

TITLE PAGE

**ECONOMICS CLASSROOM INTERACTION PATTERNS IN SENIOR
SECONDARY SCHOOLS IN NSUKKA EDUCATION ZONE IN
ENUGU STATE, NIGERIA.**

By

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DEDICATION

This work is solely dedicated to my family for their moral and financial support.

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ABSTRACT

This research examined Economics classroom interaction patterns in senior secondary schools in Nsukka Education zone in Enugu state, Nigeria. To achieve the purpose of this study, nine research questions and four hypotheses were formulated to guide the study. Descriptive survey research design was adopted for the study. A sample of three hundred and forty - one (341) students was randomly selected from public senior secondary schools for the study. The instrument used for data collection was modified Flanders Interaction Analysis Category (FIAC), the instrument was adapted and subjected to validation by experts in social science education, educational psychology and measurement and evaluation. The reliability estimate of the instruments was established through Cronbach Alpha statistics. Data were analyzed using frequency counts, mean, percentage and t-test statistic. The major findings from the study showed that Economics teachers dominated the Economics classrooms and initiated interactions themselves. In sex segregated schools, boys interact more frequently with Economics teachers than girls. The result also showed that Economics teacher interact more with students from urban areas than those in the rural areas and students in the urban areas interact more than those in the rural areas.

CHAPTER ONE

INTRODUCTION

Background of the Study

Classroom interaction is critical to the teaching and learning situation. It is a useful tool for engaging students in active learning and also for enhancing the overall communication in the classroom. It is, thus, the teacher's responsibility to create the enabling environment to enhance students' intellectual, social and emotional growth. Classroom interaction is a practice that enhances the development of the two very important language skills which are speaking and listening among the students. This device helps the students to be competent enough to think critically and share their views among their peers. The amount of teacher and students' talks in the classroom situation facilitates effective and efficient interaction. This means that the nature and amount of talk has profound bearing on the nature and quality of Economics classroom interaction patterns in senior secondary school that could be obtained in any classroom interaction.

Interaction among people plays some vital roles in the life of individuals. This is evident in the way people relate with one another at home, in the school, within the society and among peer groups (Van, Wolfman, Yasuhara & Anderson 2002). Interaction occurs every day in the classroom activities, which is between

the teacher and the learner (Olatoye, Aderogba&Aanu, 2011). It is managed by everyone, not only by the teacher in the classroom but also by the students. This interaction is usually used to share ideas together and it is the process through which teaching is accomplished.

Classroom interaction, therefore, is the talk that occurs between teachers and students and among students (Best & Addison, 2000). It is the primary medium through which learning occurs in the classroom that is any kind of classroom, be it Mathematics or Economics classroom. According to Kouicem (2012), classroom interaction or classroom behaviour describes the form and content of behaviour or social interaction in the classroom. Interaction in the classroom is an essential part of teaching-learning process. The classroom climate is built up by the patterns of interaction between teachers and studentsø verbal exchange, asking questions, responding and reacting. Maslowski (2003) described the class climate as the collective perceptions of students with respect to the mutual relationship within the classroom, the organization of the teaching and learning tasks of the students. It is important to mention that the interaction between students and teachers is closely related to the classroom climate. Classroom interaction during the teaching-learningprocess could be verbal or non-verbal behaviours. The most important factors in a classroom situation are the interactive exchanges initiated by teachers and students.

According to Flanders as cited in Sahlbery (2010), classroom activity or interaction patterns can be described as teacher talk, student talk and period of silence or confusion. Teacher talk is further classified as direct and indirect influence. Indirect influence has subcategories which are: - accepts feeling, praise and encourage, accepts and uses idea of students and ask question. Direct influence also has subcategories, which are: - lecturing, giving directions, criticizing or justifying authority; student talk could be classified as response and initiation; period of silence or confusion is an integral part of classroom interaction and a key concept of the way we interact. It functions as a means of reticence and reflection (Onwiodiokit&Oranu, 2012).

Classroom interaction is important because interaction is the essential criteria of classroom pedagogy. Chaudron (2008:10) stated that interaction is viewed as significant because it is argued that only through interaction, the teacher can decompose the teaching - learning structures and derive meaning from classroom events. Moreover, Allwright and Bailey (2009) stated that through classroom interaction, the plan produces outcomes (input .practice opportunities, and receptivity). According to Hussain (2011), classroom interaction promotes involvement, enhances learning and motivates the students. It promotes a shift from teacher centered to student centered environment. Bruce,(2010) and Hussain,(2011) indicated that teachers-students interaction through classroom

discussion and other forms of interactive participation is foundational to deep understanding and is related to students' performance. Teachers establish the pattern of general conduct during teaching, while on their part students establish certain types of behaviour to coincide with this pattern (Kalu, 2008). According to Thompson and Anderson (2008), one of the most basic characteristics of a good teacher is the ability to establish adequate interaction in the classroom and most of the observed stresses in the classroom come from lack of desired interaction. Ifamuyiwa and Lawani (2009) further added that observed classroom interaction could be divided into teacher talk and student talk. Teacher-student interaction in the classroom is not just a two-way process but it is triangular, that is interaction could be from the teacher to student or student to teacher and student to student (Fakeye, 2007). Each participant influences the other's behaviour, that is, the students condition their teachers' behaviour and vice versa. Interaction in the senior secondary schools is a precursor to learning by students in the classroom. This is because the type of interaction patterns that goes on in the classroom could have a major impact on how well students achieve the goals of instruction. Hence, to achieve the aims of secondary education, this study intends to implement classroom interaction patterns to see how effective it would be to Economics teaching and learning in the senior secondary school level.

Secondary education level is the bridge between the primary education and tertiary education. The importance of secondary education made the federal government to state the broad aims of secondary education as preparation for useful living within the society and for higher education. The underline principle here is that the secondary schools should be able to provide quality secondary education to all those who can benefit from it.

According to Rowntree (2003) secondary education refers to òfull-time education provided in secondary schools usually for students between the ages of eleven or twelve and eighteen plusö (p.25). Webster (2013) defines it as education in high school between the primary and the college level. It is defined by the Federal Republic of Nigeria (2004) in her National Policy on Education (NPE) as the form of education children receive after primary education and before the tertiary stage.

Thus, secondary education in this study is the form of education which children receive automatically after they have received primary school education. It constitutes post primary education and sometimes serves as a link between primary and tertiary education. It is suitable for children who have completed primary education. At this level students are expected to have credit in five subjects to qualify for higher learning. A credit pass in Economics is also required

for students offering commercial and social science courses, but this aim has not been fully achieved.

Economics is one of the electives or group of subjects expected to be studied at the Senior Secondary School (SSS) level under the new National Policy on Education. Economics is concerned with human behaviour such as how people earn their living and make a choice between alternatives to satisfy their wants. It also focuses on the study of firms and the government whose activities are geared to the production of goods and services for the satisfaction of human want. The guiding principle of Economics curriculum is the need to equip graduates of the senior secondary school with the basic knowledge and skills that will enable them to better appreciate the nature of Economic problems in any society. Thus the objectives of teaching and learning of Economics are:

- (i) To equip students with the basic principles of Economics necessary for useful living and for higher education,
- (ii) To prepare and encourage students to be prudent and effective in the management of scarce resources
- (iii) To raise students respect for the dignity of labour and their appreciation of Economic, cultural and social values of our society and
- (iv) To enable students acquire knowledge for the practical solution of Economic problems of society; Nigeria, developing countries and the world at large.

Schugs (2005) stated that the main aim of Economics teaching and learning in schools is to foster in students the thinking skills, substantial Economic knowledge and attitudes necessary to become effective and participating citizens (p. 2). It has been generally assumed that gender and location may influence the process of teacher-student and student-student interaction in the classroom. In other words, gender of both teacher and students influences the quality and quantity of the interaction patterns in the classroom. Gender refers to the roles and responsibilities of women and men that are created in families, societies and cultures. The concept of gender also includes the expectations held about the characteristics, attitudes and behaviours of both female and male (femininity and masculinity). These roles and expectations are learned. They can change over time and they vary within and between cultures. Gender in its narrowest sense means socially constructed sex roles of female or male. Gender is a significant factor in students' academic performance in senior secondary school subjects. Gender refers to the social meanings associated with being a male or a female, including the construction of identities, expectations, behaviours and power relationships that is derived from social interactions (Ambe-Uva, Iwuchukwu & Jibrin, 2008). Gender in this study refers to both male and female, and the relationship between them. Gender in classroom interaction pattern should engage male as well as female.

According to Thorne (2009) teachers make eye contacts more frequently with male than to female and allow their classrooms to be male dominated by calling on male more frequently, allow males to interrupt and respond to male with attention and female with diffidence. Teachers of both genders also frequently give male students more interaction time than female students (Sadker&Sadker 2009) and initiate more contact with male students than with female students. Sadker further said that classroom interactions between teachers and students put males in the spotlight and relegate females to the sidelines, or to invisibility. Besides Kelly (2008), concluded that teachers tended to interact more with boys than girls both in teachers and students initiated interaction. Teachers asked boys much more questions and provide them more response opportunities. In other words Kelly came to this result that teachers totally pay more attention to boys than girls and this fact exist in a wide range of classroom contexts.

Male and female students were also different from each other regarding their patterns of interactions with their teachers. For example, Francis (2004) has indicated that boys contribute more to classroom interaction than girls. It has been, actually argued that teachers may interact more with boys because boys respond to and initiate conversation with theirs more than girls (Meece, 2007). Put it in another way, since boys interact more in the classroom, teachers are caused to make interaction more with boys rather than girls (Duffy &Walsh 2007). As

Rashidi and Rafiee Rad (2010) observed that boys were more likely to interact with their teachers. Boys, however tended to be volunteer to answer the questions, even if they do not know the right answer. Similarly, they reported being more likely to take longer turns.

Nevertheless, Chavez (2010) found that girls tended to use humor less than boys. Girls were more concerned with pleasing the teacher or meeting expectations, girls are reported taking shorter (more fragmentary) turns, but being more likely to be addressed in complete sentences by the teacher. On the whole, teachers and girls seem to form stronger co-operative units than teachers and boys. Teachers were reported to be more likely to call on girls. Girls more than boys peers enjoyed interaction with the teacher and took notes of the teacher's presentation. The tendency of boys receiving more attentions from teachers in mixed sex classroom has been widely accepted and proved by many scholars.

Duffy (2007) pointed out that although boys tend to have more interactions with teachers, this tendency was not the result of male students having initiated more direct verbal interactions with teachers. In short, the idea of boys receiving more attentions and, therefore, are more valued by educators has been proved again and again by a great number of scholars. Those mentioned previously are just some representatives of them. Consequently, there might be differences in male and female behaviours partly, as a product or outcome of gender roles

orientation in social construction of particular environment in which they belong to. As a result of inconsistency in classroom interaction patterns, there is no evidence to show whether the interaction was initiated by the male or female students and that was why the researcher wanted to carry out the research on the influence of gender on Economics classroom interaction patterns in senior secondary school in Nsukka Education zone.

Hence, the odds associated with school location should not be justifiable criteria to deny rural or urban students from the acquisition of basic Economics skills and knowledge. The concept of location reminds us of schools that are located in rural or urban areas. According to Orji (2013), school location refers to rural and urban schools. Thus, Orji further conceptualized urban schools as those schools in the municipalities or schools found within the towns and rural schools as those located in the villages or semi-urban areas. In addition, Frederick (2011) views school location as one of the major factors that influence students' academic performance in some subject areas. As such, Frederick added that many parents look at factors such as the location of schools (urban or rural) and the distance to the school before enrolling their wards. To that end, Owoeye and Yara (2011) noted that many parents prefer their children to attend schools in urban areas because they (parents) believe that students from urban schools perform better than their counterparts from rural schools.

Thus, as the school environment differs, the level of academic performance may also differ. The consequence is that the quality of education may not be even; and the national policy of education for a democratic, egalitarian society cannot be attained unsentimentally. Onuoha (2010) noted that location is one of the potent factors that influence the distribution of educational resources and academic performance. In the present study, location is seen as the setting within which teaching and learning take place. Onah (2011) and Owoeye (2002) indicated that schools in the urban areas perform more than schools in the rural areas. Specifically Owoeye and Yara (2011) showed in their studies that schools in urban locations had better academic performance than their rural counterpart in Economics. Yet, Ezeudu (2003) and Bosede (2010) showed that location has no effect on students' academic performance. These contradictory findings generated to the present study to see the influence of location on Economics classroom interaction patterns in senior secondary schools in Nsukka Education zone.

In the study area, there is a seeming general poor performance among senior secondary school Economics students. Evidences of the poor performances are seen in both students' internal and external examination. For instance, the available records of WAEC result analyses from 2009 to 2012 indicate downward trends in students' academic performance. According to the analysis, the achievement levels of Economics students who had credit pass (i.e. A1-C6) are as follows: 2009-

33.97%, 2010- 38.20%, 2011- 41.12%, 2012- 46.75% [Source: Statistics Office WAEC, Enugu (2013)]

However, some noticeable changes have occurred in the education world during the past decade. Reasons behind these changes are complicated: social changes, economical changes, political changes are all important factors that are constantly pushing education into new situations. This new situation could have been changes in the way and manner in which interaction takes place in classrooms.

