research design**

Amin defined research design is an outline of what the researcher write or formulate the hypothesis of the final analysis of data. The researcher actually adapted the survey research design for this work since the population of this study is fairly large. The design specifies how such data would be collected and analyze Also,

According to Ngorgu [1991], a survey research is one in which a group of people or item is study by collecting and analyzing data from only a few items or people considered to be representatives of the entire grouping this design the researcher would be able to find out the effect through which classroom interaction has on the academic performance of students.

### **3.3 Site of the study**

This study was carried out in Yaoundé, the central capital of Cameroon. It has a unique climatic condition suitable for learning and even for agriculture. The population can be divided into three sectors the dominant working population (civil servants, the military and the diplomatic cord), followed by commercial activities, agriculture, and education. Better still, Yaoundé is one of the secured towns in Cameroon suitable for teaching learning.

### **3.4 Population of the study**

According to Amin in (2005:235), a population is a complete collection of all the elements that are of interest in a particular investigation. The population of the study comprises of all public secondary schools in the central region in Cameroon.

#### **3.4.1. Target population**

Still according to (Amin, 2005:235) a target population is the population to which the researcher ultimately wants to generalize the results. The target population of this study in this view comprises of two public bilingual schools in this region.

#### **3.4.2. The accessible population**

The accessible population is the population in which the researcher can easily collect data. The accessible population of this study was made up of form one and two of the public schools in the central region of Cameroon.

### **3.5. Sampling size and sampling technique**

A sample is a collection of some elements of a population (Amin, 2005:235) in this research; both the purposive and random sampling techniques were use.

According to Amin (2005:242) purposive sampling technique is one in which the researcher purposely selects samples because of their relevance to the investigation under consideration. In this line, purposive sample population was made up of teachers and students of two public secondary schools

The sample size constituted 40 teachers and 124 students randomly selected from form 1 and 2 as shown in table 1.

**Table 2.1 Accessible population and sample size for teachers**

Public schools	Population of teachers	Sample size for teachers
Lycee Bilingue du Application	50	20
Government Bilingual High School Nkol-Eton	50	20
<b>Total</b>	<b>100</b>	<b>40</b>

The table above shows the accessible population of the study and the sample size of the teachers

Sample size of each school= $\frac{\text{No of teachers in each school}}{\text{Total No of teachers}} \times \text{Sample size}$

**Table 2.2 Accessible population and sample size for students**

Public schools	Population of students	Sample size for students
LyceeBilingue du Application	200	62
Government Bilingual High school Nkol-Eton	150	62
<b>Total</b>	<b>350</b>	<b>124</b>

The table above shows the accessible population of the study and the sample size of students.

Sample size of each school= $\frac{\text{No of students in each school}}{\text{Total No of students}} \times \text{Sample size}$

### **3.6. Description of the instruments of data collection**

Data collection is the process of gathering and measuring information on targeted variables in an established systematic fashion, which then enables one to answer relevant questions and evaluate outcomes. The data collection component of research is common to all fields of study including physical and social sciences, humanities and business. While methods vary by discipline, the emphasis on ensuring accurate and honest collection remains the same. The goal for all data collection is to capture quality evidence that then translates to rich data analysis and allows the building of a convincing and credible answer to questions that have been posed.

“Data collection instruments» is a means of tests, questionnaires, inventories, interview schedules or guides, rating scales, and survey plans or any other forms which are used to collect information on substantially identical items from 2 or more respondents.

“Respondents” means individuals or organizations from which information is collected

A research instrument is a survey, questionnaire, test, scale, rating, or tool designed to measure the variable(s), characteristic(s), or information of interest, often a behavioral or psychological characteristic. Research instruments can be helpful tools to your research study.

Questionnaires and observations were used to collect data to verify the extent to which classroom interaction affects the academic performance of students.

#### **3.6.1 Questionnaire**

According to Merriam-Webster's Learner's Dictionary questionnaires is a written set of questions that are given to people in order to collect facts or opinions about something.

Two set of questionnaire were used for this study, one set administered to the students and the other to the teachers. The one administered to the student was made up of 4 sections (A, B, C and D). Section A constituted the demographic information of the students (respondents) while section B, C and D were related to the research topic (Independent variable), which dealt with students interactions in classroom. The set administered to the teachers were made up of 4 sections E, F, G, and H. These also constituted the demographic information of the teachers; interaction in classroom and students out comes.

### **3.6.2. Observation**

According to Merriam-Webster's Learner's Dictionary observation is a statement about something you have noticed; a comment or remark. Or the act of careful watching and listening: the activity of paying close attention to someone or something in order to get information. The non-participative observation was used for this study. The observation checklist was used to help the researcher have a clue of how interaction in classroom usually takes place. On several occasions, the researchers sat behind observing the teachers on how they use communication in classroom and students reaction through their responses.

### **3.6.3. Validations of instruments**

Validity is the extent to which a concept, [1] conclusion or measurement is well-founded and corresponds accurately to the real world. The word "valid" is derived from the Latin word *validus*, meaning strong. The validity of a measurement tool (for example, a test in education) is considered to be the degree to which the tool measures what it claims to measure; in this case, the validity is an equivalent to accuracy.

In psychometrics, validity has a particular application known as test validity: "the degree to which evidence and theory support the interpretations of test scores" ("as entailed by proposed uses of tests"). [2]

It is generally accepted that the concept of scientific validity addresses the nature of reality and as such is an epistemological and philosophical issue as well as a question of measurement. The use of the term in logic is narrower, relating to the truth of inferences made from premises. Validity is important because it can help determine what types of tests to use, and help to make sure researchers are using methods that are not only ethical, and cost-effective, but also a method that truly measures the idea or construct in question.

### **3.6.3. Content validity**

Content validity is a non-statistical type of validity that involves "the systematic examination of the test content to determine whether it covers a representative sample of the behavior domain to be measured" (Urbina, 1997). For example, does an IQ questionnaire have items covering all areas of intelligence discussed in the scientific literature?

