REPUBLIQUE DU CAMEROUN
Paix – Travail – Patrie
****
UNIVERSITE DE YAOUNDE I
FACULTÉDES SCIENCES DE L'ÉDUCATION
DEPARTEMENT DE D'INGENIERIE EDUCATIVE
****
CENTRE DE RECHERCHE ET DE FORMATION
DOCTORALE (CRFD) EN
« SCIENCES HUMAINES, SOCIALES ET EDUCATIVES »

REPUBLIC OF CAMEROUN
Peace – Work – Fatherland
****
UNIVERSITY OF YAOUNDE I
FACULTY OF SCIENCES OF EDUCATION
DEPARTMENT OF OF EDUCATIONAL ENGINEERING
****
POST COORDINATE SCHOOL FOR
SOCIAL AND EDUCATIONAL SCIENCES

THE USE OF DIDACTIC MATERIALS ON THE ACADEMIC PERFORMANCE OF STUDENTS STUDYING ECONOMICS IN SECONDARY SCHOOLS IN THE CENTER REGION OF CAMEROON

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE AWARD
OF A MASTERS' DEGREE IN SCIENCES OF EDUCATION (M.Ed.)

Par : **PECHELE STEPHANI PEACHAP**
B.Ed. in Curriculum Studies and Teaching (Economics)
(CST/ECN)
University of Bue

Sous la direction de
BELINGA BESSALA Simon
Maître de Conférences
Université de Yaoundé 1

Année Académique : 2016

DEDICATION

To my parents

Mr ATSE Christopher PITSEAPONG & Mrs ATSE LONGNJINU Angeline

ACKNOWLEDGEMENTS

This study is realised thanks to the collective efforts of many. I am therefore thankful and grateful to all those who contributed in one way or the other to the realization of this work.

I am immensely grateful to my supervisor, professor BELINGA Simon BESSALA, Senior Researcher and lecturer in the department of Sciences of Education, University of Yaoundé I for his relentless assistance and guidance throughout this work.

My gratitude also goes to all the lecturers of the department of Sciences of Education in the University of Yaoundé I for the knowledge acquired in the course of my studies and for their endless guidance and criticisms that has given this work its present shape.

Special thanks go to Kehbuma Serge for accepting to spend time off his busy schedule to read and make valuable suggestionsto this work and for his unconditional support throughout my study. To my entire family members, my parents, sisters, brothers and friends I say thanks for their support morally, financially, emotionally and even intellectually in accomplishing this work.

To, Mongeh Doris, Atemangho Bruno, Ngwepekem Sylvie, Atefor Charly, Mbonuh Nelly,Awa Edward, Katherine Anne Nji, Tsala Atangana, Ngwe Laurine Penanje, Yonkam Lutress, Anye Ateh, Kimbong Abanda Gladys, Nchong Emmanuella and to any other person not cited for their continuous advice and updates that served as a pillar in helping me accomplish this work.

Above all, thanks to God almighty for his abundant grace.

ABSTRACT

The use of didactic materials primarily influences teaching and learning at all levels. Different subjects entail the use of different types of didactic materials for their studies to be effective. Economics is a subject of great importance that has to do with humans in the society. It is a social science that studies human behaviour in relation to ends and scarce means which have alternative uses. Therefore it is very important to teach it appropriately and this can only be achieved if adequate didactic materials are used to this effect. Recent studies of the GCE Ordinary level result show an increasing poor performance in Economics at the secondary level of education. This study is guided by the constructivist theory which asserts that learners are at the centre of constructing their own knowledge from their own experience and thought and they only need some guidance and support from their teachers with the use of materials around them to better develop their mental abilities, notably in Economics. The increasing rate of failure in this subject is a call for concern to upgrade the techniques and strategies that will enable the learners perform better in Economics.

The general objective of this study focuses on determining if the use of didactic materials influence the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon and the general hypothesis of this study states; The use of didactic materials significantly influences the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon. This study made use of the Quantitative approach. The population of the study included the teachers and the students of the secondary schools in the Centre Region of Cameroon. The sample population is form four students selected at random in this region from five schools. The sample of 160 students and 30 teachers in Economics were subjected to a test (questionnaire).The data was obtained and analysed with the aid of two statistical tools; SPSS (Statistical Package for Social Sciences) for the descriptive analysis of data and the chi-square X^2 for the correlative analysis; the results have been as follow:

Decision: Reject Ho hypothesis and accept calculated Ha since 116.969 is greater than 65.171.

a) Reject H_o if $\chi^2_{cal} > \chi^2_{crit}$

(b) Accept H_o if $\chi^2_{cal} < \chi^2_{crit}$

The decision rule for this research implies the rejection of Ho, the null hypothesis and the acceptance of Ha which states that there is indeed a significant relationship between the use of didactic materials and its influence on the academic performance of students in Economics at the secondary level of education in the Centre region of Cameroon.

Key words: didactic materials, economics, academic performance, competences.

RESUME

L'utilisation des matériels didactiques impactes principalement l'enseignement et l'apprentissage. La diversité des matières sous-entend l'utilisation de différents types de matériels didactiques pour l'effectivité de leurs études. L'Economie est une matière de grande importance en rapport avec les hommes dans la société. Il s'agit d'une science sociale qui étudie le comportement humain en rapport avec les finalités et les ressources rares aux utilisations alternatives. Par conséquent, il est très important de bien l'enseigner et cela n'est possible que si des matériels didactiques adéquats sont utilisés à cet effet. Des études récentes des résultats du *GCE Ordinary Level* démontrent une augmentation de mauvais résultats en Economie dans l'enseignement secondaire. Cette étude repose sur la théorie constructiviste qui stipule que les apprenants sont au centre de la construction de leurs propres connaissances à partir de leurs propres expériences et pensées et n'ont besoin que des conseils et de l'accompagnement de leurs enseignants ou des matériels autour d'eux pour mieux développer leurs capacités mentales, en particulier en Economie. Cette augmentation du taux d'échec en Economie est préoccupante aux regards des techniques ou aux stratégies qui permettront d'améliorer les performances des apprenants.

Cette étude vise principalement à déterminer la façon dont l'utilisation d'outils ou de matériels didactiques impactes les performances académiques des élèves en Economie dans l'enseignement secondaire, en particulier dans la Région du Centre du Cameroun. Les hypothèses générales de l'étude comprennent : il n'existe pas de relation importante entre l'utilisation d'outils ou de matériels didactiques et leur impact sur les performances académiques des élèves en économie dans l'enseignement secondaire, en particulier dans la Région du Centre du Cameroun. L'approche quantitative a été utilisée dans cette étude. La population d'étude est composée d'enseignants et d'élèves des lycées de la Région du Centre du Cameroun. L'échantillon de population est composé d'élèves de *form four* sélectionnés au hasard. L'échantillon de 160 élèves et 30 enseignants d'économie a été soumis à un test (questionnaire). Les données que nous avons obtenues avec l'aide de deux outils statistiques à savoir le SPSS pour l'analyse descriptive des données et le chi carré X^2 pour l'analyse corrélative ont permis d'obtenir les résultats suivants :

Décision : Rejette l'hypothèse Ho et accepte le Ha calculé, car 116 969 est plus grand que 65 171.

a) Rejette H_o si $\chi^2_{cal} > \chi^2_{crit}$

b) Accepte H^o si $\chi^2_{cal} < \chi^2_{crit}$

En résumé, la décision pour ce tableau final implique le rejet de Ho et l'acceptation de Ha, qui stipule qu'il existe en effet une relation importante entre l'utilisation d'outils ou de matériels didactiques et son impact sur les performances académiques des élèves en économie dans l'enseignement secondaire, en particulier dans la région du Centre du Cameroun.

Mots clés : matériels didactiques, Economie, performance académique, compétences.

LIST OF ABBREVATIONS

LIST OF ABBREVATIONS

CBA	Competence Based Approach
CFSHS	Christians Foundations Secondary and High school Jouvance
EHS	English High School
DF	Degree of Freedom
ICT	Information and Communication Technology
GBPHS	Government Bilingual Practicing High School (LBA)
GBSSE	Government Bilingual Secondary School Etoug-Ebe
GCE	General Certificate of Education
HO	Null Hypothesis
HA	Alternative Hypothesis
NESCAS	National Educational College of Arts and Science
NPA	New Pedagogic Approach
SL	Significance Level
SPSS	Statistical Package for Social Sciences
X_{CAL}	Chi Square Calculated
X_{CRIT}	Chi Square Critical or Read
X2	Chi Square

TABLE OF CONTENT

GENERAL INTRODUCTION

Didactic materials are all the specially prepared materials intended to be used during the processes of teaching and learning. They are usually needed when studying specific educational contents and achieving specific educational goals defined in syllabuses. For this reason, they are appropriately didactically adapted. Didactic materials consist of books, encyclopaedias, atlases, dictionaries, textbooks, charts, globes, graphs, newspapers, journals, etc.; that is, mostly written materials, which can be either printed or available in electronic form (Ikerionwu, 2000). Both printed and electronic educational materials are indispensable in the teaching process, since they are in addition to the teacher's direct explanation and other learning activities, an important source for students and teachers.