The classroom interaction patterns of interest to the researcher in this study include teacher - student and student - student interaction. Also the focus and interest of this study is on teacher initiated discussion and student initiated discussion in classrooms that will be analyzed based on data collected from schools through classroom observations. The teachers and students will be observed in their natural and normal teaching - learning process that is without any specified teaching method. Hence, there is a need to examine the Economics classroom interaction patterns in senior secondary schools in Nsukka Education zone.

Statement of the Problem

Economics as a subject enables both leaders and citizens to understand basic Economics concepts, principles as well as to understand, appreciate and seek to

improve the economic situations in their environment. The knowledge of Economics is a pre-requisite for one to adequately prepare for life in modern society. It gives us facts and shows us what may be expected to be the outcome of certain lines of conduct; it charges its recipient to make wise choice that will satisfy their needs in the presence of unlimited wants. Despite the lofty objectives of the subject, it appears students achieve poorly in internal and external examination. Most students in Nsukka Education zone are in greater risk of poor academic performance in both internal and external examination (WAEC and NECO) due to lack of effective classroom interaction patterns. For instance, the available records of WAEC result analysis from 2009- 2012 show a continuous decline in students overall performance in school certificate examination. Could the poor performance of the students be as a result of the way teacher and students interact during Economics lessons?

Hence, the major problem of this study put in question form is. What is the Economics classroom interaction patterns in senior secondary schools in Nsukka Education zone?

Purpose of the Study

The main purpose of this study is to determine the Economics classroom interaction patterns in senior secondary schools in Nsukka Education zone of Enugu state specifically, the study seeks to determine:

1. Patterns of interaction in observed senior secondary school Economics classrooms.
2. Average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.
3. Average length of time of student-student interaction in observed senior secondary school Economics classrooms.
4. Average length of time of teacher initiated discussion in observed senior secondary school Economics classrooms.
5. Average length of time of student initiated discussion in observed senior secondary school Economics classrooms.
6. Influence of gender on the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.
7. Influence of gender on the average length of time of student-student interaction in observed senior secondary school Economics classrooms.
8. Influence of location on the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.
9. Influence of location on the average length of time of student-student interaction in observed senior secondary school Economics classrooms.

Significance of the Study

The theoretical significance of this study is explained by Lev Vygotsky social learning theory which states that we learn through our interactions and communications with others. This simply means that senior secondary school Economics teaching is hinted on the classroom interaction pattern of both the teachers and the students. The findings of this study will help to either strengthen or refute this assertion of Lev Vygotsky.

Practically, the finding of the study will be of great importance to students, teachers and Government. The study will motivate teachers to use the classroom interaction patterns as a tool to achieve or enhance success in Economics teaching and learning. It gives the teacher understanding of the type of classroom interaction patterns adequate for senior secondary school Economics teaching and learning and also exposes them to new classroom interaction patterns. The teachers will also benefit from the findings in the areas of effective implementation and construction of conducive learning environment for students which are the backbone of effective teaching and learning. Since learning takes places effectively only when proper and conducive environment is provided for students, schools irrespective of mode of administration must upgrade the standard of secondary schools to enhance students' active participation. There is also a need for professionals in secondary schools to be conversant with the factors that hinder classroom interaction patterns

so that they are fully involved in providing the kinds of educational experiences that can enhance students' active learning.

The outcome of this research will be utilized by the Ministry of Education Nsukka Education zone and post primary school management board for effective planning and implementation of various education policies and programmes to justify the government's huge material and financial resources to secondary education. The study will also benefit State government and officials of Ministry of Education on taking the right decision on the provision of infrastructural facilities to aid teaching and learning process which will help improve classroom interaction patterns of secondary school students in Nsukka Education zone. The education policy makers will find this research work very indispensable if published, it will guide them in initiating the right interaction patterns, which will motivate the students' active participation in learning thereby making Economics teaching and learning to be students centered. When this is done, secondary education objectives will be realized.

Finally, students will benefit from the outcome of the study in that it has been outlined by Lev Vygotsky social learning theory that the learning takes place through the interactions students have with their peers, teachers, and other experts.

It will also prove helpful in improving instructions by increasing the volume of students' participation in classroom activities, which may improve their competences in Economics topics.

Scope of the Study

The scope of this study embraces both the content and geographical scope. The content scope is to determine the Economics classroom interaction patterns in senior secondary schools in Nsukka Education zone.

The geographical scope is Nsukka Education zone of Enugu State. The area was selected because of the presence of the factors of interest in the study.

Research Questions

To investigate the problem of this study, the following research questions guided the study:

1. What are the patterns of classroom interaction in observed senior secondary school Economics classrooms?
2. What is the average length of time of teacher- student interaction in observed senior secondary school Economics classrooms?
3. What is the average length of time of student ó student interaction in observed senior secondary school Economics classrooms?
4. What is the average length of time of teacher initiated discussion in observed senior secondary school Economics classrooms?

5. What is the average length of time of student initiated discussion in observed senior secondary school Economics classrooms?
6. What is the influence of gender on the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms?
7. What is the influence of gender on the average length of time of student ó student interaction in observed senior secondary school Economics classrooms?
8. What is the influence of location on the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms?
9. What is the influence of location on the average length of time of student ó student interaction in observed senior secondary school Economics classrooms?

Research Hypotheses

H₀₁: Gender does not significantly influence the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.

H0₂: Gender does not significantly influence the average length of time of student-student interaction in observed senior secondary school Economics classrooms.

H0₃: Location does not significantly influence the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.

H0₄: Location does not significantly influence the average length of time of student-student interaction in observed senior secondary school Economics classrooms.

CHAPTER TWO

LITERATURE REVIEW

This chapter presents the review of related literature. It is organized under the following sub-headings:

Conceptual Framework

- Concept, scope and aims of senior secondary school Economics teaching and learning
- Classroom interaction patterns
- Concept of Gender
- Concept of Location

Theoretical Framework

- Constructivism theory by Jean Piaget (1896)
- Social learning theory by Lev Vygotsky (1962)

Empirical Studies

- Studies on classroom interaction patterns
- Studies on classroom interaction patterns and academic performance

Summary of Literature Review

Conceptual Framework

Concept, Scope and aims of Senior Secondary School Economics Teaching and Learning

Secondary school is provided for children after primary school, that is, before tertiary education. It is aimed at developing a child better than the primary level, because it is obvious that primary education is insufficient for children to acquire literacy, numeracy, and communication skills (Ige, 2011; Yusuf, 2009). Such education is provided in secondary school, which can be owned by government (state or federal), individuals or community. It is divided into two phases as follows which includes junior secondary school (JSS) and senior secondary school (SSS).

Junior secondary school is the first three years of secondary education. The curriculum at this phase is pre-vocational and academic in scope. Core, pre-vocational and non prevocational subjects are included in the curriculum. The core subjects include: English Language, Mathematics, French, and a major Nigerian language other than that of Environment, Basic Science, Social Studies, Citizenship Education, and Basic Technology. The pre-vocational subjects include Agricultural Science, Business Studies, Home Economics, Fine Arts, Computer Education and Music while the non-prevocational subjects include Religious Knowledge, Physical and Health Education as well as Arabic. Certification at the

end of this phase depends on the performance of a student in Continuous Assessment (CA) and the results of Junior School Certificate Examination (JSCE), being coordinated by State Ministries of Education or Federal Ministry of Education (if owned by Federal Government). A child has to do the Junior School Certificate Examination (JSCE) at the end of this phase. A child with minimum number of passes in the subjects in the curriculum including English Language and Mathematics (varies across the States) qualifies to proceed to the Senior Secondary school (SSS) level where he or she will be trained for additional three years

Senior secondary school is the next three years after junior secondary school. It has wider scope than the junior secondary school (JSS) and aims at broadening the knowledge and skills of a student beyond the JSS level and thus prepares him or her for further education. It is academic and vocational in scope. A student has to offer minimum of seven and maximum of eight subjects, comprising the six core subjects: English Language, Mathematics, a major Nigerian language, one science, an art, and a vocational subject. One or two other electives are to be selected from the art, science, technical, social science, and vocational subjects. Certification at the end of this phase depends on the performance of a student in the Continuous Assessment (CA) and Senior School Certificate Examination (SSCE), coordinated by West African Examinations Council (WAEC) and National Examinations Council (NECO). A child must obtain a minimum of five

credits at two sittings including English Language and Mathematics to be able to proceed to the tertiary level of the educational system. In Nigeria, secondary education aims at preparing an individual for useful living within the society, and higher education. Specifically, it aims at:

- a) Providing all primary school leavers with the opportunity for education of higher level irrespective of sex, social status, religious or ethnic background.
- b) Offering diversified curriculum to cater for differences in talent, opportunities, and future roles.
- c) Providing trained manpower in applied science, technology and commerce at sub-professional grades.
- d) Developing and promoting Nigerian languages, arts and culture in the context of the world's cultural heritage.
- e) Inspiring students with a desire for self improvement and achievement of excellence.
- f) Fostering national unity with an emphasis on the common ties that unite us in our diversity.
- g) Raising a generation of people who can think for themselves, respect the views and feelings of others, respect the dignity of labour, appreciate those values specified under our broad national goals, and live as good citizens and

- h) Providing technical knowledge and vocational skills, necessary for agricultural, industrial, commercial, and economic development (National Policy on Education, 2004).

Economics is one of the elective subjects expected to be studied at the Senior Secondary School (SSS) level under the new National Policy on Education. Economics has been widely defined by different people from different disciplines. To Krugmen and Wells (2004), Economics is the study of the economy at both the levels of individuals and of society as a whole. Economics is the study of how human beings coordinate their wants and desires given the decision-making mechanisms, social customs and political realities of the society (Colander, 2000). Economics is the study of how society manages its scarce resources (Mankiw, 2001). To Bade and Parkin (2002), Economics is the social science that studies the choices that individuals, businesses, government and entire society make as they cope with scarcity. Economics is the study of human behaviour with a particular focus on human decision making (Gwartney, Macpherson, Sobel & Stroup, 2006).

Robbins (1970) widely accepted definition refers to Economics as the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses. According to him the word 'end' means the numerous desires, needs or goal which individuals, businesses or government wants to satisfy. In the definition 'scarce' presupposes that the resources

with which to satisfy these ends are limited or at best insufficient in relation to our desires for them. Also, the word 'alternative uses' suggest the fact that these scarce means can be put to various uses. It is therefore rational to conclude that available resources must be allocated among the many competing ends that face humans. It is pertinent to note that this definition by Professor Robbins is the most acceptable of all the definition of Economics.

Sanford and Dawson (1990) defined Economics as a social science and described it as an organized body of knowledge from which generalizations may be developed and used for predicting and controlling behaviour. It is a known fact that Economics collects a massive number of facts and organizes them in an orderly manner. This can be verified by looking through government, business, labour and banking publications and arriving at a generalization, principles, laws or theories. Therefore Economics is concerned with peoples' attempts to organize the environment to satisfy their needs. It concentrates on satisfying material needs such as the need for food and shelter. It also deals with issues as it concerns production, distribution and consumption of goods and services.

Economics focuses on the way in which individuals; groups, business enterprises and government seek to achieve efficiently any economic objective they select. Therefore, Economics is apparently the study of the economy, the study of the effects of scarcity, the science of choice and the study of human

behaviour in relation to production, distribution and consumption. According to Obemeata (1980) the importance of Economics teaching to any nation, is very clear. It enables both leaders and citizens to understand basic Economics concepts, principles as well as to understand, appreciate and seek to improve the economic situation for their own social good. The understanding of Economics is a prerequisite for good citizenship. To him the principal objective for teaching Economics should be "to provide Economics understanding necessary for responsible citizenship". Being a responsible citizen involves the ability to take rational decision on important economic issues with a good basis for doing so. Furthermore, Obemeata (1991) stated that the position of Economics in senior secondary school curriculum has been strengthened because it has been accepted that it has some civil values because of some topics as "the element and determinants of national income, the structure and activities of labour unions, the working and influence of financial institutions". These prepare one adequately for life in modern society. According to Adu (2002) the study of Economics serves a useful purpose in modern life. It gives us facts and shows us what may be expected to be the outcome of certain lines of conduct; it helps us to decide which of several alternatives to choose. It charged its recipient to make wise choice that will satisfy their needs in the presence of unlimited wants and resources. Obemeata (1991)says

Economics as a subject has various values to the learners and these values according to him include;

- i) **The Cultural Values:** Economics has some intrinsic value that makes it appealing as a school subject for example: there is a great logic in it. It connects learners to the essentials of everyday life and it is also concern with almost tropical events such as International Monetary Fund [IMF], Structural Adjustment Programme [SAP] and so on Pause and justify the above assertion in your own understanding
- ii) **Intellectual Training:** - Economics also contribute to intellectual training because it involves looking at issues in a way which fore most new to people. Economics is not primarily a body of knowledge, it is a method rather than a doctrine, an apparatus of mind, a technique of thinking which helps its possessors to draw correct conclusion
- iii) **Vocational Training:** - The vocational nature of Economics made it readily acceptable to students. Economics as a subject is of direct utility in many branches of industries and commerce. It is also an essential part of most professional examination like Banking, Accountancy, and Secretariat.