Content validity evidence involves the degree to which the content of the test matches a content domain associated with the construct. For example, a test of the ability to add two numbers should include a range of combinations of digits. A test with only one-digit numbers, or only even numbers, would not have good coverage of the content domain. Content related evidence typically involves subject matter experts (SME's) evaluating test items against the test specifications.

The content of this study covers the objectives; hypothesis and variables. To ensure the content variety of this study, the project supervisor checks the importance of the item to the objective of the study.

#### **3.6.4. Face validity**

Face validity is an estimate of whether a test appears to measure a certain criterion; it does not guarantee that the test actually measures phenomena in that domain. Measures may have high validity, but when the test does not appear to be measuring what it is, it has low face validity. Indeed, when a test is subject to faking (malingering), low face validity might make the test more valid. Considering one may get more honest answers with lower face validity, it is sometimes important to make it appear as though there is low face validity whilst administering the measures.

Face validity is very closely related to content validity. While content validity depends on a theoretical basis for assuming if a test is assessing all domains of a certain criterion (e.g. does assessing addition skills yield in a good measure for mathematical skills? To answer this you have to know, what different kinds of arithmetic skills mathematical skills include) face validity relates to whether a test appears to be a good measure or not. This judgment is made on the "face" of the test, thus it can also be judged by the amateur.

Face validity is a starting point, but should never be assumed to be probably valid for any given purpose, as the "experts" have been wrong before—the Malleus Malificarum (Hammer of Witches) had no support for its conclusions other than the self-imagined competence of two "experts" in "witchcraft detection," yet it was used as a "test" to condemn and burn at the stake tens of thousands women as "witches." [5]

Based on the questionnaires, the items were carefully examined by the supervisor for necessary corrections, some were adjusted and others reframed.

### 3.7. Procedure of data collection

The researcher personally administered the instruments for data collection in the above mentioned public schools. Thanks to the authorization letter given by the head of department of science of education (END), the permissions were granted. The researcher was given a convenient time for the questionnaires to be administered. Respecting this date, the questionnaires for the students were administered and the students filled them and returned them immediately, while the teachers gave appointments at their own convenience time when to fill and collect. Finally, the return rates of the questionnaires for students were exactly as administered and that of the teachers were also returned back the same. The table below shows the return rate of the questionnaires

**Tale 2.3 Distribution of questionnaires and the return rate**

Respondents	Numbers distributed	Numbers retained
Students	124	124
Teachers	40	40
Total	164	164

The table above shows that 124 questionnaires were administered to the students and 124 retained while 40 questionnaires were administered to the teachers and 40 retained.

### 3.8. Method of data analysis

The descriptive statistics were used in analyzing the data precisely the frequencies and percentage. Inferential statistics were used to test the research hypothesis. The inferential statistics encompasses the chi-square test.



The chi square test was used to compare distributions this test was considered appropriate for this study because the study is a rational study thus, the test is aimed at finding the relations and verifying the significant differences between the dependent and the independent variables.

#### Chi-Square Test for Independence

This study explains how to conduct a chi-square test for independence. The test is applied when you have two categorical variables from a single population. It is used to determine whether there is a significant association between the two variables. For example, in an election survey, voters might be classified by gender (male or female) and voting preference (Democrat, Republican, or Independent). We could use a chi-square test for independence to determine whether gender is related to voting preference. The sample problem at the end of the lesson.

The analysis plan describes how to use sample data to accept or reject the null hypothesis. The plan should specify the following elements.

Significance level. Often, researchers choose significance levels equal to 0.01, 0.05, or 0.10; but any value between 0 and 1 can be used.

Test method. Use the chi-square test for independence to determine whether there is a significant relationship between two categorical variables.

#### Analyze Sample Data

Using sample data, find the degrees of freedom, expected frequencies, test statistic, and the P-value associated with the test statistic. The approach described in this section is illustrated in the sample problem at the end.

Degrees of freedom. The degrees of freedom (DF) are equal to:

$$DF = (r - 1) * (c - 1)$$

Where r is the number of levels for one categorical variable, and c is the number of levels for the other categorical variable.

Expected frequencies. The expected frequency counts are computed separately for each level of one categorical variable at each level of the other categorical variable. Compute  $r * c$  expected frequencies, according to the following formula.

$$E_{r, c} = (nr * nc) / n$$

where  $E_{r,c}$  is the expected frequency count for level  $r$  of Variable A and level  $c$  of Variable B,  $n_r$  is the total number of sample observations at level  $r$  of Variable A,  $n_c$  is the total number of sample observations at level  $c$  of Variable B, and  $n$  is the total sample size.

Test statistic. The test statistic is a chi-square random variable ( $X^2$ ) defined by the following equation.

$$X^2 = \sum [(O_{rc} - E_{r,c})^2 / E_{r,c}]$$

where  $O_{rc}$  is the observed frequency count at level  $r$  of Variable A and level  $c$  of Variable B, and  $E_{r,c}$  is the expected frequency count at level  $r$  of Variable A and level  $c$  of Variable B.

## **Conclusion**

This chapter explains the research type, the research design, population of the study, sampling size and sampling technique, description of the instruments of data collection, validations of instruments, procedure of data collection and Method of data analysis