In addition to the commonly used printed and electronic materials, others like the visual display devices include materials like the chalkboard, the green board, the cloth board, the magnetic board and the use of real things (Tambo, 2003). This research in a bit to ascertain the influence of the use of didactic materials and its influence on the academic performance and improvement of students samples via the use of questionnaires, one hundred and sixty (160)students offering Economics in Form four and 30 Economics teachers of Form four in the Centre Region of Cameroon, Yaoundé precisely.

Two Public schools and three Private schools that offer Economics were sampled: Government Bilingual Practicing High School (LBA) Yaoundé, Government Bilingual Secondary School Etoug-Ebe, National Educational College of Arts and Science (NESCAS) Yaoundé, Christians Foundations Secondary and High school Jouvance, English High School (E.H.S) Yaoundé. These are sampled with the intention of verifying the general research objective for this study which focuses on determining how the use of didactic materials influence the academic performance of students in Economics at the Secondary level of Education in the Central Region of Cameroon and to answer the general research questions - Does the use of educational materials influence the academic performance of students in Economics at the Secondary Level of Education in the Central Region of Cameroon?

Given the quantitative nature of this study, a descriptive and inferential analysis is done with the help of chi-square tables and percentages to analyse data collected. The sampling

technique used for this study is the non-probability sampling technique in choosing the schools under study in this Region. Based on the four main theories studied and their incessant appreciation of the use of didactic materials and aids or other natural resources from the environment for effective learning, coupled with findings on what the use of didactic materials in Economics actually entail. This study used the survey technique to properly carry out this research in finding out to what extend the use of didactic materials influences the academic performance of form four students in Economics, in some selected schools in Yaoundé.

CHAPTER ONE

THE PROBLEM OF STUDY

1.1. Research Context

The main aim of education is to produce human beings who are able to appreciate the benefits of education and contribute to the development of the community in different spheres of life be it political, social, economic or technological. When we look at the world from ancient period till date, we find that great transformations had occurred in every period. The old system laid stress upon rote memorization or recitation and the present system gives stress upon new techniques and methods of education so that we make teaching up to the understanding level of students.

The educational process consists of a set of teaching and learning processes that go along with materials and the goals of acquiring some knowledge or training. There are four important aspects to take into consideration when analysing the educational process. Those aspects are: the actors of the process, their objectives, the didactic or instructional materials, and the administrative and support infrastructure (Ikerionwu, 2000). Actors can be differentiated in two categories: learners (i.e. students or apprentices) and pedagogical or academic staff (i.e. instructors, tutors, pedagogical advisors, etc.). Their objectives are complementary: learners' objectives are related to the achievement of some knowledge, competences or skills, following the guidelines defined for the lesson or course in which they are enrolled. Academic staff is devoted to compose didactic materials, manage their contents, and establish pedagogical mechanisms to guide learners through the learning process.

Ikerionwu (2000), defines didactic materials as any kind of aids that assists those actors of the educational process to achieve their objectives during the entire teaching/learning process. Didactic materials according to the actors of the educational process include teaching materials and learning materials. Learning materials are those assets or resources that support learners during the process of learning (e.g., books, games, worksheets, etc.). On the other hand, teaching materials provide academic staff with resources to guide and support the learning process of students. The administrative and support infrastructure for the educational process comprises all those services related to management of the learning process. In the

case of students, some of those services are course offerings, admissions, enrolment, lesson schedules, tests and examinations, examination results, etc. For academic staff those services are mainly related to organization of courses, their structure, schedule and timing according to selected curriculum or educational program, among others.

Padron et al (2005), as certains that thanks to development and improvements in technology, an important evolutionary step has been taken in the educational area with the transformation of traditional didactic materials. This transformation improves learning materials communication and presentation capabilities since contents can be represented with demonstrations, simulations and animations using interactive and multimedia techniques. Thus, learners' comprehension of represented information or knowledge is also improved. Other advantages of electronic Learning, worthy to be mentioned are the enhancement of flexibility in the use of didactic materials and their accessibility, their support for diverse pedagogical methodologies, the optimization of resources, the improvement of learners' individual work, the enrichment of their relations with the academic staff, and the improvement of other learners' attitudes such as responsibility and collaborative work will. The general assumption holds that learning activities enhance practical work, problem solving and investigation as well as the appropriate use of teaching aids in turn elicits discussions all leading to proper learning and teaching.

Teaching aids enable the teacher and the children to engage in solid conversations about something concrete. Having concrete objects to manipulate enables teachers to demonstrate and illustrate concepts in Economics and provide appropriate properties and procedures to create an environment conducive to learning (Szendrei, 1996). Researchers found that if the tools of real life like scales, clocks, measures, containers etc. or their pictures are used in classrooms, they provide evidence that applications in real life can become essential subject matter of Economics in the school (Ensor, 1997).

From a constructivist perspective, which forms the basis of this study, the primary responsibility of the teacher is to create and maintain a collaborative problem- solving environment where learners are allowed to construct their own knowledge and the teacher acts as a facilitator and guide through the use of resourceful teaching aids or materials. Vygotsky's theory of social constructivism, as opposed to Piaget's individualistic approach to

constructivism, emphasizes learners' interaction with others and the objects in their environments in terms of cognitive development. His theoretical concept of the zone of proximal development embodies his belief that learning is directly related to social development. "The discrepancy between a child's actual mental age and the level he reaches in solving problems with assistance indicates the zone of his proximal development" (Vygotsky, 1986). According to Vygotsky, good instruction can be ensured by determining where each learner is in his or her development and then building on that learner's experiences.

This goes with what most constructivists advocate, namely that instructional intervention should not only match but also accelerate learners' cognitive development. According to Copley (1992) constructivism requires a teacher to act as a facilitator "whose main function is to help learners become active participants in their learning and make meaningful connections between prior knowledge, new knowledge, and the processes involved in learning". Ormrod (1995) states that teachers can encourage learners' development by presenting tasks that "they can complete only with assistance – that is, within each learner's zone of proximal development".

As described by Cheung and Taylor (1991), a constructivist learning environment is characterized by shared knowledge among teachers and learners; shared authority and responsibility among teachers and learners; the teacher's new role as guide in instruction; and heterogeneous and small groupings of learners. Thinking with the idea that the teacher is a guide instead of an expert, constructivism instruction has always been likened to an apprenticeship (Collins, Brown & Holum, 1991; Rogoff, 1990) in which teachers participate with learners in resolving meaningful and realistic problems. Here the teachers serve as models and guides, showing learners how to reflect on their evolving knowledge and providing direction when the learners are having difficulty. Learning is shared and responsibility for the instruction is shared. The amount of guidance provided by the teacher will depend on the knowledge level and experience of the learners (Newby, Stepich, Lehman & Russell, 1996).

Brooks and Brooks (1993) summarize a large segment of the literature on descriptions of "constructivist teachers" and they conceive of a constructivist teacher as someone who will:

• Encourage and accept student autonomy and initiative;

• Use a wide variety of materials and teaching aids, including raw data, primary sources and interactive materials, and encourage students to use them;

• Enquire about students' understanding of concepts before sharing his/her own understanding of those concepts;

• Encourage students to engage in dialogue with the teacher and with one another;

• Encourage student inquiry by asking thoughtful open-ended questions, urging students to put questions to one another, and seeking elaboration of students' initial responses;

• Engage students in experiences that show contradictions to initial understandings and then encourage discussion;

• Allow time for students to construct relationships and create metaphors;

• Assess students' understanding through the application and performance of open-structured tasks.

The researcher contends from a constructivist perspective that the primary responsibility of the teacher is to create and maintain a collaborative problem- solving environment, where students are allowed to construct their own knowledge and the teacher acts as a facilitator and guide with the use of adequate teaching materials.

The act of teaching and learning Economics in the Anglo-Saxon Secondary schools of Cameroon is deemed important, as the field of Economics focuses on current issues at the heart of modern society. Economic events, be they the challenges of unemployment, inflation, labour relations, international trade agreements or the exchange rate, hold important socio-economic implications for stakeholders such as individuals, businesses, the government sector and foreign role-players in the market (McConnell & Bruce, 2005). Paxton and Smith (1992) hold the view that the teaching of Economics as a school subject focuses on specific overall outcomes: "The main objective of teaching Economics is to acquaint the pupil with the understanding of the Cameroonian national economy, the basic economic problems; to

participate in economic matters and to interprete statistical data and make informed decisions".