Economics teaching and learning in senior secondary schools has taken a variety of forms over the last three decades (Jephcote, 2004) and it has several attractive characteristics (Baumol& Blinder, 2001). Economics is a lively subject

dealing with current and future problems; it touches our lives intimately; it is concerned with people; it studies many aspects of people's behaviour (Baumol & Blinder, 2001) and is therefore a very appropriate subject to study at all levels (Walstad, 2004). Given this significance, Economics teaching and learning can be defined as a process through which young people acquire knowledge and skills that contribute to the creation of wealth and to the satisfaction of human needs and wants (Baumol & Blinder, 2001). However, Becker (1997) noted that the field of Economics has placed too little value on the importance of teaching and learning in recent decades and Economics teachers are not keeping up with progressive education nor moving away from the traditional teaching methods of 'chalk and talk'. According to Cameron (2001), teaching is a process of constructing opportunities for learning and to help learners take advantages of them. Teaching can never guarantee learning; all it can do is to construct opportunities for learning and to help learners take the advantages (Cameron, 2001: 242). This means that in a teaching - learning process, the teachers should be able to help the students in constructing understanding towards the lesson. Economics teaching and learning at senior secondary school level appears to be important for the development of the Economics understanding of students. Although Economics courses are offered in universities, it is argued that the best opportunity for expanding the Economics teaching and learning of the youth of a nation occurs in secondary school

(Caropreso & Haggerty, 2000; Walstad, 2001). However, a review of the literature on Economics teaching and learning suggests that Economics as a school subject together with how it is taught and learnt appear very much under-researched in many parts of the world (Jephcote, 2004, Walstad, 2001). Apparently, little attention has been given to the improvement of teaching and learning of Economics in recent decades (Becker, 1997; Walstad, 2001). The available evidence from the last few years shows that passive learning based on traditional methods of chalk and talk seems to be the most widely used teaching method, characterizing the 20th century style of Economics teaching and learning (Becker & Watts, 2001; Benzing & Christ, 1997; Siegfried, Saunders, Sonar, & Zhang, 1996). And the aim of teaching and learning Economics for senior secondary school students is to provide an intellectual training, a preparation for citizenship, and a vocational training for a business career. Despite the differences in educational level, one reason for introducing Economics into the senior secondary school curriculum is to foster the learning of Economics, set in the social and political environment in which students live. Interaction in the secondary school Economics teaching and learning is a precursor to learning by students in the classrooms. This is because the type of interaction pattern that goes on in the classroom could have a major impact on how well students achieve the goals of instruction.

Concept of Classroom Interaction Pattern

Formal education is organized in schools and schools normally are arranged into classrooms. The classroom is a basic structural unit of our educational system. It is a miniature community in which members' interest influences the behaviour of others in classroom. Classroom is an institutionalized setting for teaching in its most common form; it is a place where a teacher and students meet regularly for a designated period of time to engage in meaningful teaching-learning activities. Also, it is the smallest foundational unit of the school system (Adeyemo, Adegbola&Oke, 2009). Therefore, classroom is a major component of teaching and learning process that entails the use of both human and material resources while the material resources consist of students teaching and non-teaching all of which would have to be put in an orderly way so as to facilitate learning.

A classroom is a room where a class of students or pupils is taught. It can be regarded as the theatre of school activities. It is here that the learning process is generated, implemented and classroom is the teachers' theatre of operation, a place which makes or masses his careers, a place where he is happy to be if he teaches with confidence. The importance of the classroom in the teaching ólearning process cannot be over-emphasized. First of all, it holds students together and affords them the opportunity to interact with one another. Through this interaction, they grow physically, intellectually and emotionally. Secondly, the teacher

prepares his lessons in the classroom, motivates the students and evaluates students' understanding of his lesson in the classroom. Thirdly, it is in the classroom that educational plans are carried out and research findings tested and tried out. Fourthly, the classroom provides a common ground for students to share experiences together and to accommodate their likes and dislikes. The school classroom is more than just a place where teachers and students interact for the purpose of teaching and learning. The classroom is a major tool of instruction for teachers; it is a home for students. The classroom is ultimately a place where students can learn, but it is also where they can come to understand responsibility, become social and learn to work together.

Individual teachers are assigned to various classrooms where they conduct formal teaching in educational institutions; teaching and learning take place in the classroom and since the greater part of the educational activities of a school occurs in the classroom, it becomes an indispensable tool for teachers. Here, the teacher is a classroom manager who is concerned with the utilization of available resources in the accomplishment of the stated educational instructional objectives. The place of teacher in creating a good learning environment cannot be over emphasized. Classroom is a place dominated by the teacher's authority, he sees to the provision of materials for work, regulates the time for activities, assigns duties to the class

prefects and monitors who are expected to use this delegated authority to do what the teacher wants, the teacher alternatively affect their motivation and aspiration.

Nonetheless, it serves as an avenue where students share experiences and growth in group living (Emmer & Sough, 2011). The classroom environment is very important to students interaction and therefore needs not to be only comfortable and non-threatening, but also a place suitable for teaching and learning. Classroom interaction aims at meaningful communication among the students in their target language. It also aims at probing into the student's prior learning ability and his way of conceptualizing facts and ideas. This practice will help the teacher to have a detailed study of the nature and the frequency of student's interaction inside the classroom.

Quality interaction is universal and naturally embedded in care giver-child communications that teacher shows and cares to all the students in the classroom and tries to create a mediated learning environment for them and also help students to regulate their behaviour (Margrelashvili, 2012). Howarth (2006) was of the opinion that student's interaction in class is desirable because learning involves participation. A student cannot learn how to operate a computer without actually operating a computer and similarly, it is difficult to learn Economics in secondary level without engaging in discussion, sharing of ideas and solving practical problems together. Therefore the task of the teacher is not as easy one as the

teacher is a planner, behaviour modifier, evaluator etc. also, the study of classroom interaction entails active participation of students in the teaching-learning process. Thus for this reason, the importance of classroom interaction pattern in teaching and learning cannot be underestimated.

Interactions among people play some important roles in the life of individuals. This is seen in the way people relate with one another at home, in the school, within the society and among peer groups. In particular, the interaction between students and their teacher is expected to have a great effect on their lives. The way students learn any subject will depend on the teachers' pattern of classroom interaction.

The Cambridge International Dictionary of English defines the verb to interact as to communicate with or react to each other. The new Oxford dictionary of English defines the noun interaction as a reciprocal action or influence. Therefore, interaction is more than action followed by reaction. It includes acting followed by reaction. It includes acting reciprocal upon each other. Rivers (2007) describes the word through its Latin roots *agere* meaning 'to do' and *inter* meaning 'among'. It shows us the active and social part of a human being that affects other people through interaction. Brown (2007, 165) relates interaction to communication, saying 'interaction is in fact, the heart of communication. It is what communication is all about'.

Interaction has a similar meaning in the classroom. According to Kamar & Mozetic (2004), classroom interaction can be defined as a two-way process between the participants in the teaching-learning process. The teacher influences the student and vice versa. Classroom interaction is a form of institutional talk which is locally managed but cooperatively constructed speech exchange system (Markee & Kasper, 2004). Composed of interactions between teacher and students and among students, classroom interaction is one of the platforms where any reality about classroom phenomena is produced and can be observed at the same time. Classroom interaction refers to a technique consisting of objective and systematic observation of the classroom events for the study of the teacher's classroom behaviour and the process of interaction going on inside the classroom (Eriba & Achor, 2010). It is an interpersonal transaction between the teacher and student which occurs at different levels.

Classroom interaction encompasses a lesson situation during which the teacher and students through their verbal and non-verbal actions have reciprocal effect on each other. In particular, the relationship between students and their teachers is an essential part of teaching and learning process and it is expected to have a great effect on their lives. Audu and Achor (2003) stated that interaction in the classroom entails an active encounter of the teacher and the student through verbal, gestural and resource instrumentality to bring about effective

communication in a teaching - learning process. For both parties to be actively involved in the teaching and learning, the method in use ought to create opportunity for the required interaction to take place. Classroom interaction could be defined as a process of passing down vital information from the professional teacher who has undergone a rigorous training to the learner in the classroom (Ghosh, 2010). It could be referred to all interactions that take place between the teacher and the learner in an organized classroom.

Classroom interaction is the sum total of activities taking place in the classroom between the teacher, the learner and the learning materials during the teaching - learning process (Nwagbo&Okoro, 2011). Classroom interaction is a practice that enhances the development of problem solving skills among the learners. According to Amrita (2010) classroom interaction is a practice that enhances the development of the two very important skills which are speaking and listening among the students. Amrita went further to add that this device helps the students to be competent enough to think critically and share their views among their peers. Klen and Connell (2004), note that teachers who experience close relationship with students reported that their students were less likely to avoid school, appeared more self-directed, more cooperative and more engaged in learning. The concept of classroom interaction according to Ifamuyiwa and Lawani (2009) refers to the chain of events which occur one after the other, occupying a

small segment of time. This includes what the teacher does that influence students' learning. Classroom interaction is therefore a way to bridge the gap between the teacher and good intention of the class and the behaviours which actually occurs in the classroom. The classroom interaction during the teaching - learning process can be verbal or non-verbal like giving the students a problem to solve, working problems on the chalkboard or making students work. It is an observed truth to know that during teaching - learning process, students' personal and social problems in connection with their families and peer group may hinder their interactions. In view of the authority rested on the teacher in the classroom, classroom interaction can be conceived as being established and maintained by the teacher.

Consequently, classroom interaction can be bidirectional or unidirectional according to how the teacher considers it important or unimportant that his or her behaviour and that of the students should be reciprocally determined. Classroom interaction can be described as a classroom process in which teachers and students have a reciprocal effect upon each other through what they say and do in the classroom (Matelo, 2006). It is the interpersonal transaction between the teacher and the students which occurs at different levels. It can also be seen as the successful transmission of message between teacher and students. In a classroom in which students' voices are honored, the teacher gains access to information about

students' education, social affective and physical needs (Stiles, 2007). This includes what the teacher does that influence students learning.

Classroom interaction is one of the primary means by which learning is accomplished in classroom. In secondary school, classroom interaction takes on an especially significant role in that it is both the medium through which learning is realized and an object of pedagogical attention. Through their interactions with each other, teachers and students construct a common body of knowledge. They also create mutual understanding of their roles and relationships and the norms and expectations of their involvement as members in their classrooms. That is to say, that through interaction with their teachers, students are socialized into a particular understanding of what counts as the official curriculum and of themselves as students of that subject matter.

The pattern of interaction also helps to define the norms by which individual student performance is assessed. Students draw upon these patterns and norms to participate in subsequent classroom activities and thus they are consequential in terms of not only what students ultimately learn, but also more broadly their participation in future educational events and the roles and group membership that they hold within these events. Classroom interaction patterns are the different ways learners and their teachers interact in the class. The concept of classroom interaction pattern is defined as reciprocal events that require at least

two objects and two actions. Interaction pattern occurs when these objects and events naturally influence one another (Okoye, 2012). Marshal (2009), defined classroom interaction patterns as the form and content of behavior in the classroom. Classroom interaction patterns are the different ways learners and their teachers interact in the class. Classroom interaction pattern according to Oyedeji (cited in Ifamuyiwa and Lawani, 2009) refers to the chain of events, which occurs one after the other each occupying a small segment of time. This includes what the teacher does that influences students' learning. In the classroom, interaction plays the role of binding everyone together.

Classroom interaction pattern encompasses all types of interaction that goes on in the classroom. There are several ways to categorize classroom interaction, but all of the types are important to engage learning and to create well rounded young people inside and outside the classroom (Kouicem, 2012).

Teacher-Students Interaction

Teacher-students interaction in the classroom is a two-way process. Each participation influences the others behaviours, that is, the student condition their teachers' behaviour and vice versa. The teacher-student interaction is one of the most powerful elements within the learning environment. In the classroom, the teacher often asks questions to students and students answer the questions and vice versa; or the teacher participates in learning activities. These forms are called

teacher-student interaction. Generally, such interactions take place between the teacher and the class and or small groups in the class and or individuals. In the traditional classroom, the teacher only sits or stands behind a desk, and spends a large amount of time giving lectures and directions whereas students' roles are sitting, listening and taking notes passively. The focus of interaction was predominant between the teacher and students. This one is usually initiated and controlled by the teacher. The teacher's central role is to dominate in terms of the talking time and of the running of the process. The teacher controls the topic for classroom talk, and determines when to start and stop talking in the classroom (Cazden, 2008; Tsui, 2005). At the beginning of the lesson, the teacher reviews what has already been done, introduces new content, explains problematic concepts and then clarifies complex requests and activities during the lesson. At the end of the lesson, the teacher sums up the new content studied and gives feedback. The teacher is central to the classroom interaction while students are passive listeners. At times, students are required to participate only by answering questions which their teacher already knows the answers. They also have no time to ask questions and always rely on the teacher's instructions and cannot solve problems independently.

According to Achor (2010) interaction in the classroom involves teachers, the teacher-student, student-teachers and students. The types of interactions

involving teacher-centered approach, explain discussion approach, active learning, group methods and means of engagement. The theory further suggests that when teachers have strong and positive relationships with students, teachers are more motivated to spend time and energy to improve student success. But when teachers have a conflict and a negative relationship with students, they often handle only student behaviour and prevent efforts to promote a positive school environment for them (Pianta et al., 1995; Hamre&Pianta, 2006).