# CHAPTER FOUR: PRESENTATION, INTERPRETATION AND ANALYSIS OF DATA

## Introduction

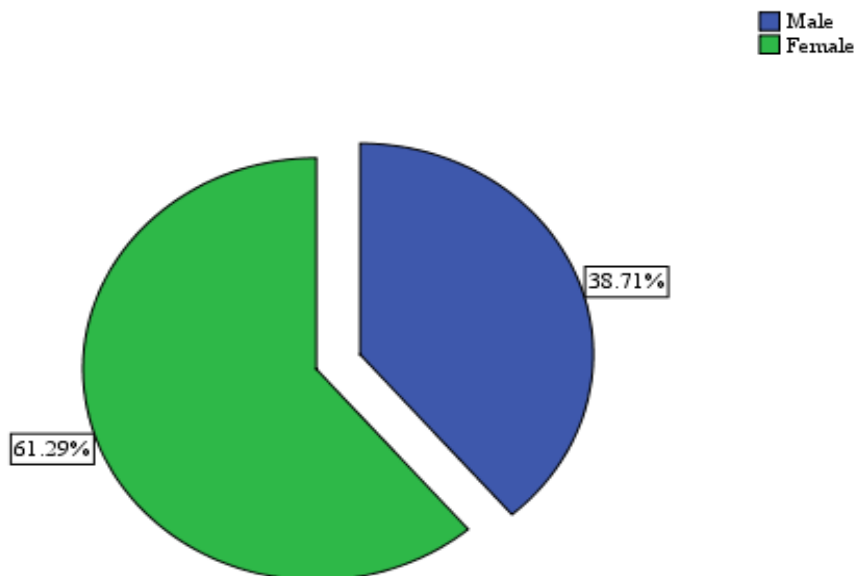
This section aims at presenting interpreting and analyzing the data collected from the field. It is divided into two main sections, first of all the descriptive analysis of the questionnaires then the inferential analysis that will help to test the hypotheses.

### 4.1. Descriptive analysis of the instruments

Here the questionnaires will be presented item by item but adjacently the students then staff questionnaires.

#### ➤ Demographic Information

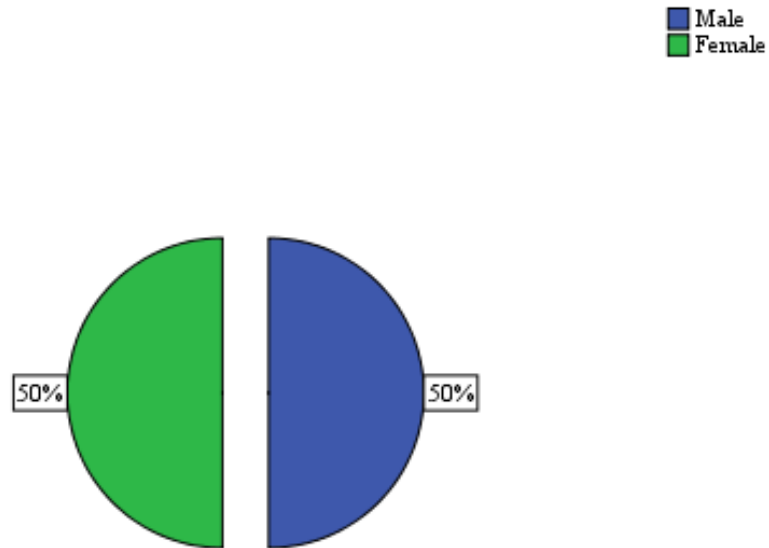
This section seeks to provide the repartition of the respondents according to their age and gender. All respondents were selected from public schools. The first element studied was the gender and figure 1 displays the gender distribution of the students



*Figure 1: Gender Distribution of the Students*

Source: Fieldwork, 2016

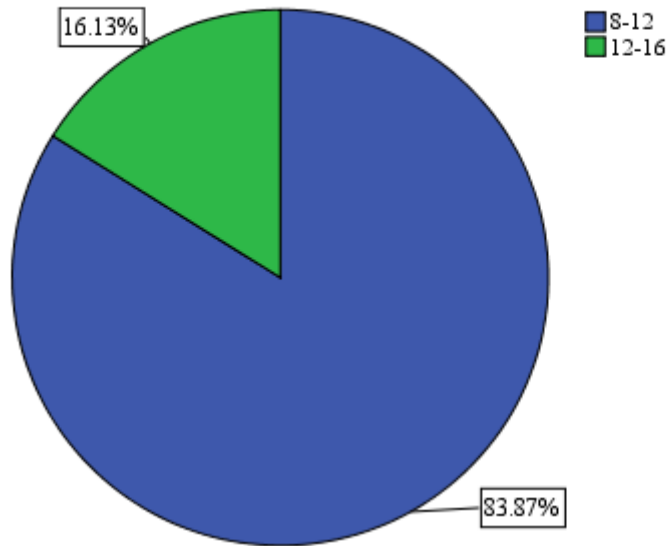
Figure 1 shows that 38.71% of the students are male against 61.29% of the students are females. This is a clear indication as far as the sample is concerned that the students' population of the schools are more of females than males which is clearly in line with most statistics in the domain. The gender reparation of the teachers was also studied and summarized in Figure 2



***Figure 2: Gender Distribution of the Teacher***

Source: Fieldwork, 2016

Figure 2 depicts a balance between the males and the female teachers (50%) this depicts that the teaching profession is as appealing to males as to females. Again it shows that the government as far as recruitment is concerned gives equal opportunities to all genders. The next item investigated was the age distribution of the respondents. Since all the teachers were in the more than 20 category the analysis reported in Figure 3 applies only to students



**Figure 3: Age Distribution of the Students**

Source: Fieldwork, 2016

Figure 3 shows that 83.87% of the students are in the 8 years to 12 years old category as compared to 16.13% who fall in the 12 years to 16 years category. The sample selected therefore reveals a relatively young population as far as the students are concerned. The next item investigated was the practice of two way communication

➤ **Two Way Communications**

Two way communication was analysed based on each group of respondents. Here, it involves the use of a student centered approach where there is an interaction between the teacher and the students. The analysis of students' responses is reported in Table 1.

**Table 1: Two Way Communication-Students**

<b>Statements (items)</b>	<b>N</b>	<b>Mean</b>
You participate in classroom during teaching learning process	124	3.13
You often study in groups	124	2.52
You ask your peers to explain what you don't understand	124	3.42
You relationship with your teachers is cordial	124	3.16
You teacher use verbal and non-verbal communication in class	124	2.77
<b>Overall Mean</b>		<b>3.00</b>

Source: Fieldwork, 2016

Scale: 1.00- 2.50= *Not Practiced*, 2.51-4.00= *Practiced*

Table 1 shows the mean responses recorded from the respondent (students). The scale provided below shows that the two way communication is highly practiced in the schools this as represented by an overall mean of 3.00. This is further supported by the fact that students always ask their peers to explain to them things which are not understood (Mean= 3.42), they participate in the classroom during the teaching process (Mean= 3.13), they also have a cordial relationship with their teachers (Mean=3.16). But it shall be noted that study in group is not really practiced by them (Mean= 2.52). A further analysis of this item based on the percentage responses is reported in Table 2.