Horton and Weidenaar (Gregory, 1996) further emphasized the importance of Economics as a subject in their formulation of an outcome:

The main objective of Economics education is to improve our understanding of the world in which we live. Without this understanding we are frequently confused and unable to identify, analyse and interpret successfully the economic aspects inherent in so much about us.

The focal point of this overall outcome is aligned with the principle of attaining high levels of knowledge and skills, articulated in the Pedagogic Approach by Competence for Cameroonians. This would suggest that knowledge; skills and values in the Economics field are more than valuable to both teachers and learners in their pursuit of a better understanding of the functioning of the market environment. Hanson (1981) is of the opinion that current teaching practices in Economics do partly meet the expectations of stakeholders who question the levels of literacy among Economics learners emerging from the school system.

To achieve the aforementioned objectives, the Economics teacher is required to create a teaching-learning situation in which learners are able to master critical and developmental outcomes (i.e. high levels of knowledge, skills and positive attitudes in the domain) via the use of essential didactic aids. Waspe (1997) holds the view that the traditional teaching approach, in which learners' input is limited in practice to a passive role and the reproduction of knowledge, has become redundant. The traditional teaching and learning approach in most African schools, which previously focused only on the mastery of specific learning content (knowledge), has undergone a paradigm shift in emphasis towards an outcome-based education approach following the establishment of new democracy. This paradigm shift in teaching and learning emphasizes active classroom participation and interaction through the use of facilitating teaching mediums.

To ensure that the outcomes of Economics teaching are achieved, Economics teachers are compelled to consider different teaching strategies and methods. By pursuing these new strategies and methods, Economics teachers will be enabled to initiate teaching and learning effectively so that knowledge, skills and positive attitudes may be optimized among learners in their response to the economic environment. A large variety of teaching strategies, methods and techniques are available, but this study focuses on the provision by the

Economics teacher of essential and important teaching materials, which can be utilized to add benefit to the teaching and learning situation.

Therefore, teachers of Economics should strive to present their subject in ways that are meaningful and learner centred. If this can be achieved, learners are engaged effectively in the subject, and an interest in the learning content may be evoked. By establishing excellent modes of teaching and the use of teaching aids by Economics teachers may create an optimal learning environment to enable learners to transfer knowledge and skills into the real life situations.

1.2. Formulation of the problem

Cameroon classrooms tend to be empty and void of didactic materials. It is very common for example to find Economics teachers in classrooms rushing through with explanations of complicated and difficult concepts, expecting the learners or students to grasp these concepts within few minutes of the lesson time, this makes learning extremely difficult and complicated for students and teaching boring and unenthusiastic for the teachers themselves since they have no other media like textbooks, films, audiotapes, graphs, globes, charts, encyclopaedias etc. to turn to for further learning and for a profound comprehension of concepts.

There is the necessity for the utilization of good textbooks and didactic materials when the educational and professional qualifications of teachers are not high and even in a bit to improve on learners' performance in a particular subject. These good textbooks and instructional materials can help overcome deficiencies. Unfortunately, however, most of the African countries, Cameroon inclusive are noticeably lacking in the production and use of effective secondary school instructional materials. In many of them, parents are expected to provide the textbooks. There are even certain secondary schools where only the teacher has a textbook and many others where these materials or aids are completely inexistent. Special agencies for textbook production have been established by many governments, some of them with the assistance of UNESCO or UNICEF. But the problem is of such dimensions that it cannot lend itself to easy solutions.

At the secondary levels of education in Cameroon, notably in Economics, the acceptance by teachers of the concept of evaluation as part of a continuous process of education and the use

of a varied number of teaching/learning aids in the educational process will significantly double the performance of the learners. There is indeed a general educational ferment in all the developing countries which gives hope that, with proper research in certain uncharted areas, concerted efforts on the part of governments, and effective international guidance and assistance, the problems of secondary education, as many as they are, can be solved within a reasonable period of time.

Economics teachers in secondary schools in Cameroon currently find themselves in a transitional phase between a traditional teaching approach and the National Curriculum objectives based on the principles of an outcomes-based education approach or the competence based approach (CBA). It appears from previous studies that Economics teachers are ready for this transition in education, but are not ready to implement correctly the strategies and techniques like the use of teaching materials that will lead to the success of this new approach. The non-use or inappropriate use of didactic materials causes learners in secondary schools to perform poorly. Below is presented an outline of the performance of students in Cameroon in the GCE ordinary level in Economics and other subjects in the year 2010.

PERFOMANCE AT THE 2010 GCE ORDINARY LEVEL BY SUBJECT

Subjects are ranked on the basis of their candidate pass rates

Rank	SUBJECT NAME	GRADES ACHIEVED						% pass
		PASS GRADES			FAIL GRADES			
		A	B	C	D	E	F	
1st	Food And Nutrition	147	330	1116	283	114	38	78.55
2nd	Economics	9393	11240	14536	7674	5746	3509	67.32
3rd	Chemistry	864	2765	5741	2655	1398	1153	64.18
4th	Geography	1403	12162	17741	8327	4883	5277	62.70
5th	Commerce	1101	3356	10547	5549	1930	1500	62.32
6th	Literature in English	1103	7162	10164	4596	3514	3203	61.77
7th	History	2172	6052	17152	6417	4299	5973	60.13
8th	Additional Mathematics	354	518	1562	284	451	943	59.18
9th	Physics	680	1591	3302	1593	2043	1127	53.84
10th	Computer Science	9	272	708	433	321	137	52.33

11th	**Biology**	**1123**	**4290**	**8275**	**2801**	**4127**	**6702**	**50.02**
12th	**Human Biology**	**272**	**959**	**3792**	**1827**	**2247**	**1399**	**47.69**
13th	**Accounting**	**46**	**108**	**299**	**133**	**257**	**121**	**46.94**
14th	**Religious Studies**	**627**	**4835**	**8567**	**10658**	**5390**	**1902**	**43.77**
15th	**English Language**	**723**	**5584**	**18022**	**5992**	**12690**	**14506**	**42.26**
16th	**French**	**1472**	**2916**	**7398**	**3575**	**2249**	**36349**	**21.81**
17th	**Mathematics**	**800**	**1308**	**6063**	**2209**	**6472**	**37562**	**15.00**

Source: Fako journal of analysis Buea, 47th edition.

This percentage pass in economics is 67.32% as opposed to the poor percentages of the other subjects. This percentage pass can be markedly improved in if the use of didactic materials in classroom by Economics teachers and students is done effectively and efficiently.

According to Cooper (1995), African schools require a large number of well- trained graduates in the Economic and Management Sciences to develop knowledge and skills, which are prerequisites for economic growth and sustainable development. From previous study of interviews with subject teachers, on internship in GSS Bokova on March 2011, it can be deduced that the majority of teachers in this field are generally applying a teacher-centred education approach with reasonable success. Teachers whom in the most part in the private sector of education in Cameroon have not been appropriately trained to teach the subject.

Also, articulating the criticisms against traditional teaching and learning, stating that the teacher-centred approach: Inhibits both teachers' and learners' initiative and innovation; does not promote critical thinking by learners; Prompts teachers and learners to pursue examination results; does not develop entrepreneurship in learners; and does not prepare learners for the needs of a challenging workplace are facts worth mentioning. The bone of contention then that boils to mind is; Does the essential and effective use of didactic materials influence the academic performance of learners in Economics in secondary schools in the Centre Region of Cameroon?

1.3. PURPOSE OF THE RESEARCH

As a teaching Technique, the use of teaching materials is not new, and stakeholders' interest in the use of these teaching aids has seen massive growth since the 1990s (Manning

&Lucking, 1991). Sapon (1992) holds the view that the use of teaching materials is necessary in any teaching-learning situation, because this particular strategy can foster educational excellence for all children regardless of race, class, or gender, and can provide students and teachers with the experience and expectations of active participation in controlling and changing the spheres of their lives.

Therefore, this research is necessary because the syllabus for Economics requires that the principle of an outcomes-based education and an approach by competence, which is applicable to the use of varied teaching aids or didactic materials, is applied in the classroom. This teaching strategy also applies to Economics teachers. This learner-centred approach requires that learners are not mere passive listeners as in the past. The majority of teachers who have been trained in a teacher-centred approach and who are now required to make a paradigm shift to a learner-centred approach continue to struggle to be able to compensate by moving to the essential approach.