Hamre&Pianta, (2006) added that when students feel they have a strong and positive relationships with teachers, they are more likely to believe and love the teachers and more motivated. In contrast, when students feel that they have a conflict and a negative relationship with teachers, they do not or believed to teachers, not the motivation to succeed and may challenge the teachers (Pianta et al., 1995; Hamre&Pianta, 2006). Finally, a negative relationship with the teacher students will lead to student dropout rates (Lan&Lanthier, 2003). Nugents subsequent study (2009) which showed a positive correlation between teacher-student interactions with the motivation. A major factor affecting students development, schoolengagement and academic motivation, teacheróstudent interactions form the basis ofthe social context in which learning takes place (Hughes & Chen, 2011; Roordaet al.,2011; Spilt, Koomen&Thijs, 2011). Teacheró student interactions are not onlyinfluenced by a number of factors including

gender, but in turn also influence a student's classroom environment. Supportive and positive interaction between teachers and students ultimately promote a sense of school belonging and encourage students to participate cooperatively in classroom activities (Hughes & Chen, 2011, p.278).

Battistich, Schaps & Wilson (2004) and Hamre & Piñata (2006) asserted that positive teacher-student interaction evidenced by teachers' reports of low conflict, a high degree of closeness and support and little dependency have shown to support students' adjustment to school, contribute to their social skills, promote academic performance and foster students' resiliency in academic performance. Berry and O'Connor (2000) posited that students with more closeness and less conflict with their teachers developed better social skills as they approach the middle school years than those with more conflictual relationships in secondary schools.

Student-Student Interaction

Student-student interaction occurs among students. In this form of interaction, the teacher plays a role as a monitor and students are the main participants. Student-student interaction occurs in groups called student-student interaction, in pairs called peer interaction. Students' interactions are categorized into pair or group work and topic based and task based activity.

Pair or Group Work: Many researchers assert that practice is the most beneficial when carried out in collaboration with small groups or peers rather than with the teacher or in a whole-class setting. Significantly, students always initiate their questions during small-group rather than whole-class activities. Open discussion in cooperative groups can make clarification of ideas and perspectives in a context free of the perpetual scrutiny of the teacher and the wider class group (Gillies, 2006). Furthermore, students do not have to rely on the teacher to be their only interlocutor and source of language input (Nunan, 2009). It is possible for peers to provide language models and to interact with each other (Erten, 2010). Peers act as natural interlocutors resulting in the availability of a much greater variety of models with whom to practice (Long & Porter, 2005). Peers are often more aware than teachers of understanding (Gillies, 2006). In fact, cooperation in groups also contributes to a more relaxed atmosphere in the classroom, lessens anxiety and inhibitions, and thus leads to an increase in both the quantity and quality of practice (Ur, 2006, Altay & Ozturk, 2004). Collaborative work often exerts a beneficial effect on the performance (Storch, 2001). Therefore, it can be concluded that collaborative practice should facilitate language development.

According to Long and Porter (2005), student-student interaction pattern is an attractive alternative to teacher-student interaction. Harmer (2006) proposed that pair work increases the amount of talking time available to every student in

classroom. It allows students to work and interact independently without the necessary guidance of the teacher, thus promoting students' independence. It allows teachers to have time to work with one and more pairs while other students continue working. This cooperation helps the classroom become a more relaxed and friendly place. According to Sullivan (2000), pair or group work is considered the most interactive way. It does not pay attention to the socio-cultural and personal experience that guide students' behavior in the classroom. It has three value systems of choice, freedom and equality. The reasons are that students in pairs or groups have the right to talk freely and are also free from the teacher's control. Students in groups are equal, and the power of the teacher within groups is also diminished or neutralized. The teacher should frequently use group work to maximize each student's opportunity to speak and reduce the psychological burden of public performance.

Doughty and Pica (2006), moreover, contend that "group work is more likely to lead to negotiation of meaning than interaction with the teacher." The extent to which group work results in cooperative learning through collaborative interaction depends on the frequency of classroom interaction (Mercer, 2004) and the quality of that discourse (Ellis, 2003). Group learning seems to occur when participants are required to communicate and discuss together to solve a problem (Light & Glachan, 2005).

Topic-based and task-based activities: The need for well-planned and well-designed group work activities seem to be of great significance (Gillies, 2006). To increase the quality and quantity of such discourse in the classroom, the teacher needs to organize the most beneficial speaking activities that afford the most opportunities for students to collaborate and negotiate meaning during the interaction (Bygate, Skehan, & Swain, 2001; Ellis, 2003). Ur (2006) describes some characteristics of good speaking activities: There is a large amount of student talk during these activities. Students have ample opportunities to speak and participate in activities. Students are also highly motivated and interested in the activity. They use language which is relevant, comprehensible and fairly accurate. The question then arises as to what kinds of activities tend to incorporate these characteristics and would seem to be useful in promoting collaborative group practice.

In addition, Ur (2006) proposed two activities for oral communication: topic-based and task-based activities. According to Duff (2006), topic-based activities tend to be \neq divergent \neq or open-ended in nature, since the emphasis is on the discussion of a particular subject and the actual production of relevant speech. There are generally no specific goals or outcomes to be but only conversely relevant on the topic in question. These activities contain discussions and debates which do not appear to support negotiation. During such sessions, students express

individual ideas independently without the need to engage in collaboration very much, so they do not necessarily need to exchange information during the activity (Pica et. al.). Besides, with divergent goals and optionality in information supply, negotiation of meaning decreases (Pica, Kanagy, & Falodun, 2005). Task-based activities, on the other hand, are convergent in nature (Duff, 2006) since students are required to use the target language as a means to reach a specific outcome or consensus. This outcome may be open-ended, however, with no single right answer. During the activity, there is more emphasis on students through expressing the meaning by using all the target language to ensure comprehension, rather than using particular linguistic features or conversing on a specific topic. This category includes things such as role-play, problem solving and information-gap activities. The main objective is to engage in real communication as Nunan states: "a piece of classroom work which involves students in comprehending, manipulating, producing or interacting in the target language while their attention is focused on meaning rather than form." (Nunan 2009:10) The pair and group work activities and tasks were classified according to two categories taken from Ellis (2001): functional language practice and focused communicative tasks. Ellis (2001, p. 20) defines functional language practice as "instructional materials that provide students with the opportunity to practice producing the target structure in some kind of situational context" and notes that, although the activities involved appear

to concentrate on meaning, the primary focus remains on form, and students are aware that the purpose is to master accurate use through repeated use of the target feature.

The particular activities in pair work group are for students to practice targeted vocabulary and structures through asking each other questions on a predetermined topic such as daily routines or descriptions of an item, person or a picture, or engaging in role play. According to Willis (2006), a successful task-based contain the following characteristics. Firstly, the task should provide an appropriate level of complexity and difficulty. Secondly, the task's primary goal should reflect what students need to do in real-life situations such as exchanging information, giving instructions, or presenting an oral report. Moreover, tasks must be based on authentic materials obtained from written or oral texts that have not been adapted to simplify their level difficulty. Finally, the task includes a particular feature of language form for students to use in conveying meaning during the tasks. In order to accomplish them, students must negotiate, plan, and anticipate.

In other words, they have to use and practice with the language, elaborating and revising their work. According to Willis (2006), two general goals for using task-based activities are communicative effectiveness and second language acquisition. The reasons are that task-based activities give students confidence in trying out whatever they know, give students experience of spontaneous

interaction, give students the chance to benefit from noticing how others express similar meanings, give students chances for negotiating turns to speak, engage students in using language purposefully and cooperatively, make students participate in a complete interaction, not just one-off sentences, give students chances to try out communication strategies and develop students' confidence that they can achieve communicative goals. Negotiation takes place as students discuss and reach an agreement regarding the topic of the conversation they want to put together. Oral exchange is necessary to carry out the task, as proposed by Gass (2007), as is collaboration in order to produce an outcome. Ellis described focused communicative tasks as 'designed to elicit production of a specific target feature in the context of performing a communicative task' (Ellis 2001, p. 21). Such tasks primarily focus on meaning rather than on form. Students work collaboratively to construct text and to ask other students; for example, make one or two-way information gap tasks, make a debate, create a role play, prepare part of a procedural text such as a recipe, and list the ingredients of an imaginary dish and so on. With task-based activities, however, students need to communicate with and comprehend each other for successful performance to reach an outcome (Ellis, 2003, Skehan & Foster, 2001). Because the task is open and discovery-based, group members are interdependent, and interaction is vital to productivity (Gillies, 2004). Cooperative group learning involves working together on a common group task,

helping each other and facilitating each other's learning, and accepting responsibility for contributing to the group's task. Unless members of the group collaborate, they cannot successfully complete the activity (Wegerif et al, 2009). A task-based curriculum, then, specifies what a student needs to do with the language in terms of target tasks and organizes a series of pedagogical tasks intended to reach those goals (Brown, 2004, p. 229). Activities occur either between the teacher and other students or between students themselves. The use of effective interaction helps in the diagnosis of students' weakness and implementation of corrective measure. In addition there is intrinsic motivation, high expectations for success, high benefit, high epistemic curiosity and continuing interest in learning and high commitment to achieve long term retention of what is learned and promotes a greater use of higher level reasoning strategies and critical thinking.

Classroom interaction pattern entails the regular way in which students communicate among themselves, with the teacher and the instructional materials. Classroom interaction pattern can also be categorized into teachers' talk, closed ended, open ended teachers' questioning (IRF), student initiates and teacher answers full class interaction and individual work, and competitive interaction.

Teachers' talk is when a teacher talks and the students listen while closed ended teacher questioning is when a teacher asks a question and a student gives

one correct answer, for example the teacher asks question like what are Economics tools and the student give the answers -mean, mode, media etc. This type of interaction is a classic sort method of teaching which is called IRF meaning initiation response.

Open-ended teacher questioning is a situation where the teacher asks a question and there is no one set answer. This could be that there are many possible answers for instance; a teacher asks what money is? And the students for instance in the clarification, the teacher explains or clarifies a specific point. Another kind of interaction has to do with the full class interaction. In this, type, the class works in collaboration with each other. The class discusses a particular topic within themselves thereby helping each other to do a specific job or activity. The class can be grouped or paired as the case may be. This is important because it has to do with the social aspect of working together.

Individual work means working on your own. Here the teacher gives a workbook and the student fills it, in addition the students can be given a problem and they solve it on their own. This is similarly called self-access meaning that the material is given to the students and they decide what to choose and what to do with it. The interaction is organized in this order because it starts with the least teacher talk to the student's involvement called self-access.

Concept of Gender

The concept of gender has been of interest to scholars and researchers in recent times, especially those in the field of social sciences and humanities due to its different connotation and misused in different media (Helgeson, 2005). Gender is distinct from sex and refers to socially constructed and not biologically defined characteristics of human being. It refers to the social construction of what is considered male and female based on socio-cultural norms and power. However, some scholars- (scientists and linguistics) interchange the word gender for sex to create the erroneous impression that certain barriers to progress are a matter of nature, whereas they are manifestation of nurture, that is socially constructed and therefore subject to change.

Gender refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context or time-specific and changeable. Gender determines what is expected, allowed and valued in a woman or a man in a given context. In most societies there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Gender is part of the

broader socio-cultural context. Other important criteria for socio-cultural analysis include class, race, poverty level, ethnic group and age.

The concept of gender needs to be understood clearly as a cross-cutting socio-cultural variable. Gender roles are learned through socialization processes; they are not fixed but are changeable. Gender systems are institutionalized through education systems, political and economic systems, legislation, culture and traditions. In utilizing a gender approach the focus is not on individual women and men but on the system which determines gender roles or responsibilities, access to and control over resources, and decision-making potentials. It is also important to emphasize that the concept of gender is not interchangeable with women. Gender refers to both women and men, and the relationship between them. Promotion of gender equality should concern and engage men as well as women. From the literature reviewed so far, it is seen as sexual identity, especially in relation to society or culture. It is the condition of being male or female. Gender is a concept that is used to distinguish between male from female (Espagnol, 2005). Gender is the range of physical, mental, and behavioural characteristics pertaining to and differentiating between masculinity and femininity. Depending on the context, the term may refer to biological sex that is the state of being male, female or intersex based on social structures including gender role and other social roles.

In the present study, the researchers define gender as the condition of being female or male or sexual identity in relation to culture. Okafor (2012) observed that male students tend to receive more encouragement in science while female students are nurtured more in arts and that parents are often gender biased in orientation of their children. Therefore, there might be differences in male and female behaviours partly as an outcome of gender role orientation and social construction of particular environment in which they found themselves. There has been contrasting opinions on gender related issues in interaction. Onyegebu (2004) reported that girls participated in fewer interactions than boys. In terms of gender, Verenikina, Vialle and Lysaght (2011, p.234) have identified differences between the sexes in a number of areas, including õpersonality, physical, occupational and cognitiveö. There are significant variations in the classroom interaction of girls and boys, with more differences between a same-age girl and same-age boy than for example, the age differences between a seven-year-old girl and nine-year-old girl (NASSPE, 2011). Girls are more likely to cooperate and work well in small group settings in which they can discuss a problem or task ideas, compared to boys who prefer to work alone, and will often õargue over who will lead when working in a groupö (EduGuide, 2010). From an early age, girls are more compliant than boys, when interacting not just with peers but also their teachers (Berk, 2006). When students engage in interactions with their teachers,

their learning is assisted, as students must demonstrate a meaningful and profound understanding of central ideas in order to communicate these understandings effectively (Hinde-McLeod & Reynolds, 2007). Girls and boys should both be encouraged to engage in substantive interactions focused on their learning experiences in order to discover new ways of knowing rather than transmit traditional knowledge (Hinde-McLeod & Reynolds, 2007, p.51). Within the classroom context, gender plays a significant role, as teachers will often respond differently to different students (Schlechty & Atwood, 2007, p.286). Teachers often also act in ways that sustain the gender roles taught at home. Boys are often praised for their knowledge for example, and girls for their obedience.