**Table 2: Frequency Analysis of Students Two Way**

Statements (items)	Agree	Disagree
	%	%
You participate in classroom during teaching learning process	93.5	6.5
You often study in groups	48.4	51.6
You ask your peers to explain what you don't understand	96.8	3.2
You relationship with your teachers is cordial	83.9	16.1
You teacher use verbal and non-verbal communication in class	53.3	46.7

Source: Fieldwork, 2016

Table 2 merged the Strongly Agree with Agree into Agree and Strongly Disagree and Disagree into Disagree. This shows as already demonstrated by Table 1 that students participate during classroom (93.5% Agree), they seek help from their class mates when required (96.8% Agree) and that the teacher uses nonverbal and verbal communication at the same time (53.3 Agree). Again, as already stated, the students do not study in group (51.6% Disagree).

The view of the teachers about the same item was analyzed and responses reported in Table 3.

**Table 3: Two Way Communication-Teachers**

Statements (items)	N	Mean
As a train teacher you use learners centered approach	40	3.90
You motivate students in class when they answer questions	40	3.90
You have a friendly relationship with your students	40	4.00
You move round the class when teaching	40	3.60
<b>Overall Mean</b>		<b>3.85</b>

Source: Fieldwork, 2016

Scale: 1.00- 2.50= Not Practiced, 2.51-4.00= Practiced

From data compiled in Table 3, there is no doubt that the teachers highly practice the two way communication (Mean= 3.85). All items here scored very high, as the study obtained a Mean 4 for the statements that teachers motivates students in class when the answer questions, they have a friendly relationship with students and they move around the class to be closer to the students when teaching. It can therefore be concluded from Table 1, Table 2 and Table 3 that the two way communication is practiced in the selected institutions. The study thus proceeded to evaluate the practice of ne way communication in the schools

### **One Way Communication**

The investigation about the practice of one way communication was done from each group of respondents and analysis reported in Table 4.

**Table 4: Students View on One Way Communication**

Statements (items)	N	Mean
You understand better when the teacher talk alone in class	124	2.81
You are not often given the opportunity to ask/answer question	124	3.16
You enjoy studying on your on	124	2.73
You have your individual time table	124	3.30
Overall Mean		3.00

Source: Fieldwork, 2016

Scale: 1.00- 2.50= *Not Practiced*, 2.51-4.00= *Practiced*

From the responses of the students reported in Table 4, one way communication is also practiced in the schools (Mean= 3.00). This appears as no surprise as most at times the different teachers have different teaching styles and depending on the subject, the teachers adopt different strategies. Here, it was revealed that students averagely understand when the teacher talks alone in class (Mean=2.81), students are not given the opportunity to ask or answer questions (Mean=3.16) and they enjoy studying on their own (Mean= 2.73). A further analysis is reported in Table 5



**Table 5: Frequency Analysis of One Way-Students**

Statements (items)	Agree (%)	Disagree (%)
You understand better when the teacher talk alone in class	66.7	33.3
You are not often given the opportunity to ask/answer question	86.6	13.4
You enjoy studying on your on	60	40
You have your individual time table	80	20
Overall Mean		3.00

Source: Fieldwork, 2016

From the analysis reported in Table 5, it is clear that 66.7% of the students understand better in a traditional teaching environment, 60% enjoy studying on their own and 80% have their individual timetable. The one way communication was also evaluated from the teachers' perspective and findings reported in Table 6

**Table 6: One Way communication- Teachers**

Statements (items)	N	Mean
You use the traditional strategy during teaching learning process	40	2.60
You do not allow students to participate in class	40	2.20
You do not find out from students if they actually understand the lesson	40	1.80
Your position in class is far from the students	40	1.20
<b>Overall Mean</b>		<b>1.95</b>

Source: Fieldwork, 2016

Scale: 1.00- 2.50= Not Practiced, 2.51-4.00= Practiced

Table 6 reveals that the teachers do not practice the one way communication (Mean=1.95), in order words they are more of the students centered approach than the traditional teachers' centred approach. Even though this is opposite to what the students think, teachers hardly accepted they used the traditional teaching strategy (Mean=2.60), they do not stand far from students (Mean=1.20) and they don't make sure by asking students if they actually understand what they were taught (Mean=1.80). The study proceeded by investigating the practice of *laissez faire* communication in class.

### **Laissez-faire Communication**

The investigation on this practice from the point of view of students is recorded in Table 7.

**Table 7: Laissez Faire- Students**

<b>Statements (items)</b>	<b>N</b>	<b>Mean</b>
You are never focused or attentive in class	124	1.77
Noise makers are not often given punishment	124	2.55
You move in and out of the class even when the teacher is in class	124	1.52
You parents do not check your books	124	2.32
you enjoy not being controlled in class	124	1.42
<b>Overall Mean</b>		<b>1.92</b>

Source: Fieldwork, 2016

Scale: 1.00- 2.50= *Not Practiced*, 2.51-4.00= *Practiced*

Table 7 about the students view on the practice of *laissez faire* in the classrooms and at home reveals that it is not practiced (mean=1.92). This is justified that the students are often focus in class (Mean=1.77), noise makers on average are not punished (Mean=2.55) but students are not allowed to move in and out when the teacher is in class (Mean= 1.52). The view of the teachers is analysed in the following section and results compiled in Table 8.

**Table 8: Laissez-faire Teachers**

Statements (items)	N	Mean
You allow students walk in and out of your class when they want	40	2.00
You don't punish your students even when they make noise in class	40	2.70
You come to class when you want	40	1.60
Do you really have love for your profession	40	3.50
<b>Overall Mean</b>		<b>2.45</b>

Source: Fieldwork, 2016

Scale: 1.00- 2.50= *Not Practiced*, 2.51-4.00= *Practiced*

The teacher also from Table 8 confirmed that the laissez faire is not practiced in the classrooms (Mean= 2.45). However, they don't really punish students who make noise in class (Mean=2.70) and those selected do really love the profession (Mean=3.50).