It appears from previous analysis study by the researcher, on the field during practice teaching on internship at GSS Bokova in March 2010/2011, at GHS Bolifamba mile 16 in April 2012/2013 and NESCAS in June 2013/2014, that Economics teachers are inadequately equipped for their task and are lacking in the use of didactic materials, and it is for this reason that this study is necessary, so that developing the ideas of the constant use of various teaching and learning materials will be beneficial in improving the teaching learning process in Economics in Cameroonian secondary schools. Therefore aiming at providing Economic teachers and students with an overview for materials development, taking into account the experience gained by these teachers in the teaching-learning process.

The rationale for using teaching and learning materials in Economics lies in the fact that it has the ability to:

• Evoke learner's interest in the subject matter

• Promote the process of establishing links between prior knowledge and new subject matter in ways that are efficient and effective

• Encourage a critical attitude among learners towards the subject matter

• Promote a process of expanding learners' understanding of their social environment and their active engagement therein

• Develop and promote thoroughness, tidiness, and precision within the economic environment.

Should the Economics teacher succeed in establishing a learning environment typical of the above-mentioned aspects, the use of teaching materials could possibly be highly effective as a teaching strategy in achieving the following outcomes for Economics;

• Developing a culture of lifelong learning

• Promoting learner involvement

• Applying, analysing and interpreting financial and management information

• Applying and developing calculation skills

•Creating investigative and active-participative learning activity among learners

• Promoting accuracy, orderliness and thoroughness (Bisschoff et al., 1992).

The use of didactic materials in the teaching learning process of Economics will also enable higher explicitness; they help organize instruction more rationally and effectively thereby realizing the didactic principles of effectiveness and rationality; they stimulate students' activity and effectiveness; they make the process of learning easier; they help acquire knowledge of better quality; they encourage students' independence and critical thinking when selecting/collecting information and so on (Akhtar, Munshi, & Naseer , 2010; Fleischman, 2004; Means & Olson, 1995; Prensky, 2008).

As Saglam also emphasizes, "Teaching materials provide a great deal of convenience in teacher's ability to convey a message to students in an accurate, proper, clear and understandable manner; in making abstract knowledge concrete and in enabling students to comprehend complex ideas through simplification. When properly used, printed materials, audio-visual materials and experience-giving methods help make the learning process easy and enduring. Studies concluded that the number of sensing organs activated by the teaching materials used in learning–teaching process is directly proportional to an easy and enduring learning process. In other words, the higher the number of sensing organs activated by the teaching materials employed in learning–teaching process, the better and more enduring the learning process is" (Saglam, 2011, p. 36).

1.4. Research objectives

1.4.1. General research objective

The general research objective for this study focuses on determining if the use of didactic materials influences the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

1.4.2. Specific research objectives

The following specific research objectives are formulated for purposes of conducting this study to demonstrate the importance of the use of some basic teaching and learning materials on the academic performances of students on the subject Economics in secondary schools in Cameroon.

1) To verify if the appropriate use of visual display devices will influence the academic performances of students in Economics at the secondary level of education in the Centre Region of Cameroon.

2) Secondly to verify if the appropriate use of print materials impact the academic performance of students in the teaching/learning process of economics at the secondary level of education in the Centre Region of Cameroon.

3) To verify if the appropriate use of graphic materials influence the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

1.5. Research questions

1.5.1. General research question

The primary research question for this study is: Does the use of didactic materials influence the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon?

1.5.2. Specific research questions

The following specific research questions are formulated for purposes of conducting this study to demonstrate the importance of the use of some fundamental teaching and learning materials on the academic performances of students in Economics in some secondary schools in Cameroon.

1) How does the appropriate use of visual display devices in a classroom influence the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon?

2) How does the use of print materials influence the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon?

3) How does the use of graphic materials influence the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon?

1.6. RESEARCH HYPOTHESES

1.6.1. General Hypothesis

1.6.1.1. Null hypothesis (Ho): There is no significant relationship between the use of didactic materials and their influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

1.6.1.2. Alternative hypothesis (Ha): There is a significant relationship between the use of didactic materials and its influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

1.6.2. Specific Research Hypotheses

1.62.1. Ho1: The appropriate use of visual display devices has no significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

1.6.2.2. Ha1: The appropriate use of visual display devices has a significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

1.6.2.3. Ho2: The organized use of print materials has no significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon.

1.6.2.4. Ha2: The organized use of print materials has a significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon.

1.6.2.5 Ho3: The use of graphic materials has no influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

1.6.2.6 Ha3: The use of graphic materials has an extensive influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

1.7. Delimitation of the study

This investigation is limited to the evaluation of the essential didactic materials that could be used or not used by Economics teachers in teaching Economics effectively in some selected secondary schools in the Centre Region of Cameroon and how these didactic materials influence students' academic performances. The necessity of conducting this investigation reinforces the claim to which the use of didactic materials to teach Economics in Cameroonian secondary schools is not a waste of time and energy. Thus, this study focuses on secondary school Economics teachers, the heads of Economics departments in the Centre Region of Cameroon secondary schools, as well as Economics students in forms four. The geographical area of this study is limited only to the Centre Region of Cameroon (Yaoundé), secondary public and private schools; five of them in number constitute our case studies. These schools include;

- Government Bilingual Practicing High School (GBPHS) Yaoundé.
- Government Bilingual Secondary School Etoug-Ebe (GBSSE).
- National Educational College of Arts and Science (NESCAS) Yaoundé.
- Christians Foundations Secondary and High school (CFSHS)Jouvance.
- English High School (E.H.S) Yaoundé.

1.8. DEFINITION OF KEY TERMS

The following concepts require definition, as they are used extensively in this investigation:

1.8.1. Teaching Strategy

Teaching strategy refers to a broad plan of action, which includes the selection of teaching activities with the purpose of achieving a specific outcome. A teaching strategy includes methods, procedures, activities and techniques that may assist the teacher in promoting learners' ability to understand learning content or knowledge (Fraser & Van Rooy 2004).

1.8.2. Economics

Sameulson and Nordhaus (2000) define Economics as “the study of how society uses scarce resources to produce valuable commodities and distribute them among different people”. Economics, as a social science, denotes the study of the individual, who by means of engaging in effort and exercising choices, satisfies an infinite number of needs with the scarce resources available so that optimal wealth may be created. All households, businesses, the government and other stakeholders in the community are required to make informed choices with respect to the scarcity issue and the fact that unlimited resources do not exist to provide goods and services.

Also, Hanson (1979) says “Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses”. The essence of economic thought is the fact that people must consciously take alternative actions to exercise that choice (Reinke 1990).

1.8.3. Didactic Materials

Didactic materials are any kind of aids or materials that assist the actors of education to achieve their objectives during the entire learning process (Ikerionwu, 2000).They can be grouped into; teaching materials and learning materials, they can also be grouped into audio materials, visual materials and audio-visual materials.

Learning materials are those assets or resources that support learners during the process of learning, for example books, games, worksheets, etc. On the other hand, teaching materials provide academic staff with resources to guide and support the learning process of students. Audio materials are those teaching and learning devices that appeal to the sense of hearing for example, radios. Visual materials on the other hand ate those teaching and learning materials that appeal to one’s sight examples include charts, the chalkboards, journals etc. Also, audio-visual materials are those materials that appeal to both senses of sight and hearing; they include televisions, computers, projectors etc.

1.8.4. Learning

Morris and Maisto (2006) define learning as the process by which experience or practice results in a positive permanent change in behaviour. Learning therefore can be outlined asa

relatively permanent positive change in behaviour, skills, knowledge and attitudes of a person or individual resulting from identifiable psychological or social experiences.

1.8.5. Student Academic Performance

This term students' academic performance refers to the measurement of academic performance and progress of individual pupils or learners in a particular subject matter or field of study(World Bank, 2004).

1.8.6.Teacher Quality

The qualities of a teacher are his Abilities and competencies determined by his qualifications, experience and mode of delivery during the teaching/learning process. Teachers are central to any consideration of schools, and a majority of education policy discussions focus directly or indirectly on the role of teachers. There is a *primary* case for the concentration on teachers, because they are the largest single budgetary element in schools. Moreover, parents, teachers, and administrators emphasize repeatedly the fundamental role that teachers play in the determination of school quality. Yet there remains little consensus among researchers on the characteristics of a good teacher, let alone on the importance of teachers in comparison to other determinants of academic performance. Teacher quality is the concept that embodies what the teacher does and they can do in terms of their assigned roles in the school. Related to the concept of teacher quality is teaching quality and it has been observed that one way of determining the quality of teaching in schools is by looking at the intermediate outcome of student performance (Sanders, 1999).