More of the teacher's time in the classroom is also spent interacting with boys than girls, with teachers likely to interrupt girls more than boys during conversations (Berk, 2006). Verenikina, Vialle and Lysaght (2011) support that this can impact on girls' development in certain subject areas, as well as the development of their self-esteem. Although girls seem to be more susceptible to teacher expectations compared to their male counterparts, girls perform better in classroom environments in which they have private and personal contact with the teacher (McCormick & Pressley, 2007). It is therefore important that teachers and students form a community of students (Verenikina, Vialle & Lysaght, 2011, p.226), in which teachers understand individual students' needs and in turn, both

boys and girls are given the support and assistance they require. Apart from gender, location could also influence classroom interaction pattern in senior secondary school Economics classroom.

Concept of Location

Location refers to a specific position or point in physical space. It is used to identify a point. It is also a particular point or place in physical space. School location is classified into urban and rural. There could be variations in educational opportunities in schools due to location. The emphasis on education and the amount given to students varies from one locality to another. One of the most important effects of geographical locations is the difference between the educational conditions in the urban and rural areas. Benton (2000) described location as a geographical place or an area. In the word of Oguniyi (2008), location has to do with the area which may be urban or rural area where an individual resides.

Location could also be a factor that affects Economics classroom interaction patterns. Ezeudu (2003) stated that location means urban and rural area. Location is a particular place in relation to other areas (Quirk, 2003). Akpan (2008) indicated that schools in urban areas have electricity, water supply, more teachers, more learning facilities and infrastructure. To support this Ezike (2001) stated that urban areas are those with high population density, high variety and beauty while

rural areas are those with low population, subsistence mode of life, monotonous and burden. Pascarella and Terenzini (1991) attributed students' academic performance to school environment. A school located in a rural area, they argue, will have all the characteristics of a rural environment; similarly, an urban school will have an environment-based activities peculiar to its environment but different from a rural location. Location in this study can be seen as the environment or the area where teaching and learning of Economics takes place.

The location of a school can hinder teachers from interacting with their students effectively during Economics classroom, since some of the teachers living in the urban areas can rattle their teaching in the rural area in order to get back to the urban area where they are residing. For instance, Reeves (2005) observed that location conceivably may have consequences on how well teachers teach and students learn at school. The extent to which students learning could be enhanced depends on the location of the school (Caroline, 2014). The nature of secondary schools classroom learning environment has been found to differ according to location Lawren, (2006). This difference due to location may lead to students' different perception of classroom interaction in rural and urban schools, and may or may not result to difference in students' performance in rural and urban schools. According to Murdock (2007) location influence classroom interaction. Wentzed (2006) continued by saying that a learner's concept of his worthiness, competence

and other academically related qualities are derived from interactions with others in the academic environment. Economics knowledge is learnt through classroom interactions. Murray (2001) further explained that location can be rural or urban. According to him, urban population are made up of more of educated population, equipped library, educative television and radio programmer which are likely going to enhance the understanding of the senior secondary school Economics teaching and learning. Therefore location can influence Economics classroom interaction pattern.

Theoretical Framework

Jean Piaget Constructivism Theory (1892)

Piaget's theory of constructivism was propounded in 1892. This theory asserts that human beings generate knowledge and meaning from an interaction between experiences and ideas. Piaget upholds that human beings (i.e. Economics students in this context) can construct their own data or knowledge in the course of interaction. Accordingly, this theory could be related to this study by saying that in the classroom, if secondary school Economics teachers create room for two way interactions between them and their students, much will be known about a particular concept or topic. When a secondary school Economics teacher makes his or her students feel free to interact with him or her, the teaching and learning process would be made easy and the stress that the teacher would have passed

through to help the students understand would be reduced. This is because in a class some students are gifted and if a secondary school Economics teacher gives them the chance to contribute, they will do it happily. When an Economics teacher allows students to interact among themselves, they are likely to discover knowledge, ideas and gain experiences from practical learning. Giving students opportunity to interact either in group discussion, co-operative, competitive or creating room for debate among themselves, is like making them carry out an investigation on a topic.

Therefore, Piaget's theory of constructivism may be a plausible explanation for students' academic performance in senior secondary schools using effective teacher-students and students-students interaction pattern. Effective teacher-student interaction pattern enable students or student to gain skills and knowledge by working together just to carry out investigations about what they were ignorant of and respond to problems or challenges.

Lev Vygotsky Social Learning Theory (1962)

Social learning theory was developed by a Russian scientist, Lev Vygotsky in 1962. Lev Vygotsky based his theory on socio-cognitive and multicultural principles. Social learning theories help us to understand how people learn in social contexts (learn from each other) and informs us on how we, as teachers, construct active learning environment. Lev Vygotsky first stated that we learn through our

interactions and communications with others. Vygotsky (1962) examined how our social environments influence the learning process. He suggested that learning takes place through the interactions students have with their peers, teachers, and other experts.

Consequently, teachers can create a learning environment that maximizes the learner's ability to interact with each other through discussion, collaboration, and feedback. Moreover, Vygotsky (1962) argues that culture is the primary determining factor for knowledge construction. We learn through this cultural lens by interacting with others and following the rules, skills, and abilities shaped by our culture. Developing Learning environment by implication, the degree of social interaction in any class is assumed to influence learning. This theory supports that social interaction plays a fundamental role in the development of cognition. It explains that socialization affects the learning process in an individual. It tries to explain consciousness or awareness as the result of socialization. This theory emphasizes social orientation with conceptual growth and equally stresses the role of culture and its transmission through social interaction within a shared cultural framework. This implies that learning should be based on learners' culture and sub science culture, a fact that places this theory within the confines of constructivism.

Lev Vygotsky says that the more socially skillful students are, the more attention teachers pay to teaching involving the learners in activities through the

use of social interaction, the more it would lead to achievement of self goals. The implication of this theory for the present study is that whatever happens within the confines of the senior secondary school Economics classroom is expected to transmit into sub science culture and facilitate understanding through teacher-student, student-student interactions. It also implies that active participation rather than passive and taking great care to assess what the learner has already known to estimate what he or she can learn is very necessary. Guided participation in which learning activities are structured will provide helpful instructions that are carefully tailored to the student's current abilities and monitors the learner's progress.

Empirical Studies

The following studies have been reviewed in relation to the present study:

Studies on Classroom Interaction patterns

Pheasanty (2003) conducted a research which objective was to identify the characteristics of the classroom interaction in the Elementary school English classes; and to find out whether there are any significant differences in the effectiveness of teaching learning process among classes with different percentage of classroom interaction characteristics. This study involves the fifth grade students and English teachers of some schools as the subjects. The observation used Flanders interaction Analysis to identify the classroom interaction while the English mastery test was analyzed by using one way ANOVA. The result of the

analysis showed that the dominate characteristics of classroom interaction in Elementary schools are the student participation, indirect ratio, and content cross. The English mastery tests of the fifth grades of Elementary schools are good enough. The inferential analysis shows that there are significant differences in the effectiveness of teaching learning English among classes which have different percentages of characteristics of classroom interaction. This is related to the present study in the area of classroom interaction pattern. For the present study, the researcher intends to study the Economics classroom interaction pattern in senior secondary schools in Nsukka Education zone while the data will be analyzed using T-test.

Kalu (2008) conducted a study on classroom interaction patterns and students' learning outcomes in physics in Calabar, Nigeria. A correlation research design was adopted in the study. Fifteen (15) secondary schools were selected in Calabar while the sample was 516 SS 2 physics students and 15 physics teachers. The study adopted purposive sampling technique while data were collected through students' physics attitude scale (SPAS), physics achievement tests (PAT) and science interaction categories (SIC). Data collected were analyzed using Pearson product moment correlation technique. The major finding revealed that there is a significantly positive relationship between interaction pattern and students' post-instructional attitude and low academic task achievement. This

study is related to the present study in the area of classroom interaction pattern even though the study was done in Calabar and it was on physics while the data was analyzed using Pearson product moment correlation technique. However, in the present study, the researcher intends to study the Economics classroom interaction pattern in senior secondary schools in Nsukka Education zone in Enugu State while data collected will be analyzed using T-test.

Okoye (2007) investigated the effects of two learning styles on pupils' achievement and interest in primary science. The purpose of the study was to observe the two interaction patterns which are competitive and co-operative during primary science lessons and to relate the patterns to students' achievement and interest. The researcher used two instrument for data collection which is primary science achievement test (PSAT) and primary science interaction test (PSIT). The PSAT consisted of fifty items of Likert type drawn from all the topics in primary science; the PSIT consisted of lesson plan with the two interaction patterns. The sample consisted of three hundred and fifty pupils from government owned primary schools in Onitsha Education Zone. The data collected was analyzed using Pearson product moment correlation coefficient. The result showed that pupils' achievement and interest correlated positively with the two learning styles. It also showed that the things in which a learner had interest were well attended, learned properly, retained for a long time and made use of at the proper time. The study

relates to the present study in the area of classroom interaction pattern though the work was done in Onitsha Education Zone on primary science and the data collected was analyzed using Pearson product moment correlation coefficient while the present study will be on Economics classroom interaction pattern in senior secondary school in Nsukka Education zone in Enugu State and the data collected will be analyzed using t-test.

In 2005, Inamullah conducted the research to explore patterns of classroom interaction at secondary and tertiary levels in the North West Frontier Province of Pakistan using Flanders Interaction Analysis system. This study was significant because its findings and conclusions may stimulate teachers to improve their teaching behavior in order to maximize students learning. Fifty observations were carried out, each in one classroom, using Flanders Interaction Analysis system to secure the data. To do this, time sampling was used and each classroom was observed for 810 second in a 45-minutes class. After obtaining and encoding the data, it was tabulated, analyzed and interpreted by using percentages, means, standard deviations and t-test. The result shows that the students talk time at secondary and tertiary level differed in favor of secondary level classes where students talk time was greater than at tertiary level. The talk time of teacher at tertiary level was greater than that of the teacher at secondary level. Silence time at secondary level was significantly greater than at tertiary level. The study relates

to the present study on the pattern of classroom interaction of secondary levels in the North West Frontier Province of Pakistan and the data was analyzed using percentages, means, standard deviations and t-test. However, in the present study, the researcher intends to study the Economics classroom interaction pattern in senior secondary schools in Nsukka Education zone in Enugu State while the data collected will be analyzed using T-test.

Studies on Classroom Interaction Patterns and Academic Performance

Aboho, Dodo and Isa (2014) conducted a study on the teacher-student classroom interaction on academic performance: A case study of senior secondary Economics students in Benue state. The main purpose of the study was to investigate teacher-student classroom interaction on academic performance of senior secondary school students in Economics the research design adopted in the study was a survey design. The population for the study formed a sample size of 390 students. The instrument for data collection was a self structured questionnaire on teacher- student interaction (QTSI). The data collected were analyzed using chi-square and t-test statistical. The major finding of the study revealed that teacher students' interaction has a significant impact on the students' academic performance. It was recommended that the teacher should always interact with their students. This study is related to the present study in the area of teacher-student interaction, though it was carried out in Benue State on senior secondary

school Economics. The present study was on the Economics classroom interaction pattern in senior secondary schools in Nsukka Education zone in Enugu State and data collected will be analyzed using T-test.

Odu, Odigwe and Ekpenyong (2013), conducted a study of pattern of interaction of Economics teachers in cross River state secondary schools, Nigeria. The purpose of the study was on interaction pattern in Cross River state secondary schools. The design of the study was a descriptive research design. The population for the study was 400 from the sample size comprising 350 students and 50 teachers of Economic. The sampling technique used was stratified sample technique and the instrument used for data collection was questionnaire. The data collected was analyses using one sample t- test statistical. The major findings of the study revealed that students of Economics in Cross River state secondary schools do not consider the interaction pattern of their teacher as adequate and helping them achieve better academic performance and that students of Economics in Cross River state secondary schools do not consider the student-student interactive pattern as adequate and helping them achieve better academic performance. This study is related to the present study in the area of òinteractive patternö though the work was done in Cross Rivers State on Economics. However the present researcher intends to study the Economics classroom interaction pattern

in senior secondary school in Nsukka Education zone in Enugu state and the data collected will be analyzed using t-test.

All the above mentioned studies were all on classroom interaction pattern of primary, secondary and tertiary schools on specific subjects area outside Nsukka Education zone but the present study is trying to fill the gap of investigating on the Economics classroom interaction patterns in Nsukka Education zone using Flanders interaction analysis category.

Summary of Literature Review

The review of literature was carried out under the following sub-headings, conceptual, theoretical and empirical studies. The concept reviewed are; concept, scope and aims of senior secondary school Economics teaching and learning, classroom interaction patterns, concept of gender and concept of location. The theoretical framework looked into the reviews on Jean Piaget constructivist theory and Lev vygotsky social learning theory which stated that we learn through our interactions and communications with others.