### Students Outcome

The students outcome was evaluated solely by the teachers and findings thereof compiled in Table 9.

**Table 9: Students Outcome**

Statements (items)	N	Mean
You are satisfied with you student's outcomes	40	2.70
Your exams percentage is usually very high	40	2.40
Even when there is a drop you do not border to adjust	40	1.60
You do find out from of students' parents whose performances are usually low	40	3.10
<b>Overall Mean</b>		<b>2.45</b>

Source: Fieldwork, 2016

Scale: 1.00- 2.50= *Poor Outcome*, 2.51-4.00= *High Outcome*

Table 9 reveals that the students on average have a poor outcome (2.45). Even though they are on average satisfied with the performance of students (Mean= 2.70), and that they often communicate with the parents of under performers (Mean= 3.10), there are constant drops in performance that the teachers hardly try to adjust (Mean=1.60).

➤ **Inferential Analysis**

The test of hypothesis is done based on the pairwise Pearson product moment correlation coefficient (PPMCC) with a significance level  $\alpha=0.05$ . The analysis is done for teachers responses only since outcome was not measured for the students and is based on the correlation Matrix reported in Table 10

**Table 10: Correlation Matrix**

		<b>Students' Outcome</b>	Teachers' Two Way	Teachers' One Way	Teachers' Laissez Faire
Students' Outcome	Pearson Correlation	<b>1</b>	.228	-.169	.069
	Sig. (2-tailed)		.588	.689	.872
	N	<b>40</b>	40	40	40
Teachers' Two Way	Pearson Correlation	<b>.228*</b>	1	-.074	.520
	Sig. (2-tailed)	<b>.050</b>		.849	.187
	N	<b>40</b>	40	40	40
Teachers' One Way	Pearson Correlation	<b>-.169</b>	-.074	1	.359
	Sig. (2-tailed)	<b>.689</b>	.849		.382
	N	<b>40</b>	40	40	40
Teachers' Laissez Faire	Pearson Correlation	<b>.069</b>	.520	.359	1
	Sig. (2-tailed)	<b>.872</b>	.187	.382	
	N	<b>40</b>	40	40	40

Source: Fieldwork, 2016

➤ **Hypothesis 1**

The first hypothesis was stated as follows:

*H<sub>0</sub>: There is no statistically significant relationship between two way communication and the outcome of students at the selected schools.*

From the correlation matrix in Table 10, we obtain a correlation coefficient  $r=0.228$  showing there is a positive relationship between the two variables. To this  $r$  is attached a  $p$ -value= $0.05$  (the  $p$ -value= $\alpha=0.05$ ) which also shows that the relationship is significant. Based on this we reject the null hypothesis and conclude that there is indeed a positive relationship between the two way communication and outcome. In other words, when the teacher uses the students centered approach, thus allowing the students to express their views and participate in the knowledge acquisition process as actors, there is a higher propensity of them obtaining good results.

➤ **Hypothesis 2**

The second hypothesis was stated as follows:

*H<sub>0</sub>: There is no statistically significant relationship between one way communication and the outcome of students at the selected schools.*

For the second hypothesis, the correlation matrix in Table 10 shows a correlation coefficient  $r= -0.169$  which depicts a negative relationship between the traditional one way communication channel and the students outcome. To this coefficient  $r$  is associated a  $p$ -value =  $0.689$ . Since the  $p$ -value  $>\alpha$  we fail to reject the null hypothesis and conclude that there is no significant relationship between the one way communication and students outcome. In other words the teachers centered approach is not sure to produce an outcome at the students' level.

➤ **Hypothesis 3**

The third hypothesis was stated as follows:

*H<sub>0</sub>: There is no statistically significant relationship between laissez faire communication and the outcome of students at the selected schools.*

For this hypothesis, we obtained a correlation coefficient  $r= 0.069$  depicting a very weak positive relationship between the variables. This is associated with a  $p$ -value=  $0.872 >\alpha$  we therefore fail to reject the null hypothesis and conclude that there is no significant relationship between the laissez faire communication and students outcome.

# **CHAPTER FIVE:**

## **DISCUSSIONS, RECOMMENDATIONS, SUGGESTIONS, LIMITATIONS AND CONCLUSION**

### **Introduction**

The final chapter of this research work seeks to discuss the findings obtained from the field then arrive at an appropriate conclusion and make recommendations based on the findings as well as implications for further studies.

### **5.1 Discussions of findings**

The discussion is done at the base of the different research objectives. But before that, it should be noted that the response rates obtained for the study was quite low and out of which two (2) questionnaires were rejected for having a lot of inconsistencies. The samples were collected from two public high schools of Yaoundé respondents to the self-administered questionnaires.

The first objective sought to assess the relationship existing between two way channel of communication between teachers and students and the performance of the students termed as outcome. It was realised through the study that the two way communication was practiced in the schools (Table 1, Table 2 and Table 3). This is in line with new pedagogical suggestions that stipulate that the teaching must be shifted from the teachers centered approach to the students (learners) centered approach. According **to the Law N<sup>0</sup> 98/004 of April 1998** to lay down guild lines for education in Cameroon, the syllabuses that were drawn up by the inspector general of education in the ministry of secondary education since 2012 are in accordance with the major guidelines for education in general and secondary education in particular as they are enshrined both in the 1998 law to lay down guidelines of education in Cameroon and in the 2009 Growth and Employment Strategy Paper (DSCE). Conceived in the various inspectorates of pedagogy and later introduced for training for secondary and high schools during the 2012/2013 school year, these syllabuses were developed with the

contributions of the classroom teachers and teachers trade unionists. The new syllabuses have to undergo many changes: e.g. Shift from a skill based approach to a competence based approach through real life situations and a shift from a school cut off of society to the one that prepares citizens for a smooth insertion into a socio cultural and economic activities.