Conclusion

According to Okereke (2006), poor performance of learners or students can be attributed to a lack of attractiveness and novelty in teaching methods and strategies, inclusive the non-use of essential didactic materials in the educational process. Economics is a subject that warrants the use of extensive aids for it to be effectively assimilated and for learners to be motivated in the teaching/learning process. A variety of teaching and learning materials can be used in teaching Economics effectively. These include the use of chalk boards, graphs, maps, textbooks, encyclopaedias, charts for illustration and demonstration of relevant terms and concepts in Economics. This chapter outlined the context in which this research is carried out, the statement of the research problem, the purpose of the research, research objectives,

questions and hypotheses, a delimitation of this study and explicit definition of key terms related to this study. Cognisant of the importance of Economics to society especially in the social sciences, cognizant of the level of performance and creativity in Economics in the Anglophone sub system of Education in Cameroon, studying the effectiveness of teaching Economics by using appropriate teaching materials to motivate students learning and improve performance is the immediate and clear implication of this study.

CHAPTER TWO

LITERATURE REVIEW AND THEORITICAL FRAMEWORK

2.0 Introduction

According to Amin (2005) literature review involves location, reading and evaluation reports of observations, discussions and opinions related to an individuals' planned project. It also involves the systematic identification, location and analysis of documents containing information related to the research problem in order to orientate the study, identify important data relevant to the study, avoid repetition and focusing on a new trend. On this basis, an extensive review of literature will be done on the concept of didactic materials, the types of didactic materials used in the study and the concept of Economics and its interrelatedness to improve performance with or without the use of didactic materials.

In addition, Amin (2005) defines theories to be logically related propositions presented in a systematic way which describe and explain phenomena and are constructed statements which summarize and organise knowledge in a particular area and are open to testing, reformulation, modifications and revision. In this study, four theories related to the topic were used to guide the researcher. These theories show a link between the use of didactic materials and learners' academic performances in Economics.

2.1.Conceptual Review

2.1.1.Meaning of Didactic Materials

Obanya (1989) viewed instructional materials as things which are supposed to make learning and teaching possible. Also, he acknowledged that didactic materials are materials or tools locally made or imported that could provide tremendous enhancement of lessons if intelligently used. They are referred to as objects or devices, which help the teacher to make a lesson much clearer to the learner. Instructional materials are also described as concrete or physical objects which provide sound, visual or both to the sense organs during teaching. There exist 5 different categories, namely: visual display devices, graphic materials, print materials, models and real things (Tambo, 2003).

Didactic materials are in various classes, such as audio or aural, visual or audio-visual. Thus, audio instructional materials refer to those devices that make use of the sense of hearing only,

like radio, audio tape recording, and television. Visual instructional materials on the other hand, are those devices that appeal to the sense of sight only such as the chalkboard, chart, slide, and filmstrip. An audio-visual instructional material however, is a combination of devices which appeal to the sense of both hearing and seeing such as television, motion picture and the computer. Among the instructional materials the classroom teachers' use of the visuals out-numbered the combination of the audio and audio-visual.

Tambo, (2003 pg. 234) describes didactic materials as tools for teaching and avenues for learning that also stipulate the various teaching and learning materials or devices that are capable of teaching on their own or assisting a life teacher to teach most effectively. He also acknowledges that laying more emphasis on the appropriate use of diverse media and aids in teaching and learning encourage inquiry teaching and problem solving approaches by teachers on one hand and also encourage inferential and critical thinking by students on the other hand. Some simple teaching/learning aids that exist in the Cameroonian context will be discussed below. Tambo, (2003) generally grouped teaching and learning aids into five, these are: Visual display devices, Graphic materials, Print materials, Models and Real things. For the purpose of this study, the first three will be studied in detail.

2.1.1.1. The Use of Visual Display Devices

Visual display devices as earlier mentioned are widely used in the classroom by most teachers during the teaching-learning process (Tambo, 2003). They include devices like the Chalkboards, Magnetic boards, Bulletin Boards, Cloth Boards, thus explaining why they are described as visual because they can be seen when displayed. Tambo (2003) defined each of these visual display devices accordingly. These are:

The Ordinary Chalkboard

This is commonly referred to as the blackboard since must chalkboards are coloured black in order to produce a good background effect when white chalk is being used on them. Though there also exist chalk boards of different colours like green. The chalkboard is the most commonly used type of display device since in Cameroon it exists in all or most classrooms. It is very advantageous because it is one of the cheapest didactic materials to produce; it is adapted to both small and large group works such as assignments, exercises, sketches and drawings and even for practice exercise during lessons by the students guided by their

teachers. When chalk boards are used appropriately in the teaching and learning of Economics, they will definitely improve on learners' performance.

The Magnetic Board

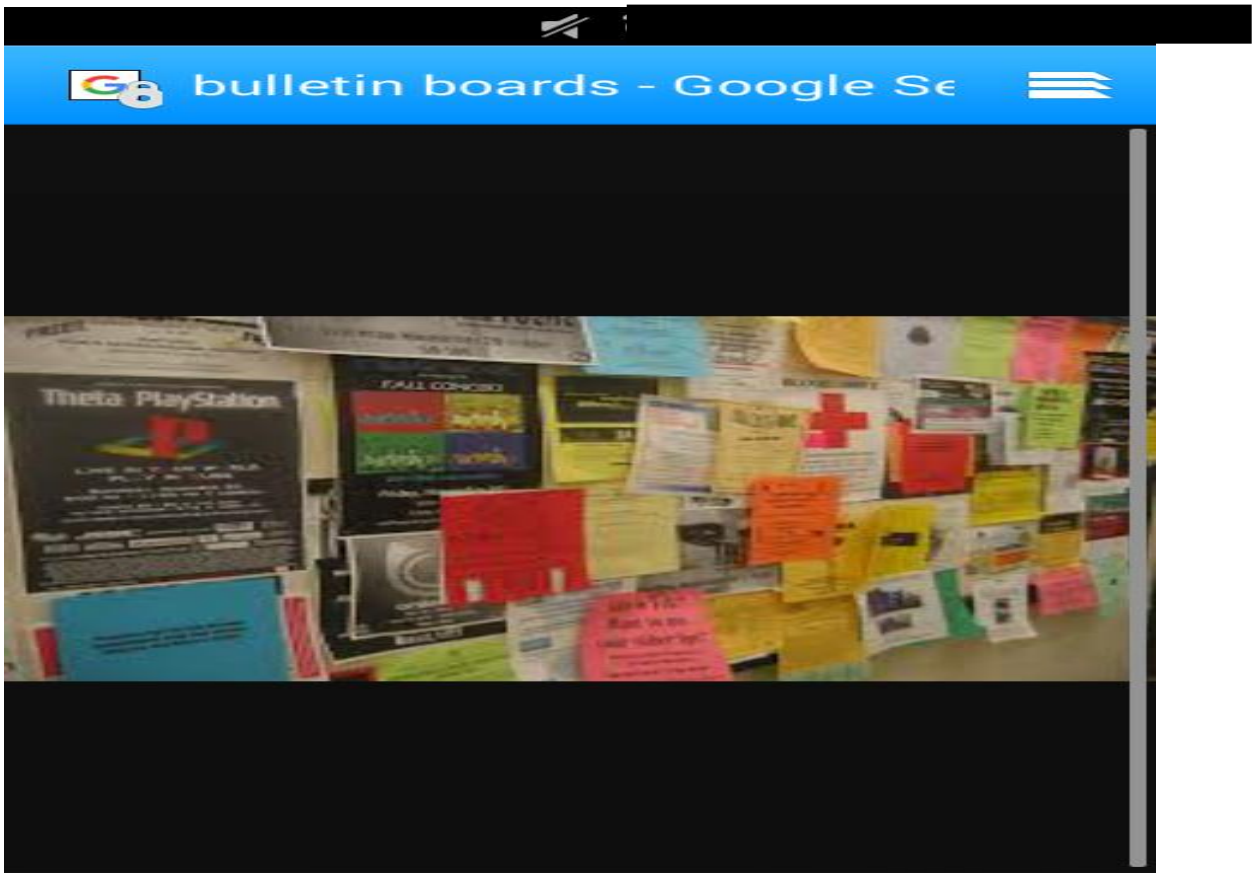
This is a recent development in classroom display devices since it is not as old as the ordinary classroom chalkboard. It allows for the use of two and three dimensional materials since the backing and under surface of the magnetic board is not made of wood but steel so that material to which pieces of magnets are attached can adhere and stick to the board and be moved as well as arranged in any way desired by the teacher or learners. This kind of board is useful in economics as an important aid for lecture and demonstration or illustration of concepts, diagrams and drawings. If used effectively in teaching and learning Economics, it will promote mastery of concepts and understanding to learners in form four. An example of a magnetic board is presented below.