The empirical studies reviewed some research works that were opined that interaction greatly influence the way in which students interact with each other and with the teacher which in turn affects learning while some researchers emphasized the use of interaction in promoting teaching- learning process and for greater mastery of the subject matter by students. Some of them did not specify the type of

interaction but the results indicated that teachers' characteristics like experience and qualifications contributed greatly to learning outcomes. From the literature review, one can see that classroom interaction is an important predictor of senior secondary school Economics teaching and also ability to retain important concepts.

The gap, the researcher wants to fill is the gap in the research studies carried out in Nigeria on lack of Economics classroom interaction pattern in secondary schools. The researcher sees the classroom interaction patterns (teacher talk, student talk and period of silence or confusion) as a neglected variable in the studies of poor secondary school Economics teaching and learning. Therefore the present study investigates the Economics classroom interaction Patterns in senior secondary schools.

CHAPTER THREE

RESEARCH METHOD

This chapter describes the general procedure the research employed in conducting this study. It is presented under the following sub headings; research design, Area of the study; population of the study, sample and sampling technique, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis.

Research Design

The study adopted a descriptive survey research design. According to the Association for Educational Communication and Technology (AECI) (2001), descriptive survey research design involves gathering of data that describes events and then organizes, tabulated, depicts and describes the data collected. This type of design describes how a situation is with respect to existing event. Descriptive survey research design was deemed suitable for this study because the researcher intended to gather and describe the events by telling how it is through the use of observation to get vital information during classroom teaching and learning within the selected schools.

Area of Study

The study was carried out in Nsukka Education zone in Enugu with a total of 58 secondary schools located in three local government Areas comprising Nsukka,

Igbo-Etiti and Uzo-Uwani. Nsukka Education zone was chosen because of the vast interest of the people in investing in education in the area. Another point is that Nsukka Education zone contains a number of secondary schools that have Economics students. The zone was also chosen because most schools do not have the conducive environment for learning which may affect students in achieving the instructional objectives.

Population of Study

The population of the study comprises all the SSII students of government owned senior secondary schools in Nsukka Education zone who offer Economics. There are fifty-eight (58) public senior secondary schools in Nsukka Education zone (Post Primary School Management Board, PSSMB, Nsukka, 2016). The population of SSII Economics student in Nsukka Education zone is three thousand, two hundred and ninety-nine (3,299). Out of the entire population one thousand five hundred and sixty-four (1,564) are males and one thousand seven hundred and forty-five (1,745) are females. The population of the Economics teachers is one thousand, two hundred and sixty five (1,265) which are made up of three hundred and fifty- five (355) males and nine hundred and ten (910) females.

Sample and Sampling Technique

The sample size of this study was three hundred and forty- one (341) senior secondary school Economics students. The sample was drawn using an established

sample size table (see appendix III, page 121). The study adopted simple and purposive random sampling. The simple random sampling technique was used to select three hundred and forty-one (341) senior secondary school year two Economics students (*obtained using an established sample size table*), and twenty (20) Economics teachers. These students and teachers made up twenty (20) intact classrooms from twenty (20) senior secondary schools. First, an Education Zone was purposely sampled from 6 Education Zones in Enugu State and Nsukka Education zone was selected from Enugu state. Then 20 (twenty) schools were selected out of the 58 (fifty-eight) schools in Nsukka education zone by simple random sampling. One Economics classroom was selected from each of the twenty (20) schools, giving a total of 20 (twenty) Economics classrooms. These classrooms were selected based on their availability and readiness to participate in the study. The study used twenty (20) intact classrooms in order to ensure that regular class periods were not altered.

Instruments for Data Collection

The instrument used for data collection was a Modified Flanders's Interaction Analysis category system for observing and recording classroom interaction patterns. The items in the modified Flanders interaction analysis were converted in an observation sheet called coding chart as illustrated by Gay (2000). Flanders's Interaction Analysis category system was used to code and

analyze the interaction patterns during Economics teaching and learning in the selected schools used for the study. It is an adaptation of Flandersø (1970) observation system designed to code teachersø and studentsø behaviour during teaching and learning (Kalu, 2004 and Sahlbery, 2010). The following observation procedure was adopted.

1. In each class period of 45 minutes, 13.50 minutes (810 seconds) were used as observation period.
2. 13.50 minutes (810 seconds) were divided in to nine time units.
3. Each observation session was for the duration of 1.50 minute (90 seconds).
4. In the first fifteen minutes of the class observation period, three time units were observed randomly, comprising 4.50 minutes (270 seconds).
5. In the second fifteen minutes of the class observation period, three time units were observed randomly, comprising 4.50 minutes (270 seconds).
6. In the third fifteen minutes of the class observation period, three time units were observed randomly, comprising 4.50 minutes (270 seconds).
7. Each observation session constituted 30 observation periods.
8. A stopwatch was used together with an ordinary watch.
9. Total time for observation in each classroom was 13.50 (810seconds)

Validation of Instrument

Flanders Interaction Analysis Category System (FIAC) was face validated by three lecturers who are experts one from the Department of Science Education (Measurement and Evaluation), a specialist from the Social Science Education and one from Educational Psychology, all from Faculty of Education, University of Nigeria Nsukka. These experts were requested to review the items in terms of the clarity, appropriateness of the language and expressions. These experts, after scrutinizing the instrument, made very important corrections and useful suggestions and necessary modification of the instrument was made.

Reliability of the Instrument

The validated instrument Flanders Interaction Analysis Category System (FIAC) was trialó tested on five (5) senior secondary Economics classes in Igbo-Eze South Local Government Area to see if the instrument would have problem in the observation and coding. Igbo- Eze South Local Government Area was used because they have the same characteristics with the area of the study. The cronbach alpha was used to establish the internal consistency of the instrument and was guaranteed the use of the instrument for the study with coefficient of 0.609 (see appendix II, page 120).

Method of Data Collection

Data collection was based on classroom observation. The researcher personally took records of interactions using Flanders's interaction analysis system. Twenty (20) Economics classrooms were observed once each during their normal classroom teaching and learning. The study lasted for six weeks during which the teachers taught topics from the scheme of work for the second term and verbal interactions during the lesson was recorded using the prepared observation sheet.

Method of Data Analysis

The collected data was analyzed using frequency count, percentage and mean to answer research questions two (2) to nine (9) while T-test was used to test the null hypotheses one (1) to four (4) at 0.05 level of significance. T-test was used because it is conventionally accepted as a tool for making deductive inference based on observation of data.

Each table was analyzed and interpreted by using frequency count, percentage and mean. In order to calculate, all the category 1 to 10 were added and the mean of the 10 categories for the 20 schools were calculated. In order to calculate the interaction time, frequencies from category 1 to 9 were added which were calculated into percentages by dividing the frequencies with total time of interaction multiplied by hundred (100). To calculate teacher- student interaction

time, frequencies from category 1 to 7 were added and were converted into percentage by dividing the frequencies with total time of interaction multiplied by hundred (100) . To calculate the teacher's initiation discussion time, frequencies from category 4 to 7 were added which were converted into percentage by dividing the frequencies with total time of interaction multiplied by hundred (100). To calculate student- student interaction time, frequencies from category 8 to 9 were added and were converted into percentage by dividing the frequencies with total time of interaction multiplied by hundred(100). To calculate the student initiation discussion time, frequencies of category 9 were added which were converted into percentage by dividing the frequencies with total time of interaction multiplied by hundred (100)

To calculate mean and percentage and t-test, the formulas are

$$\text{Mean} = \frac{\text{Sum of total time of interaction}}{\text{No of classes}}$$

$$\text{Percentage} = \frac{\text{Time for specific interaction}}{\text{Total time of interaction}} \times 100$$

$$\frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

CHAPTER FOUR

PRESENTATION OF RESULTS

This chapter presented and interpreted the data for the study. The data were presented according to the research questions and hypotheses that guided the study.

Research Question One

What are the patterns of interaction in observed senior secondary Economics classrooms?

The Flanders interaction category (FIAC) was used to answer Research question 1.

Patterns of interaction in observed senior secondary Economics classrooms

Teacher talk: Accepting, clarifying, discussing, praising, repeating words, praising, encouraging, display question, encouraging, giving information, joking, referential questions, explaining, correct mistakes, request, giving direction, criticizing and smile

Student talk: Accepting, affirmative answer, negative answer, question, request, surprising, laughter and borrowing.

Period of Silences or Confusion

Table 1**Total Frequency Counts of Interaction Time in twenty (20) Senior Secondary School Economics Classrooms**

Schools	Observation time in seconds	Total Interaction time in seconds	Total time of teacher - student interaction in seconds	Total time of student-student interaction in seconds	Total time of teacher initiation discussion in seconds	Total time of student initiation discussion in seconds
School 1	810seconds	711	624	147	522	42
School 2	810seconds	777	636	141	568	71
School 3	810seconds	792	639	153	561	78
School 4	810seconds	780	639	141	582	69
School 5	810seconds	783	627	159	564	69
School 6	810seconds	795	660	135	585	57
School 7	810seconds	780	663	117	621	51
School 8	810seconds	771	621	150	588	75
School 9	810seconds	789	648	141	573	75
School 10	810seconds	762	648	114	615	48
School 11	810seconds	792	624	168	534	78
School 12	810seconds	783	609	174	561	84
School 13	810seconds	786	648	138	600	57
School 14	810seconds	768	612	156	582	75
School 15	810seconds	771	636	135	579	63
School 16	810seconds	777	621	156	558	63
School 17	810seconds	792	657	135	597	57
School 18	810seconds	780	612	168	558	78
School 19	810seconds	753	621	132	579	57

School 20	810seconds	780	642	138	561	60
Average length of time.	810sec	15522/20= 776.1	12687 / 20= 634.35	2898/20 = 144.9	11488/ 20 =574.4	1307 / 20 =65.35

Proportion of Interaction time in observed Twenty (20) Senior Secondary school Economics classrooms

No of schools	Total interaction time (in seconds)	Mean interaction Time (in seconds)	Observation time per school (in seconds)	% of interaction time per school (in percentage)
20	15522	776.1	810	95.8%

Research Question Two

What is the average length of time of teacher- student interaction in observed senior secondary school Economics classrooms?

Table 2: Mean time of Teacher-Student Interaction in observed Senior Secondary School Economics Classrooms

No of schools	Total interaction time (in seconds)	Mean Time of teacher ó student interaction (in seconds)	Observation time per school (in seconds)	% of interaction time per school (in percentage)
20	12687	634.35	776.1	81.7%

Table 2 shows that the average mean time of teacher ó student interaction in the twenty (20) schools was 634.35 sec. The standard time of interaction was 810sec. This shows that the teacher-student interaction time was less than the standard time of interaction, (643.35 sec < 810 sec) and the percentage was 81.7% which was below the standard percentage of interaction, (81.7% < 95.8%).

Research Question Three

What is the average length of time of student- student interaction in observed senior secondary school Economics classrooms?

Table 3:Mean time of Student-Student Interaction in observed Senior Secondary School Economics Classrooms

No of schools	Total interaction time (in seconds)	Mean Time of student ó student interaction (in seconds)	Observation time per school (in seconds)	% of interaction time per school (in percentage)
20	2898	144.9	776.1	18.6%

Table 3 shows that the average mean time of student - student interaction in the twenty (20) schools was 144.9 sec. The standard time of interaction was 810sec. This shows that the student-student interaction time was less than the standard time of interaction, (144.9sec < 810 sec) and the percentage was 18.6% which was below the standard percentage of interaction, (18.6% < 95.8%).

Research Question Four

What is the average length of time of teacher initiated discussion in observed senior secondary school Economics classrooms?

Table 4:Mean Time of Teacher initiated discussion in observed Senior Secondary School Economics Classrooms

No of schools	Total interaction time (in seconds)	Mean Time of teacher initiated discussion (in seconds)	Observation time per school (in seconds)	% of interaction time per school (in percentage)
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20	11488	574.4	776.1	74.0%
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Table 4 shows that the average mean time of teacher initiated discussion in the twenty (20) schools was 574.4 sec. The standard time of interaction was 810sec. This shows that the teacher initiated discussion time of interaction was less than the standard time of interaction, (574.4 sec < 810 sec) and the percentage was 74.0% which was below the standard percentage of interaction, (74.0% < 95.8%).

Research Question Five

What is the average length of time of student initiated discussion in observed senior secondary school Economics classrooms?

Table 5: Mean time of Student initiated discussion in observed Senior Secondary School Economics Classrooms

No of schools	Total interaction time (in seconds)	Mean Time of student initiated discussion (in seconds)	Observation time per school (in seconds)	% of interaction time per school (in percentage)
20	1307	65.35	776.1	8.4%

Table 5 shows that the average mean time of student initiated discussion in the twenty (20) schools was 65.35 sec. The standard time of interaction is 810sec. This shows that the student initiated time of interaction is less than the standard

time of interaction, (65.35sec < 810 sec) and the percentage was 8.4% which was below the standard percentage of interaction, (8.4% < 95.8%).

Research Question Six

What is the influence of gender on the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms?

Table 6: The Mean time of interaction on the influence of Gender on teacher - student Interaction in observed Senior Secondary School Economics Classrooms

Gender	No of schools	Total interaction time (in seconds)	Mean Time of teacher-student (in seconds)	Observation time per school (in seconds)	% of interaction time per school (in percentage)
Male	10	6480	648.0	776.1	83.4%
Female	10	6207	620.7	776.1	79.9%

Table 6 shows that the average mean time of interaction on the influence of gender on teacher-student interaction in twenty (20) schools were 648.0 sec for male and 620.7 sec for female. The standard time of interaction is 810 sec. This shows that (648.0 < 810sec) and (620.7 sec < 810sec) were below the standard time of interaction and the percentages were 83.4% and 79.9% respectively below standard percentage of interaction. It also shows that teachers interact more with male students than female students.