The inferential analysis done with the help of the Pearson product moment correlation coefficient allowed the study to conclude that there was indeed a positive relationship between the practice of the two way communication and the outcome of students. These findings align with the findings from Henry (1980) and those from Whitaker (2004) when they stated that effective teaching learning process requires conscious efforts by the teacher and the taught. By this the students and the teacher participate actively in the knowledge acquisition process and this in return helps the student to build and remember the acquired knowledge easily. However, caution should be taken at this level because some teachers might turn to abuse of this method leaving all or almost all the job on students by turning their classes into constant students' presentations ('expose') and just relax without assuring good quality of the produced works.

The second specific objective of the study was to assess the relationship between the one way communication and students' outcome. This is the traditional approach where the teacher was the only one talking during the class and little or no interaction existed during the class period between teachers and students. The exploratory analysis of the questionnaires revealed that to a certain extent the traditional system was practiced by some of the teachers. The PPMCC test for this revealed that there was no significant relationship between the traditional approach and the students' outcome. This is not far from the findings from Dunklin and Buddle (1974-94) stating that in an authoritarian classroom situation the effect upon achievement in any school subjects will obviously be negative. It shall be noted that in this age interaction is not as it has been in the past, students learn even from their television set and therefore they seek to share and be acknowledged and when they are not given opportunity for that they might turn to dislike the teacher, the subject and this will greatly affect their performance.

The third specific objective of the study sought to evaluate the relationship between a laissez faire environment and the outcome of the students. A laissez faire environment is one where subjects are allowed to behave as it pleases them with no punishment or negative reward. Even though a general exploratory/descriptive analysis revealed that the laissez faire system was not practiced by the selected schools, some items still need special attention such as the cross check of students work/book by their parents. The inferential test with the PPMCC revealed that there was no significant relationship between the use of the laissez faire approach and the students' performance. Dunklin and Biddle (1974) are of the opinion that good teachers can stimulate interest in pupils especially when our classrooms are lively and interesting not dull and apathetic. There should be a lot of empathy within our classrooms. It is therefore clear that if we are to be successful teachers, we must not only maintain a bright cheerful atmosphere, a discipline and orderly environment, but we must also teach.

- **Summary of findings**

The first hypothesis was stated and proven as follows

*There is no statistically significant relationship between two way communication and the outcome of students at the selected schools.*

From the correlation matrix in Table 10, we obtain a correlation coefficient  $r=0.228$  showing there is a positive relationship between the two variables. To this  $r$  is attached a  $p$ -value= $0.05$  (the  $p$ -value= $\alpha=0.05$ ) which also shows that the relationship is significant. Based on this we reject the null hypothesis and conclude that there is indeed a positive relationship between the two way communication and outcome. In other words, when the teacher uses the students centered approach, thus allowing the students to express their views and participate in the knowledge acquisition process as actors, there is a higher propensity of them obtaining good results.

The second hypothesis was also stated and proven as follows:

*There is no significant relationship between one way communication and the outcome of students at the selected schools.*



For the second hypothesis, the correlation matrix in Table 10 shows a correlation coefficient  $r = -0.169$  which depicts a negative relationship between the traditional one way communication channel and the students outcome. To this coefficient  $r$  is associated a  $p$ -value  $= 0.689$ . Since the  $p$ -value  $> \alpha$  we fail to reject the null hypothesis and conclude that there is no significant relationship between the one way communication and students outcome. In other words the teachers centered approach is not sure to produce an outcome at the students' level.

The third hypothesis was stated and proven as follows: *There is no significant relationship between laissez faire communication and the outcome of students at the selected schools.*

For this hypothesis, we obtained a correlation coefficient  $r = 0.069$  depicting a very weak positive relationship between the variables. This is associated with a  $p$ -value  $= 0.872 > \alpha$  we therefore fail to reject the null hypothesis and conclude that there is no significant relationship between the laissez faire communication and students outcome.

## **Conclusion**

From the discussion above it has been realised that the systematic two way communication where there exist a learners' centered approach should be the one mostly employed in classes since it produces positive outcome. The study thus concludes that classroom interaction greatly affects the performance of students. This interaction should be jovial, participative but with an atmosphere of discipline to avoid the students turn the classroom into a playground.

## **5.2 Recommendation of findings**

### **5.2.1 To teachers**

At the end of this study, in view with the findings obtained, the following recommendations are made to enhance the learning process.

- Teachers should not stay focus on one aspect of the transmission process but seek to find the best approach that will suit their classrooms thereby maximizing the growth in performance of their learners.
- The teachers should encourage students to study in groups since this has proven efficient to promote group retention, sharing and easy learning.

- Nonverbal communication puts students in confidence and relaxes the classroom atmosphere; teachers should therefore use a mixture of verbal and non-verbal communication.
- Acknowledging the fact that their task is cumbersome and require attention and a lot of time, teachers should put more emphasis to researchers or students who seek to collect data from them for their studies since this can help to make our educational system better.

Teachers should established high level of interaction through questioning as it promotes involvement, enhances learning and motivates students.

Vi Teachers should give attention to all the students in the class including back benchers to increase achievement of students.

vii) Teachers should increase the amount of student's participation by redirecting, probing, and

focusing questioning techniques.

viii) Teachers should provide chances to the students to participate in the teaching learning process and start classroom discussion.

ix) Teachers should try to help students to achieve best possible understanding, through class room interaction.

x) Teachers should avoid over reaction against incorrect response, but rather guide the student to encourage and motivate them in the classroom interaction.

xi) Teachers should ask students to clarify their ambiguities through questions where they don't understand the lesson.

### **5.2.3. To the government**

The government should organize seminars and workshop most importantly for teachers on how to apply strategic classroom interaction to improve the performance of students in class so as to boast education in Cameroon, Africa and the world as large.

#### **5.2.4.To school administrators**

The pedagogy in charge of formulating school policies in particular should make sure that school policies are reforms over the years. That is from the ministry of higher education right down to the ministry of basic education.