The Bulletin Board

A bulletin board is one on which different kinds of visuals can be displayed. Visuals like coupons, charts, cartons, diagrams, posters, maps, drawings, newspaper clippings, notices,

news items, pictures, pamphlets, post cards, models and announcements could be attached on this board either pasted or tacked to the wall or kept at the corner of the classroom. In most secondary schools, bulletin boards that are exclusively concerned with notices are called notice boards, (Tambo, 2003).

Bulletin boards are very useful and important because, they help the class in studying single-copy materials and also makes it easier for learners to easily study material or concepts that cannot be discussed in class due to lack of time or absence of certain students. It also encourages learners' participation and stimulates students' interest since students and their Economics teacher can work together in producing materials for the bulletin board. An example of a bulletin board is presented below.



2.1.1.2. The Use of Print Materials and Student Achievement

This study outlines two discussions of how variations in the use of print materials affect student achievement. One of these was in a footnote. Barrow and Sadow (1989) tested for

student achievement using Degrees of Reading Power test. Among the seven teachers they studied using two different basal programs; they found no significant differences in student achievement. The other was in Freeman et al. (1983), whose purpose was not to measure effects on achievement per se, but to correlate patterns of use with scores on a variety of standardized tests. Thus, they drew no conclusions about student academic performance.

Brophy and Good (1986) reviewed the literature on empirical research on teacher behaviours and student performance. Their categories of research did not include anything close to textbook use. Most researchers reviewed were, in fact, cautious about making judgements on the effectiveness of teachers' patterns of use. They preferred to remain descriptive. Sometimes their judgements were apparent, as when they discussed patterns in terms of "teacher-centred" and "learner-centred" instruction. But even at those times, they hesitate to draw judgmental conclusions. Stodolsky(1989), points out that one cannot make easy judgements about correct and incorrect ways to use a print material.

The existence of a teacher-centred program does not necessarily mean that the textbook is being followed. Conversely, the creation of a student-centred environment does not necessarily signal departure from a textbook program. Some books and curricula require establishment of peer work groups, games, laboratory exercises, or computer-aided instruction to make learning much more meaningful to the learners.

For the most part, research carried out by other authors on teachers' use of materials is ethnographic, attempting to relate the use of textbooks to other aspects of the teaching-learning process, and not aimed at demonstrating correlations between patterns of use and student achievement. In the study reviewed, (Kon, 1993), the researcher recommends that further research study focus on how teachers' use of didactic materials affects student learning. This kind of study might usefully compare teachers who used the text as a primary resource with teachers who used it as an active or limited resource. He concluded that material resources have a significant effect on student's achievement in each of the subjects and thereof concluded that schools with adequate instructional materials performed better than those with inadequate instructional materials. Rather than relying strictly on teacher reports, this study would benefit from more intensive observations of practice and interviews with selected students over time. Thus, her recommendation is to go beyond this state-of-the-art

and look at differences in student learning. The method she suggests is attractive because it obviates the need for pre-test and post-tests of achievement and the many intervening and other variables that are difficult to control. Instead, it uses data from observations and reports by students and teachers, which help to explain behavioural changes that affect students' performance in class as a result of the varied teaching and learning aids used.

In spite of the increasing number and variety of audio-visual materials being used today for teaching and learning, print materials are still largely the most indispensable teaching resources available in many school systems. These materials can come in many different forms, including textbooks, work books, newspapers, magazines, pamphlets, and reference books. (Tambo 2003)

TEXTBOOKS

The textbook is one of the oldest and commonly used teaching and learning materials. It is published in many forms, depending on the subject it is dealing with, the characteristics of the pupils for whom it is being published and the publishing technology available to the publisher. Virtually, every school subject has its textbooks, economics inclusive.

The value of textbooks can be seen from the many functions that they play in the teaching-learning process. Textbooks help to individualize teaching since students using textbooks precede at their own rates and to some extend according to their own interest. Also, the actual cost of textbooks compare to other didactic aids is comparatively low. For example, if one compares the cost of textbooks containing hundreds of pictures, charts, maps, diagrams and cartoons and other visuals with the cost of the same items in filmstrips or slides, books can be said to be cheaper and affordable.

More so, textbooks help the teacher to be better organized in his teaching, to unify and diversify teaching. They provide common reading material and activities planned before hand for a given class. Textbooks are graded in such a way that in introducing new concepts and contents, they proceed from simple to complex and from concrete to abstract. They help to improve teachers' skills, especially through means such as teaching manuals, prefaces and introductions. Also, since they are written by experts and knowledgeable persons, textbooks suggest guidelines for teaching specific topics and units (Tambo, 2010).

ENCYCLOPEDIAS

These are sets of book volumes containing information on subjects in all branches of knowledge. Information is organized in the form of articles written by prominent and well known people or authors in various fields of knowledge. These articles are frequently arranged and classified in alphabetical order. The encyclopaedia set is an excellent reference material which needs to be made available in every school library.

In selecting the type of encyclopaedia appropriate for his lessons, the teacher need to consider preliminary criteria such as if the encyclopaedia is suitable for the age level and if it has been used previously by the learners or if they are familiar with it. He also needs to take into consideration the organization of content, style and format of the encyclopaedia.

Mostly, encyclopaedias are used for research and reference purposes in the classroom. When textbooks and other media or aids raise questions that need to be further investigated, the first place to turn to for this kind of information is the encyclopaedia. Since they are mostly reference materials, encyclopaedias should be kept at the corner of the classroom or library accessible to students. Students should be directed how to use encyclopaedias, looking up information following the alphabetical and classification arrangement.

NEWSPAPERSAND MAGAZINES

Newspapers and magazines provide useful current information on various topics of economic importance essential for both the teacher and the learners. For teaching purposes, newspapers and magazines can be classified into two types, those published for the public at large and those prepared for the classroom use in particular. In Cameroon, there are hardly any classroom newspapers and magazines available so Cameroon teachers have to rely for the most part on newspapers and magazines published for the public (Tambo, 2003).

Newspapers and magazines are useful for the study and analysis of current events, provide background information on important local, national and world problems. They can help improve reading skills as well as the quality of classroom discussions and interactions. They are also sources of pictures, articles and graphics for bulletin board displays. They are useful at this age as a means of introducing children to the controversial and emotional issues of the adult world.

The teacher should not be the only person to collect newspapers and magazines for classroom use. Learners should be encouraged to bring in as many newspapers and magazines as possible and the teacher should select from among the papers those suitable to enlighten economic concepts in relation to the students. Suitability of the newspaper and/or magazine depends on such things such as the topics contained in the paper, the style and the vocabulary level. Children should be encouraged to use newspapers and magazines as research materials and didactic aids in such subjects as history, civics, economics and current events (Tambo, 2003)

2.1.1.3.The Use of Graphic Materials

The term *graphic* is used to describe those instructional/ didactic materials that show relationships by means of lines, colour or symbols. Graphics include graphs, charts, maps, diagrams, cartoons, pictures, photos and posters. Graphics are useful in teaching and learning because they render verbal symbols and descriptions more concrete and clearer to the learner. For example, the economy of Cameroon can be studied by the use of graphics that shows its clear structure and its relation to other economies more clearly and in more concrete terms than a verbal description.

Graphics can be used in a classroom situation through three ways. They can be used for imitation, where in students may copy an already-made graph, diagram, chart or map in their notebooks during a lesson in economics. Also they can be used for adaptation were learners may use information or data from several sources to build or construct graphs, diagrams ,charts or even maps on their own. A positive example here will be the use of this strategy and technique in bringing out production possibility curves when teaching Economics in form four in the Centre Region of Cameroon. lastly, creativity where learners may be required to be more creative in constructing original graphs, diagrams, maps or charts based on their own studies, analysis and imagination (Tambo, 2003).

Another important point on the use of graphics in a classroom is for the teacher to ensure that learners possess the ability to read a particular graphic form before it is being used in class to teach a lesson. Four types of graphics are outlined below these are: graphs, charts, globes and maps commonly used in studying economics in secondary schools.

GRAPHS

Many varieties and types of graphs are suitable for classroom use. The more a teacher gets acquainted with and uses graphs, the more he gains in ability of using and producing different varieties of graphs. Simply, graphs can be classified into three groups, these are: circle or pie graphs, bar and line graphs.

Circle or pie graphs are useful in showing parts of a whole. They can easily be used when the different parts or categories of the whole to be shown are not many. Bar graphs on the other hand are easily used when the categories of parts of the whole to be shown are many.