Research Question Seven

What is the influence of gender on the average length of time of student ó student interaction in observed senior secondary school Economics classrooms?

Table 7: The Mean time of interaction on the influence of Gender on student - student Interaction in observed senior secondary school Economics Classrooms

Gender	No of schools	Total interaction time (in seconds)	Mean Time of student-student interaction (in seconds)	Observation time per school (in seconds)	% of interaction time per school (in percentage)
Male	10	1572	157.2	776.1	20.2%
Female	10	1326	132.6	776.1	17.0%

Table 7 shows that the average mean time of interaction on the influence of gender on student-student interaction in twenty (20) schools were 157.2 sec for male and 132.6 sec for female. The standard time of interaction is 810 sec. This shows that ($157.2 < 810\text{sec}$) and ($132.6 \text{ sec} < 810\text{sec}$) were below the standard time of interaction and the percentages were 20.2% and 17.0% respectively below standard percentage of interaction. It also shows that male students interact more than female students.

Research Question Eight

What is the influence of location on the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms?

Table 8: The Mean time of interaction on the influence of location on Teacher –Student Interaction in observed Senior Secondary School Economics Classrooms

Location	No of school	Total interaction time (in seconds)	Mean Time of teacher-student (in seconds)	Observation time per school (in seconds)	% of interaction time per school (in percentage)
Urban	10	6474	647.4	776.1	83.4%
Rural	10	6210	621.0	776.1	80.0%

Table 8 shows that the average mean time of interaction on the influence of location on teacher-student interaction in twenty (20) schools were 647.4 sec for urban and 621.0 sec for rural while standard time of interaction is 810 sec. This shows that $(647.4 < 810\text{sec})$ and $(621.0 \text{ sec} < 810\text{sec})$ were below the standard time of interaction and the percentages were 83.4% and 80.0% respectively below standard percentage of interaction. It also shows that teacher interact more with students in the urban areas than students in rural areas.

Research Question Nine

What is the influence of location on the average length of time of student - student interaction in observed senior secondary school Economics classroom?

Table 9: The Mean time of Interaction on the influence of location on Student – Student interaction in observed Senior Secondary School Economics Classrooms

Location	No of schools	Total interaction time (in seconds)	Mean Time of student-student (in seconds)	Observation time per school (in seconds)	% of interaction time per school (in percentage)
Urban	10	1551	155.1	776.1	19.9%
Rural	10	1347	134.7	776.1	17.3%

Table 9 shows that the average mean time of interaction on the influence of location on student-student interaction in twenty (20) schools were 155.1 sec for urban and 134.7 sec for rural and standard time of interaction is 810 sec. This shows that $(155.1 < 810\text{sec})$ and $(134.7 \text{ sec} < 810\text{sec})$ were below the standard time of interaction and the percentages were 19.9% and 17.3% respectively below standard percentage of interaction. It also shows that students in the urban areas interact more than students in rural areas.

Null Hypothesis One (HO₁): Gender does not significantly influence the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.

Table 10: Summary of t-test for difference in the average length of time of Teacher-Student interaction in observed Senior Secondary School Economics Classrooms

		Group Statistics			
		N	Mean	Std. Deviation	Std. Error Mean
Gender					
T-S	Male	10	648.00	9.381	2.966
	Female	10	620.70	8.056	2.548

t - test						
Gender	No of schools	Interaction time	Mean interaction time	SD	t	Remark
Male	10	6480	648.00	9.381	6.98	NS
Female	10	6207	620.70	8.056		

Significant, $df = 18$, table value of t at 0.05 level = 2.10.

(6.98 > 0.05) NS= Not Significant

Table 10 shows that the calculated value of t is 6.98. This value was greater than critical value at 0.05 levels, Hence the null hypothesis H_0 Gender does not significantly influence the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms is rejected. Therefore, gender is significantly influencing the average length of time of teacher σ student interaction in observed senior secondary school Economics classrooms.

Null Hypothesis Two (HO₂): Gender does not significantly influence the average length of time of student-student interaction in observed senior secondary school Economics classrooms.

Table 11: Summary of t-test for difference in the average Length of time of Student-Student Interaction in observed Senior Secondary School Economics Classrooms

Group Statistics						
Gender	N	Mean	Std. Deviation	Std. Error Mean		
S-S	Male	10	155.10	13.042	4.124	
	Female	10	134.70	11.441	3.618	

t-test						
Gender	No of school	Interaction time	Mean interaction time	SD	t	Remark
Male	10	1551	155.10	13.042	3.72	
Female	10	1347	134.70	11.441		NS

Significant, $df = 18$, table value of t at 0.05 level = 2.10. ($3.72 > 0.05$) NS= Not Significant

Table 11 shows that the calculated value of t is 3.72. This value was greater than critical value at 0.05 levels, Hence the null hypothesis H_0 Gender does not significantly influence the average length of time of student-student interaction in observed senior secondary school Economics classrooms is rejected. Therefore, gender is significantly influencing the average length of time of student σ student interaction in observed senior secondary school Economics classrooms.

Null Hypothesis Three (HO₃): Location does not significantly influence the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.

Table 12: Summary of t-test for difference in the average length of time of Teacher-Student Interaction in observed Senior Secondary School Economics Classrooms

Group Statistics				
Location	N	Mean	Std. Deviation	Std. Error Mean
T-S	Urban	647.70	9.742	3.081
	Rural	621.00	8.718	2.757

t-test

Location	No of schools	Interaction time	Mean interaction time	SD	t	Remark
Urban	10	6477	647.70	9.742	6.46	NS
Rural	10	6210	621.00	8.718		

Significant, $df = 18$, table value of t at 0.05 level = 2.10.
(6.46 > 0.05) NS= Not Significant

Table 12 shows that the calculated value of t is 6.46. This value was greater than critical value at 0.05 levels, Hence the null hypothesis of location does not significantly influence the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms is rejected. Therefore,

location is significantly influencing the average length of time of teacher ó student interaction in observed senior secondary school Economics classrooms.

Null Hypothesis Four (HO₄): Location does not significantly influence the average length of time of student-student interaction in observed senior secondary school Economics classrooms.

Table 13: Summary of t-test for difference in the average length of time of student-Student interaction in observed Senior Secondary School Economics Classrooms

Group Statistics					
Location		N	Mean	Std. Deviation	Std. Error Mean
S-S	Urban	10	156.30	12.120	3.833
	Rural	10	133.50	9.823	3.106

t - test

Location	No of schools	Interaction time	Mean interaction time	SD	t	Remark
Urban	10	1563	156.30	12.120	4.65	
Rural	10	1335	133.50	9.823		

Significant, $df = 18$, table value of t at 0.05 level = 2.10. ($4.65 > 2.10$) NS= Not Significant

Table 13 shows that the calculated value of t is 4.65. This value was greater than critical value at 0.05 levels, Hence the null hypothesis óLocation does not significantly influence the average length of time of student-student interaction in

observed senior secondary school Economics classrooms is rejected. Therefore, location is significantly influencing the average length of time of student ó student interaction in observed senior secondary school Economics classrooms.

Summary of the Findings

The following are the summary of the findings of the study:

- 1) The result shows that the mean time of interaction in observed twenty (20) senior secondary Economics classrooms was 776.1sec and the percentage was 95.8% while the standard time of interaction was 810sec.
- 2) The result shows that the teacher-student interaction time is greater than the student ó student interactions time in observed twenty (20) senior secondary school Economics classrooms.
- 3) The result shows that the teacher initiated discussion time is greater than the student initiated time of interaction in observed twenty (20) senior secondary school Economics classrooms.
- 4) The result on the average mean time of interaction on the influence of gender on teacher-student interaction in observed twenty (20) senior secondary school Economics classrooms shows that teachers interact more with male students than female students.

- 5) The result on the average mean time of interaction on the influence of gender on student- student interaction in observed twenty (20) senior secondary school Economics classrooms shows that male students interact more than female students.
- 6) The result shows on the average mean time of interaction on the influence of location on teacher-student interaction in observed twenty (20) senior secondary school Economics classrooms shows that teachers interact more with the students in urban areas than students in the rural areas
- 7) The result on the average mean time of interaction on the influence of location on student-student interaction in observed twenty (20) senior secondary school Economics classrooms shows that students in the urban areas interact more than students in the rural areas.
- 8) The result shows that gender significantly influences the average length of time of teacher-student interaction in observed twenty (20) senior secondary school Economics classrooms.
- 9) The result shows that gender significantly influences the average length of time of student-student interaction in observed senior secondary school Economics classrooms.

- 10) The result shows that location significantly influences the average length of time of teacheróstudent interaction in observed senior secondary school Economics classrooms.
- 11) The result shows that location significantly influences the average length of time of studentóstudent interaction in observed senior secondary school Economics classrooms.

CHAPTER FIVE

DISCUSSION OF RESULTS, CONCLUSION, RECOMMENDATIONS AND SUMMARY

This chapter presents a discussion of the findings of this study, conclusion, educational implications of the research findings, recommendations, limitations of the study, and suggestions for further studies and summary of the study.

Discussion of Findings

Discussions are based in the various issues raised in the research questions and hypotheses of the study.

Teacher-student interaction in observed senior secondary school Economics classrooms

The results from this study indicated that the predominant interaction pattern in senior secondary school Economics classroom was directly oriented by the teacher with teaching being the most frequently occurring interaction. Teachers

characteristically dominated the Economics classrooms; students had little opportunity to participate during teaching ó learning process. These results are consistent with the findings of previous researchers including Ene-Ebute (1986), Okafor (1993), Uzuegbunam (1995), and Onyegegbu (2001). The fact, that education professional has been unable to define functional measurable terms of what good teaching and learning is. In these circumstances, it may not be easy to demonstrate to a teacher that a particular method is necessarily better than other. However teaching and learning is always a shared relationship job. It involves the participation from many people as Brown (2001) recommends: "Teacher talk should not occupy the major proportion of the class hour; otherwise, students are not probably given enough opportunity to talk.

Student-student Interaction in observed senior secondary school Economics classrooms

The results from this study showed that, student-student interaction was lower than that of teacher-student interaction. In the mixed schools, boys dominated both the teacher-initiated interactions and student-initiated interaction in the Economics classrooms under observation. The girls raised their hands and remained seated in their seats as the boys were already off their marks to answer the questions. They were observed to be more active and restless. It was also noticed that the boys mocked most of the girls that attempted to answer the question; this attitude was noticed to have reduced their self-esteem. During the

teaching - learning, the girls grouped themselves together and interacted more within themselves than between boys. The girls preferred asking questions to the teachers than to their counterparts. The boys make themselves leaders in group activities. Interaction between the teacher and students in Economics classrooms which is supposed to equip the students with the necessary principles, skills and competencies for functional living in the society is relegated to the background (Nwagbo, 2008).

Gender and interaction in observed senior secondary school Economics Classrooms

In sex segregated schools, the result of data analysis indicated that the measures of the frequency of the interaction with the teachers favoured the girls over the boys. On the other-hand in mixed schools, the results indicated gender differences was in favour of boys, both on the qualitative and quantitative measures of teacher interactions with male and female students. Onyegebu, (2004) who found out that in the three social sciences subject lessons girls participated in fewer interactions than boys. The boys clearly dominated the social science subjects, were more active, willing than girls to comment spontaneously and made more contacts with the student-teacher than girls. This finding is also consistent with Stiles, (2007) who stated that females receive less attention from teachers and that the interaction females have with their teachers are often negative

or contradicting. Results from this study showed that in mixed schools the teachers interact more with boys than girls. This can be accounted for on the basis that boys are more active and assertive than girls; they dominated the physical side for example. On the other hand, the compliance and inactivity of female students resulted in fewer opportunities for them to be called on to respond.

According to the results of the study, male and female teachers are different from each other while they interact with their students. In other words, there is a great difference between the behaviour of male and female teachers in the senior secondary school Economics classrooms. To give some examples, male teachers used many display questions but female teachers asked more referential questions which promoted more interactions between the students and the teacher. Female teachers were more interactive with their students both in single-gender and mixed-gender classes; they encouraged different interactive tasks such as peer and group works in their classes. Female teachers were also more supportive and patient. They gave more compliments to their students and used less directive forms.

Based on the obtained results, the difference between male and female students' utterances in the classroom was also significant. This means that the patterns of teacher ó student interaction were also affected by the gender of students (Chavez, 2000). In mixed-gender classes, male students initiated more exchanges with their teachers, made more humor and gave more feedback to their

teachers (Shomoosi, 2008). In other words, gender plays an important role in the way the participants of a classroom interact with each other.

Location and Interaction in observed senior secondary school Economics Classrooms

The result of data analysis indicated that the measures of the frequency of the interaction with the teachers favoured the students in the urban areas over the students in the rural areas. On the other-hand in the student ó student interaction, the results indicated that students in the urban areas interact more than the students in the rural areas. This confirms the study of Owoye and Yara (2010) which showed that there is significance difference between interaction of students in rural and urban schools as a result of classroom interaction.

Conclusion

From the analysis and discussion of the finding, the following conclusions could be made: the mean and percentage of teacher-student interaction is more than that of student ó student interaction and the mean and percentage of teacher initiated discussion is more than student initiated discussion.