#### **5.2.5.To parents**

- Teachers and schools administrations should put more measures in place for parents to participate in this learning process by either controlling their books of their children at home, making sure they do their homework or even calling to the school to inquire about the behaviour of their children at school.

### **5.3 Suggestions of the study**

Researchers interested in the field of classroom interaction could investigate on the following topic:

- A similar study could be carry on classroom interactions and its effect on the academic performance of students in different regions of Cameroon or even out of the country
- A study could also be carried out on the use of ict (information and communication technology in classroom interaction and its effects on student's outcome.
- Better still; a study could be carried out on teacher's methods of teaching in classroom settings and its outcome on the students.
- Furthermore, communication and technology in classroom settings and its effects on the academic performance of students.
- Lastly, a study could be carried out on the effects of classroom organisation on students.

These suggestions are to encourage other researchers and also to guide them if they actually find it necessary to carry out similar study in classroom interaction and its effects on student's outcome.

#### **5.4 Limitations of the study**

The difficulty of encountered by the researcher to put up this work of study was numerous, amongst which were;

- Financial constraints; the researcher could not actually cover much due to the small amount of money she had. Since she faced regular health problem and as such most of her finances was spent in the hospital.
- limited time; the researcher could not as well carry out her study due to the limited time given since she had a whole lot to do. The time she was supposed to go the field to carry out the research was used for the internship.
- The researcher also faced a lot of difficulty collecting data from the field. It was not easy to work with the teachers in the field. Some of the teachers intentionally refused to collaborate as they claimed to be so busy thus to collect questionnaires and give responses was a problem
- One of the measure problem encountered by the researcher was health. Being in her pregnancy condition she went through a lot of stress and pains .she spent most of her time in the hospital and could not really concentrate in carrying out the study. But all the same she did her best to put this study what it is today.
- Another difficulty encountered was electricity failure. In many occasions the light went off when typing the work. This was seen as a measure problem to the research because putting this work what it is was not easy as a result of constant electricity failure in the area where she lives especially in her own compound.

## GENERAL CONCLUSION

Education being the backbone of every society and an aggregate of all the processes by means of which people develop their, altitudes and forms of behavior which are of positive value to themselves and the society in which they live, it is therefore important to note that the outcome of it is significant thus the key holders of imparting knowledge should take into consideration the important strategies of communication in classroom.

With the introduction of the competence base approach, teachers as well as the school administrators should make sure this approach is put in to practice. We should not only fold our hands and continue depending on the governments but work hand in hand with the government so that in the next twenty years that is before 2035, Cameroon would be catapulted into developed state.

In order to be able to achieve this goal, the advancement of ICT (information and communication Technology) should be encouraged and applied in classroom for better interaction to take place. With this, knowledge will easily be passed by the teachers and acquired by the studies.

## REFERENCES

- Allen, J. P. (1968). Philiber, S., Herrling, S., & Kuperminc, G.P. *Arnold, D. H., McWilliams, L., & Arnold, E. H. (1998). Teacher discipline and child misbehavior in day care: Untangling causality with correlational data. Developmental Psychology, 34, 276–287* Birch,
- . Amin, (2005) location, reading and evaluating reports of research as well as reports of Observation, discussions and opinions.
- Hamre & Pianta, (2007). Teaching through Interactions Framework
- Ladd, G. W. (1996). *Interpersonal relationships in the school environment and* Birch S. H., & Brophy and Evert Wittrock, (1980) Teachers-student relationship
- Ladd, G. W. (1998). Children's interpersonal behaviors and the teacher-child Relationship.
- Bloom, B. S., Engelhard, M. D., Furst, E. J., Hill, W. H., & Bowlby, J. (1969). *And loss (Attachment, Vol. 1). New York: Basic Books.*
- Brown, G.A and Edmondson, (1984) *Asking of question in classroom, E.C. Wragg [Ed] Classroom Teaching skills.*
- Brown, G.A and Edmondson, [1984] *Asking of question in classroom, E.C. Wragg [Ed] Classroom Teaching skills.*
- Burner, J. (1996). *the culture of education, Cambridge MA: Harvard university press.* Retrieved From [http://carbon.cudenver.edu/~mryder/itc\\_data/constructivism.htm](http://carbon.cudenver.edu/~mryder/itc_data/constructivism.htm) Cameroon Constructivist Learning Theory. Retrieved from the World Wide Web November 2, 2002 from <http://www.artsined.com/teachingarts/Pedag/Dewey.html>
- Copyright, 1996). *Indiana University - Center for Adolescent Studies, all rights reserved.* Kris Bosworth – Director
- Crotty, T. (1993). *the Constructivist Paradigm. Retrieved from the World Wide Web January 21 2003 from http://edie.eprost.sfu.ca/it/constructivist-learning*
- Dougiamas, M. (1998). *A Journey into Constructivism. Retrieved January 21, 2003 from the World Wide Web http://dougiamas.com/writing/constructivism.html*