The bar graph has two axes, the horizontal and vertical axes. The horizontal axis is most often called the abscissa or the "X" axis and the vertical axis the ordinate or the "Y" axis (Tambo, 2003). All graphs always require labels and a title for the graph. Lastly, line graphs are similar to the bar graphs since they are useful for showing time and amount relationships. It also has two scales, the vertical and the horizontal scale with each point drawn having a value on both scales. Straight lines or smooth curves can be used to connect points representing each measurable quantity on the graph. Examples of graphs that are used in economics are the most famous demand and supply curve presented below.

CHARTS

A chart is a systematic arrangement of facts and relationships in a graphic, pictorial or diagrammatic form. Depending on the purpose for which it is drawn-up, a chart can be produced in the form of a graph, picture, diagram or cartoon. Charts are virtually very essential in the teaching of economics at the secondary level of education because of the numerous illustrations and demonstration inherent in economics. They can be constructed to show the flow of a process, genealogy, parts of a concept, scientific and timely information.

In constructing and using a chart for teaching and learning, a cardboard that is portable and can be easily folded can be used, charts should be correctly labelled, with large and thick readable letterings marked with colours for emphasis. We also need to ensure that the information presented on the charts used is in condensed form and accurate.

GLOBES

Globes and maps are both model and graphics. They are the only means by which large areas of the earth, or the earth itself can be effectively represented. A globe can be defined as the spherical modal of the earth. Since the earth is almost a perfect sphere, a globe being spherical, is the most accurate map that we can have of the earth as a whole. It is an accurate map of the earth surface because it shows area, distance, direction and shape of land and water areas correctly without any distortions. Globes differ from each other in four ways; in size, in the type of information they provide, in the type of mount that holds them and, in the materials from which they are made. (Tambo, 2003)

Globe size is determined by its diameter. The most common sizes are 20, 30, 40, 50, 60 millimetres [or 8, 12, 16, 20 and 24 inches]. The smaller ones are suitable for individual and small group study. The larger ones can be used with the whole class or large groups of pupils and usually include more details than the smaller ones. The main problems associated in large globes are that they are more expensive and more difficult to store or manage, consequently, the 30mm. and 40mm. types are most frequently used for class purposes.

Globes are used to show physical features of the earth's surface, political boundaries, both physical and political features and outlines of majors land areas on a slated surface to enable learners' practice in class. A physical globe shows land and water areas with the aid of colours and other techniques. Colour is used to show different height and elevation of land as well as depths of the sea. Arrows may be used to show ocean currents.

A political globe demarcates one nation or country from another with the aid of colours. Lines or dots may show sub-divisions of each country. On a physical political globe, land elevation, water features, as well as international and national boundaries are shown. This is the type of globe that is most often used in classrooms, since it contains information and is therefore more economical.

The slated or blank-outline globes shows outlines of major land area and may also include major lines of latitude and longitude. It does not show elevation or international and national boundaries. This type of globes is used to help students practice in class. They may insert with chalk or pencil any features they are studying in class; rainfall, air and sea routes, ocean current, wind direction, mineral deposits, forests, arable and pastureland and so on.

MAPS

A map can be defined as a flat representation of the earth's surface. Considering the fact that the earth's surface is spherical, any attempt to represent large portions of it by means of a flat map usually involves difficulties and inaccuracies. Nevertheless, flat maps are used in studying useful portions of the earth's surface in detail and for seeing the total earth surface as a whole rather than parts or hemispheres. The most common types of maps include political maps, physical maps, vegetation maps, land use and other maps.

Political maps are those that show political divisions either internationally or within a given country. They show these divisions by means of colour and boundary lines. Physical maps on the other hand show the major physical features of the whole earth or a particular region of the earth. They use symbols and colours to indicate relief features and resource places like mountains, plateaux, valleys, plains, rivers, parks and even oceans. Also, vegetation maps show major types of vegetation of a given region in an economy or of the whole earth. They emphasize on features like forests, swamps, grasslands and deserts.

Lastly, land-use maps show how land is used in given areas: settlements, pastures, farming, parks and lumbering. Product maps show the specific crops that are produced in given areas of a specific economy. Population maps show the distribution of people on the earth surface. They may show distribution according to countries, continents, ethnic groups and races. Weather maps show weather phenomena such as rainfall, winds, air pressure, ocean currents and temperatures.

Generally, maps are found in school textbooks, atlases, newspapers and magazines. They may also be found in special government departments such as the census office, the economic and planning divisions, and the meteorological as well as the agricultural departments. As children gain more skills in using maps in secondary schools, they should be encouraged to draw their own maps, based on data and raw material given them by their teacher. Such data may include the location of economic crops and minerals in a given country in relation to specific features such as drainage, rainfall, temperature and vegetation types (Tambo, 2003).

2.1.2.Didactic Materials and Academic Performance

Though rare in Cameroon, there have been several studies on instructional materials and academic Performance of students in Africa. For instance, Momoh (Isola, 2010), conducted a research on the effects of instructional resources on students' performance in West Africa School Certificate Examinations (WASCE) in Kwara State. He correlated material resources with academic achievements of students in ten subjects. Data were collected from the subject teachers in relation to the resources employed in the teaching. The achievements of students in WASCE for the past five years were related to the resources available for teaching each of the subjects. He concluded that material resources have a significant effect on student's achievement in each of the subjects and thereof concluded that schools with adequate instructional materials performed better than those with inadequate instructional materials.

2.1.3.Didactic Materials in Economics for Secondary School Learners

Conveying ideas skilfully to children is another important task for the teacher of Economics in secondary schools. Words have different meanings to different individuals, but pictures, drawings, models and charts can go further to convey what we have in mind. Therefore, Didactic materials are needed to convey ideas to the learners in Oder to enhance their understanding.

Didactic materials are the basic components in teaching at all levels of education, these include the pre-schools, primary schools and even secondary schools. They help the learners to understand what is being taught when they see and/or handle the object itself Shankar (1980). The didactic materials provide opportunities for learners to broaden and deepen their

knowledge by providing a variety of first-hand, developmentally appropriate experiences and by helping children acquire symbolic knowledge through representing their experiences.

According to Croft (2000) a visual presentation of an idea or a concept using pictures, charts and models helps the learner to develop mental images of the object that we are talking about. As an old oriental saying goes, “If I hear, I forget; If I see, I remember; If I do, I understand.” If the learner could “see” what we are talking about, it helps him understand what we exactly mean in words. Seeing, hearing, touching, smelling and manipulating things in the environment tells the child what the world is like. Materials such as toys, charts, pictures, maps, diagrams are basically materials of sight that offer a variety of experiences, which stimulate the senses and promote self-activity in learners.

Craig (1940) stated that, “A good aid is like a window; it should not call attention to itself, it should just let in the light”. He emphasizes that, didactic materials for learners should: attract attention, develop interest, adjust the learning climate and promote acceptance of an idea. Didactic materials should possess the qualities above in order to help children understand what is being taught. Measures should be put in place to ensure effective teaching and learning at this level and the kind of instructional materials to be used. Caples (1996), states that materials, which are durable and easy to maintain, should be selected for secondary school children. It is against this background that this research explores the importance of the effective and efficient use of didactic materials or instructional materials in improving the performance of secondary school students’ in Economics in Cameroon.

2.1.4. Economics as a Social Science

Social Sciences comprise certain basic disciplines such as Economics, Geography, Philosophy and Psychology. Many investigations have shown that secondary school students are exhibiting as years go by much more interest in these social Sciences (Esiobu, 2005). Besides, economics as a social Science subject remains one of the most difficult subjects in the school curriculum according to studies by a host of researchers on this field of study.

Poor and decreasing academic achievements and performance in Economics could be attributed to many factors among which the use of didactic aids and materials (teachers strategy’s), itself was considered as an important factor. This implies that the mastery of economics concepts by secondary school students might not be fully

achieved without the use of some basic didactic aids. The teaching of Economics without the use of didactic materials may certainly result in poor academic achievement. Franzer (1992) stressed that a professionally qualified social science teacher no matter how well trained, would be unable to put his ideas into practice if the school setting lacks the equipment and materials necessary for him or her to translate his competence into reality.

Researchers such as Eyole (2006) and Ogunleye (2002) reported that there were inadequate resources for teaching social Science subjects and many others in secondary schools. They further stated that the available ones are not usually in good conditions. There is the need therefore, for provision and regularization of those that are not in good conditions.