The study also documented that gender is significantly influencing the average length of time of teacher-student and student ó student interaction in observed senior secondary school Economics classrooms.

The study also revealed that location is significantly influencing the average length of time of teacher-student and student to student interaction in observed senior secondary school Economics classrooms.

Educational Implication of the Study

The present study has shown that classroom interaction is dominated by teacher-student. Teacher to student is a situation where the teacher gives out the facts, does not use much of students' ideas and students are not encouraged to think deeply about facts. This implies that teachers are using teaching methods such as lecture and demonstration method which are both teacher centered and not student centered. This also implies that students are not allowed to participate actively in teaching-learning process and this has affected their performance in senior secondary Economics both in internal and external examination. This goes to show that the students are passive rather than active and so it does not encourage learning through active involvement which is the very important principle of teaching-learning. It does not provide the students opportunity to think, to research or adopt a problem solving approach and they are reduced to mere observers. This also implies that students do not learn much from such method. Also it is worthy to note that students remember only 20% of what they hear and 70% of what they say.

It also showed that silence which is a temporary pause is not related to students' performance.

The findings of this study have important implications for senior secondary school Economics teachers; teachers of Economics at secondary school level need to engage their students in the teaching-learning process, use student-centered or interactive strategies and provide adequate feedback for their students after Economics instructions. The study has provided some useful empirical basis for maximizing classroom teaching and learning of Economics at the senior secondary school level. Since teacher-student and student-student interaction are related to students' performance both in internal and external examination, the findings will sensitize Economics teachers that adequate classroom interaction pattern could serve as a basis of improving students' performance.

The implications therefore centre on the use of a more student centered approach in teaching and learning Economics in senior secondary schools. Therefore, teachers should be given realization to create a democratic atmosphere in the classrooms. Teacher's initiation discussion in the class should be reduced at secondary level and student initiation discussion will be encouraged.

Recommendations

Based on the findings of this study, the following recommendations were made:

- 1) Teachers should establish high level of student ó student interaction through initiation and response as it promotes involvement and enhances performance.
- 2) Teachers should also ask questions that will encourage studentsø participation in senior secondary Economics teaching and learning
- 3) Teachers should provide chances to the student to participate in teaching and learning process and start classroom discussion.
- 4) Teachers should endeavour to make teaching and learning more studentsø centered by encouraging student ó student interaction. This will improve performance in senior secondary Economics.
- 5) The result of the study indicated that students in the senior secondary school Economics classrooms were passive. Therefore, students should be given more time for the participation in the classes.
- 6) It was also observed in the classroom that majority of the teachers used lecture method and they asked just lower order questions. As it is usedö to question well is to teach wellö. So teachers must ask higher order questions in the Economics classrooms and use participative methods instead of straight lecturing.
- 7) Majority of the teachers were not aware of the classroom interaction and its importance. Therefore, special training to teachers should be given in this

- regard and classroom interaction theories may be included in teachers' education program at all level.
- 8) It was also observed during classroom observation that teachers complained about overcrowded classes which make it difficult for them to control the classes. For adequate interaction, the number of students in the classroom may not be more than thirty or teachers may divide big classes in several groups for proper teacher- student interaction.
 - 9) The classroom observations in the present study were made obtrusively that might have changed the behaviour of teachers and students and resultantly influenced the classroom interaction pattern. In the follow up study, the observation may be conducted unobtrusively to overcome the unnatural behaviour pattern in the classrooms.
 - 10) Students classroom activity should be encouraged, silence or confusion time may be utilized by asking higher order questions and providing positive reinforcement and using "wait time", as suggested by (Mary, 1986).
 - 11) The present study was concluded at secondary level, similar studies may be conducted in tertiary levels.
 - 12) Flanders interaction analysis was an instrument to study the verbal interaction but non- verbal gestures and body language are equally, if not

more important. Non-verbal interaction instrument may be used for studying non-verbal interaction pattern.

- 13) Ministry of education (Federal and State) should organize seminars and workshops to keep teachers (Economics teachers inclusive) abreast of the application of classroom interaction patterns for instructional delivery.

Limitations to the Study

- 1) Due to classroom size, the analysis cannot give any information concerning each student's reaction during the classes.
- 2) It was not easy for some of the sample schools to allow the researcher to observe classroom interaction because the school authorities were afraid of exposing their teachers and students.

Suggestions for Further Studies

- 1) A replication of this study could be done on other social science subjects like Geography, Social Studies and Government.
- 2) This study can also be carried out by using single sex schools
- 3) A replication of this study could be carried out in primary and tertiary schools.
- 4) A study on relative effectiveness of student-student on their performance in Economics could be carried out.

- 5) A study on correlation effect of gender, location and academic achievement on Economics students' performance in external examinations could be carried out.

Summary of the Study

The study investigated the Economics classroom interaction patterns in senior secondary school in Nsukka Education zone of Enugu State. Classroom interaction, therefore, is the talk that occurs between teachers and students and among students. Classroom interaction promotes involvement, enhances learning and motivates the students. The focus and interest of this study was on the patterns of interaction in observed senior secondary school Economics classrooms, teacher-student interaction, student-student interaction, teacher initiated discussion and student initiated discussion. The trend on students' poor performance in Economics as reported prompted the researcher to carry out this study to ascertain the Economics classroom interaction patterns in senior secondary schools. Against this background, the study also examined the influence of gender and location in senior secondary school Economics classrooms. Nine research questions guided the study and were answered using frequency counts, mean and percentage. Four null hypotheses were also formulated and tested at 0.05 level of significance using independent sample t-test.

Review of related literature was done under the following subheadings; conceptual framework, theoretical framework, review of empirical studies and the summary of review of literature. The reviewed literature show that studies had been carried out to find out the classroom interaction on science subjects and the influence of gender on students' academic achievement. But no research work has been done on the Economics classroom interaction patterns in senior secondary school in Nsukka Education zone in Enugu State, Nigeria.

Survey study precisely descriptive research design was adopted for the study. The target population of the study was the entire senior secondary II Economics students and teachers in Nsukka education zone of Enugu State. Twenty (20) secondary schools were randomly selected and three hundred and forty -one students were randomly selected from the selected schools. Instrument used was modified Flanders Interaction Analysis Category (FIAC) with reliability index of 0.609 was used for data collection. Data obtained were subjected to statistical analysis. Frequency counts, mean and percentage were used to answer the research questions while independent sample t-test was used to test the null hypotheses. The analysis indicated among others that the mean and percentage time of teacher to student interaction and teacher initiated discussion are greater than the mean and percentage time of student to student interaction and student initiated discussion.

Following the discussion of the findings, the educational implications of the study were highlighted. Based on the implication of the study, recommendations were given, limitations of the study were highlighted and suggestions for further studies were made. Based on the findings of the study, it was concluded among others that Ministry of Education (Federal and state) should organize seminars, workshops and special training to teachers should be given in this regard and classroom interaction theories may be included in teachers' education program at all level in Economics.

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APPENDIX I

QUESTIONNAIRE FOR VALIDATION

Faculty of Education,

Department of Social Science Education,
University of Nigeria,
Nsukka.
9th September, 2015.

Sir/Madam,

REQUEST FOR VALIDATION

I am an M.Ed student of the above department. I am currently carrying out a research on the òEconomics classroom interaction patterns in senior secondary schools in Nsukka Education zone of Enugu Stateö.

The main purpose of this study is to determine the Economics classroom interaction patterns in senior secondary schools in Nsukka Education zone of Enugu state specifically, the study seeks to ascertain:

1. Patterns of interaction in observed senior secondary school Economics classrooms.
2. Average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.
3. Average length of time of student óstudent interaction in observed senior secondary school Economics classrooms.

4. Average length of time of teacher initiated discussion in observed senior secondary school Economics classrooms.
5. Average length of time of student initiated discussion in observed senior secondary school Economics classrooms.
6. Influence of gender on the average length of time of teacher óstudent interaction in observed senior secondary school Economics classrooms.
7. Influence of gender on the average length of time of student óstudent interaction in observed senior secondary school Economics classrooms.
8. Influence of location on the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.
9. Influence of location on the average length of time of student -student interaction in observed senior secondary school Economics classrooms.

Research Questions

To investigate the problem of this study, the following research questions will guide the study;

1. What are the patterns of classroom interaction in observed senior secondary school Economics classrooms?
2. What is the average length of time of teacher- student interaction in observed senior secondary school Economics classrooms?

3. What is the average length of time of student ó student interaction in observedsenior secondary school Economics classrooms?
4. What is the average length of time of teacher initiated discussion in observedsenior secondary school Economics classrooms?
5. What is the average length of time of student initiated discussion in observed senior secondary school Economics classrooms?
6. What is the influence of gender on the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms?
7. What is the influence of gender on the average length of time of student ó student interaction in observed senior secondary school Economics classrooms?
8. What is the influence of location on the average length of time of teacher-studentinteraction in observed senior secondary school Economics classrooms?
9. What is the influence of location on the average length of time of student - student interaction in observed senior secondary school Economics classrooms?

Research Hypotheses

Ho₁: Gender does not significantly influence the average length of time of teacher-student interaction in an observed senior secondary school Economics classroom.

Ho₂: Gender does not significantly influence the average length of time of student-student interaction in observed senior secondary school Economics classrooms.

Ho₃: Location does not significantly influence the average length of time of teacher-student interaction in observed senior secondary school Economics classrooms.

Ho₄: Location does not significantly influence the average length of time of student-student interaction in observed senior secondary school Economics classrooms.

Modified Flanders Interaction Analysis

Category System (MFIACS)

Teacher talk	Response	<p>1. Accepts Feeling: Accepts and clarifies an attitude or the feeling tone of a student in a non threatening manner. Feelings may be positive or negative. Predicting and recalling feelings are included.</p> <p>2. Praises or encourages: Praises or encourages student action or behaviour. Jokes that release tension, but not at the expense of another individual; nodding head or saying "Um hm?" or "go on" are included.</p> <p>3. Accepts or uses ideas of students: Clarifying, building or developing ideas suggested by students. Teacher extensions of student ideas are included but as the teacher brings more of his own ideas into play, shift to category five.</p>
	Initiation	<p>4.1 Asks questions on material shown: Maps, models, graphics, and charts etc.</p> <p>4.2 Asks questions involving thinking/ reasoning: open and closed questions are included.</p> <p>5.1 Teaches coherently : Continuity and relevance of subject matter</p> <p>5.2 Teaching supported by examples, tables, graphs etc., Clarifies facts, concepts, principles etc, using these devices.</p> <p>5.3 Teaches incoherently: Presents irrelevant contents.</p> <p>5.4 Teaching embedded with self questioning: Occasionally uses questions and responds himself and continues lecturing.</p> <p>5.5 Teaching involving dictation from notes: reading from</p>

Student talk	Response	<p>a book or dictating the matter from the notes.</p> <p>6. Giving directions: Directions, commands or orders with which a student is expected to comply.</p> <p>7. Criticizing or Justifying authority : Statements intended to change pupil behaviour from non acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference.</p> <p>8. student- Talk Response: Talk by student in response to teacher. Teacher initiates the contact or solicits student statement or structures the situation. Freedom to express own ideas is limited.</p>
	Initiation	<p>9. student-talk-initiation: Talk by pupils which they initiate. Expressing own ideas; initiating a new topic; freedom to develop opinions and line of thought, like asking thoughtful questions; going beyond the existing structure.</p>
Silence/ confusion		<p>10. Silence or confusion: Pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer.</p>

APPENDIX II

RELIABILITY OF THE INSTRUMENT

Reliability

[DataSet0] C:\Users\MARY\Documents\OZIOKO MARY SPSS PROJECT WORK

RELIABILTY.sav

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Valid		5	100.0
Cases Excluded ^a		0	.0
Total		5	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.609	6

APPENDIX III**SAMPLE SIZE TABLE**

APPENDIX IV

TREND OF ECONOMICS STUDENTS' ACADEMIC ACHIEVEMENT 2009-2012

Economics Students' Achievement in May/June Senior Secondary School
Examination (WAEC) 2009-2012

Year	Total Number of Candidates	Credit A1-C6 %	Pass D7-E8 %	Fail F9 %	Absent %
2009	519,524	33.97	28.16	34.47	3.4
2010	554,853	38.20	25.36	34.41	2.03
2011	649,277	41.12	31.09	24.95	2.84
2012	849,028	46.75	26.75	24.24	2.26

From table, in 2009 when 519,524 enrolled for Economics, 33.97% had credit pass (i.e A1-C6), 28.16% had ordinary pass (i.e. D7-E8), and 34.47% had F9 while 3.4% were absent. In 2010, from 554,853 candidates that enrolled, 38.20% had credit pass, 25.36% had ordinary pass i.e. between D7 and E8, and 34.41% had F9 while 2.03% candidates were absent. Further, in 2011, 41.12% had between A1- and C6, 31.09% had between D7 and E8, while 24.95% failed. Finally, in 2012, 849,028 candidates enrolled, 46.75% had credit pass, 26.75% had ordinary pass, 24.24% failed while 2.26% absent from the examination. Though there is a steady increase in the number of students who enroll for the subject but the conclusion drawn from students' achievement in Economics between 2009 and 2012 is that, more than 50% of students enrolled had below credit pass i.e. A1-C6. This is a source of worry to stakeholders.