- Doyle, W. (1986). *Classroom organization and management in Wittroc M.C Ed Hand book on Research on teaching 3<sup>rd</sup>.Ed New York: collar Mac Millan London.*
- Doyle's, (1986) *classroom organization and management in Wittroc M.C Ed Hand Book on research on teaching 3<sup>rd</sup>.Ed New York: collar Mac Millan London.*
- Good, T.LandBrophy.T.E [1978].*Looking in classroom [2<sup>nd</sup> Ed] .Harper and Row.NewYork. Hagerstown, San Francisco London*
- Good, T.LandBrophy.T.E [1978].*Looking in classroom [2<sup>nd</sup> Ed] .Harper and Row. New York. Hagerstown, San Francisco London*
- Hamre, B. K., &Pianta, R. C. (2005). Can instructional and emotional support in the first Grade classroom make a difference for children at risk of school failure? *Child Development, 76(5), 949–967.*
- Hanley, S. (1994).*On Constructivism. Maryland Collaborative for Teacher Preparation, College Park, MD.* Retrieved from the World Wide Web January 21, 2003 from <http://www.towson.edu/csme/mctp/Essays/Constructivism.txt>
- Hoyler.E [1980] *the role of the teacher Methuen New York: Humanities' Press.*
- Jump up ^ Data Collection and Analysis by Dr. Roger Saps ford, Victor Juppe ISBN 7619-5046- Jump up ^ Lescroël, A. L.; Ballard, G.; Grémillet, D.; Authored, M.;
- Ainley, D,(2014).*Decamps, Sébastien, ed. "Antarctic Climate Change: Extreme Events Disrupt Plastic Phenotypic Response in Adélie Penguins". PLoS ONE 9 (1): e85291. doi:10.1371/journal.pone.0085291. PMC 3906005.PMID 24489657.*
- Jump up ^ Weimer, J. (ed.) (1995).*Research Techniques in Human Engineering. Englewood Cliffs, NJ: Prentice Hall ISBN 0-13-097072-7*
- Lebow, D. (1993).*Constructivist values for instructional systems design: Five principles toward a new mindset. Educational Technology Research and Development, 41 (3), 4-16.*
- MINEDUB (2008) Orientation Law the Law N<sup>o</sup> 98/004 of 14th April 1998 on education
- Nworgu, B.G. [1991] *Educational Research: Basic issues and methodology Nigeria: Wisdom Publisher limited.*
- Nworgu, B.G. [1991] *Educational Research: Basic issues and methodology Nigeria: Wisdom Publisher limited.*

.Salomon, G. and Perkins, D. (1998) Individual and Social Aspects of Learning, In: P. Pearson  
And A. Iran-Nejad (Eds) Review of Research in Education 23, pp. 1-24,  
American Educational Research Association, Washington DC.

Von Glaserfeld, E. (1990). *An exposition of Constructivism: Why some like it radical*. In R.B.avis,  
C. A. Maher and N. Nodding (Eds), *Constructivism views on the teaching and  
Learning of mathematics (pp 19 – 29)*. Reston, Virginia: National Council of  
*Teachers Of Mathematics*.



**APPENDIX**

**APPENDIX 1:**  
**QUESTIONNAIRES FOR STUDENTS**

Dear students,

I am a final year students from ENS Yaoundé under the department of science of education. I am carrying out a research on **classroom interaction and its effects on the academic performance of students in some selected public schools in Yaoundé**. Therefore your contributions and cooperation will determine the success of this academic work. You are assured that your responses will be treated confidentially. Kindly answer the following questions as required.

Thanks for your cooperation.

*You are required to tick (/) in each box against the statement to show to level of agreement and disagreement the statement in the sections that follows [Strongly agree (SA), Agree (A), and Disagree (D), strongly disagree (SD)]*

**SECTION A: DEMOGRAPHIC INFORMATION**

1. School type:

A. Public                       B. Lay private

Denominational

2. Gender:                                      A. Male                       B. Female

3. Age: A. 8-12                       B. 12-16                      C. 16-20                       D. 20+

**SECTION B: TWO WAY COMMUNICATION AND STUDENTS OUT COMES**

<b>Statements (items)</b>	SA	A	D	SD
You participate in classroom during? teaching learning process				
You often study in groups?				
You ask your peers to explain what you don't understand?				
You relationship with your teachers is cordial				
You teacher use verbal and non-verbal communication in class?				

**SECTION C: ONE WAY COMMUNICATION AND STUDENT'S OUTCOME**

<b>Statements (items)</b>	SA	A	D	SD
You understand better when the teacher talk alone in class?				
You are not often given the opportunity to ask and answer question in class?				

You enjoy studying on your on				
You have your individual time table?				

**SECTION D: LAISSEZ-FAIRE COMMUNICATION AND THE STUDENTS OUT COME**

<b>Statements (items)</b>	<b>SA</b>	<b>A</b>	<b>D</b>	<b>SD</b>
You are never focused or attentive in class				
Noise makers are not often given punishment				
You move in and out of the class even when the teacher is in class?				
You parents do not check your books				
you enjoy not being controlled in class				

**APPENDIX 2:**

**QUESTIONNAIRE FOR TEACHERS**

Dear teachers,

I am a final year students from ENS Yaoundé under the department of science of education. I am caring out a research on **classroom interaction and its effects on the academic performance of students in some selected public schools in Yaoundé** .therefore your contribution and cooperation will determine the success of this academic work. You are assured that your responses will be treated confidentially. Kindly answer the following questions as required.

Thanks for your cooperation.

**DEMOGRAPHIC INFORMATION**

You are required to thick (/) in each box against the statement to show to level of agreement and disagreement the statement in the sections that follows.

1. School type:

A. Public       B. Lay private       C. Denominational

2. Gender:              A. Male               B. Female

4. Age : A. 20-30       B. 30-40               C. 40-50       D. 50+

**SECTION E: TWO WAY COMMUNICATION AND ITS EFFECTS ON STUDENT'S OUTCOME**

<b>Statements (items)</b>	SA	A	D	SD
As a train teacher you use learners centered approach?				
You motivate students in class when they answer questions				
You have a friendly relationship with your students?				
You move round the class when teaching?				

**SECTION F: ONE WAY COMMUNICATION AND ITS EFFECTS ON STUDENT'S  
OUT COMES.**

<b>Statements (items)</b>	SA	A	D	SD
You use the traditional strategy during teaching learning process				
You do not allow students to participate in class?				
You do not find out from students if they actually understand the lesson?				
Your position in class is far from the students?				

**SECTION G: LAISSEZ COMMUNICATION AND ITS EFFECTS ON THE ACADEMIC PERFORMANCE OF STUDENTS**

<b>Statements (items)</b>	SA	A	D	SD
You allow students walk in and out of your class when they want?				
You don't punish your students even when they make noise in class				
You come to class when you want				
Do you really have love for your profession				



## SECTION H: STUDENT'S OUTCOMES

<b>Statements (items)</b>	SA	A	D	SD
You are satisfied with you student's outcomes?				
Your exams percentage is usually very high?				
Even when there is a drop you do not border to adjust?				
You do find out from of students' parents whose performances are usually low?				