2.2.Empirical Review

2.2.1. The Field of Study of Economics and the Interrelatedness with Curriculum Components

The transformation of education streaming from the period after colonization, posed a challenge to policymakers, departmental officials, education professionals and teachers – that is, all role- players in education and training. In light of the inequalities, poor resources, high learner-teacher ratios, and the fragmentation of subjects and programs offered by different institutions, the teaching dispensation was facing even greater challenges. Some of these challenges facing the developers of a new approach to teaching and learning for the most part were the following:

• No clear learning outcomes for the existing curriculum;

• Many unrelated topics;

• The inability of the learning experience to meet the needs of learners;

• Little mobility or portability of qualifications.

In order to put these challenges into perspective, the urgent need for a complete reorganization of the methods strategies and techniques of teaching to suit an effective didactic process in Cameroon is an urgent call for concern.

2.2.2.Nature and Learning Field of Economics

In the subsequent paragraphs the nature and learning field of Economics, as well as the respective components of the curriculum during the teaching process, are discussed. Firstly, Economics is explained as a social science within the context of a science and is compared to other sciences and economic models. Secondly, the learning field of Economics is described and defined. Lastly, the respective components of the curriculum during the teaching process are broadly explained.

The field of Economics is a peculiar aspect of reality. De Klerk, Duvenhage and Van Wyk (1972) are of the opinion that a science is the study of the systematic and verified knowledge of reality. They believe that scientific knowledge is overall valid, timeless and logical knowledge that is researched within the science. They believe that a science purposefully searches for scientific knowledge of reality. Economics is the subject science that studies the economic aspect of reality (Hanson, 1979). Economics is a science, and like any other science it involves a systematic effort to determine uniform patterns of behaviour. These patterns of behaviour are used to explain what is happening, to predict what could possibly happen, and to help policymakers develop the most suitable policy (Mohr & Fourie, 1999). Moreover, Economics is also a social science, because it is directed at human behaviour. Experts agree that Economics is a science in its own right and that there is no doubt regarding the analytical core content of Economics (Mohr & Fourie, 1999). The scientific knowledge of Economics is contained in the form of economic concepts, principles, theories and models (Barkley, 1977).

Economics studies the economic activities of man in a reality that functions continuously. According to Gwartney (1976) controlled experiments are not possible, because from time to time changes take place in society's economic circumstances, for example changes in food prices, employment and technology, which can be investigated scientifically. With the study of human behaviour in respect of economic activities, a scientific approach is taken to find the cause-and-effect relationship in the economic reality. The cause-and-effect relationship is summarized in economic principles, theories and models.

Barkley (1977) refers to an economic theory as a simplified definition of the economic reality, which shows how variables in the economic reality are related to one another and how changes in one or more variables can influence certain other variables. Economic theories are

the basic “tools” of economic science. Through the application of an economic theory, economic activities are given meaning and order, and the economic consequences of certain events can be predicted.

The economic reality formed by the learning field of Economics has several branches. Economics has to do with the production, distribution and use of goods and services, and includes a number of economic concepts and sub-sciences. To be able to make goods and services available for use, man must combine production agents in the form of elements, labour, capital and entrepreneurship in order to produce goods and services (Schiller, 1991). Three economic activities of production, distribution, and use of goods and services form the basis of man’s economic activities. Economic concepts that occur in the economic reality and which also play an important role in the practice of Economics as a profession (Schiller, 1991) form the essence of economic reality.

The key principles are economic scarcity, the economic option issue, the distribution issue, and rationality (Baumol & Blinder, 1998). These economic concepts are related and intertwined. Each of the economic concepts forms an extended learning field within the borders of economic science. It would be impossible within the scope of this study to discuss each of these concepts in detail, and consequently the concepts are discussed briefly in order to highlight the importance of each.

In everyday life, man is confronted with the fact that his needs are unlimited while the resources that must meet these unlimited needs are limited. This leads to an economic scarcity issue – a principle defined by both Mohr and Fourie (1999) as the fundamental economic concept. Economic scarcity is experienced as the fact that people always need more goods and services than can be produced. Economic scarcity describes a condition where the production factors available to man are insufficient to meet all human needs (McConnell & Bruce, 2005). According to them, economic scarcity is an unavoidable part of human existence that affects every individual in every community.

Also as a result of economic scarcity, man is unable to satisfy certain needs. As production means have alternative application possibilities, man can choose which means of production he will use to produce specific goods and services. When choices are made, man assigns a value to the different needs, which are arranged according to priority (Barkley et al, 1998). In

economics it is said that the cost of a certain commodity can be measured by the alternative application or spending possibilities that is forgone by making a particular choice. Making choices is fundamental and subjacent to all economic activities. The option issue has become so important that some definitions in Economics have followed. An example of this is given by Hanson (1979): "Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses". The essence of economic thought is the fact that people must consciously take alternative actions to exercise that choice (Reinke, 1990).

Lastly the concept of occasional cost arises from the economic scarcity issue. Due to the fact that the means with which to satisfy needs are scarce, a specific choice must be made. Economists approach choice from the perspective of occasional cost. McConnell and Bruce (2005) view occasional cost as one of the most important aspects in economics, as it summarizes the core of the economic problem of scarcity and choice which necessitates a humane rational behaviour.

The concept of rationality is directed at the individual in the economy. The individual is the most important component of the economy, as it is the individual who requires goods and services. According to McKenzie (1978), the economic conduct of any group in the economy is determined by the individuals comprising that group. The economically meaningful decisions made by individuals are in effect choices relating to the utilization of scarce means (Lombard et al., 1985). According to Schiller (1991) man acts in an economically rational way when he approaches things in such a way that he maximizes his welfare. Rationality means that he calculates the benefits and the costs of all the alternatives and then selects those alternatives that will ensure him the greatest net benefit (Lombard et al., 1985).

2.2.3. Components of the Teaching-Learning Process for Economics

Kotze (1999), states that teaching consists of four basic elements or components, namely goals and objectives, subject matter, teaching strategies, and assessment. He shows that certain elements are important in the teaching of Economics – namely the teaching- learning situation, goal-setting, teaching methods, educational media, and assessment – which can also

be applied to Economics. These viewpoints correspond with the findings of Killen (1997). In light of the above, the conclusion can be drawn that the following components are important for the effective teaching of Economics: (i) Determining outcomes, (ii) Subject matter, (iii) Teaching method, and (iv)Assessment.

2.2.3.1.Didactic Principles for the Teaching of Economics

The overarching purpose of each lesson is the planning of each teaching- learning situation so that the planned lesson outcomes can be achieved in the most purposeful manner possible. To be able to make a responsible choice in respect of the teaching methods and strategies, the educational media and assessment techniques, the teacher must have sound knowledge of the fundamental didactic principles that apply to the teaching of Economics. According to Kotze (1999) these principles generally describe the true educational procedure, and any deviation from this can pose an obstacle to teaching. Duminy, Dreyer & Steyn (1990) see principles as "foundations, as points of departure which are fundamental and original". They describe didactic principles as "general universally-valid fundamentals underlying the most basic and essential thoughts and considerations about teaching and learning".

From the literature dealing with the universally valid didactic principles, it appears that several classifications of the most important didactic principles exist. Van Loggerenberg and Jooste (1970), for instance, draw up a classification based on the foundations arising from the principles, namely the philosophical, psychological, sociological and educational foundations. However, the various principles are closely related. A discussion of any one of the principles therefore also encompasses one or more of the others. According to Duminy et al. (1990) didactic principles are universal in nature in the sense that they can be found in all teaching-learning situations, in all subjects, and at all levels of teaching.

In the teaching of Economics, certain outcomes are stated which the learner must achieve during the course of the lesson or programme. The preceding supposes that learners must master specific outcomes. The aim is for learners to not only understand the subject matter, but also to be able to use the subject matter in new situations. The outcome for the teaching of Economics supposes that certain thought processes and activities must be mastered. For example, learners must acquire knowledge and insight from the different ways in which goods

can be produced, as well as the principle of supply and demand. A certain degree of skill in the application of these methods and principles must be demonstrated.

One of the specific outcomes of Economics supposes that learners must be able to evaluate the relationships amongst the economic branches and labour economy. In this case, learners must master Economics as a whole, up to a specific level. Apart from knowledge, skills and viewpoints, the learner must gain a certain perspective in respect of the nature and being of Economics, as well as the similarities and relationship between Economics and other sciences.

Duminy et al (1990) state that the most important guidelines that apply to the teaching of Economics so that mastery of the subject matter can take place optimally can be summarized as follows:

• Summaries of the subject matter to be drawn up by the learner in order to develop intellectual capacity so as to be able to identify key points and create structure;

• Revision, where the emphasis falls on a variety of activities and problem solutions;

• Classroom and homework exercises in order to consolidate subject matter and practice certain skills;

• Active participation by the learner in both the teaching and learning processes;

• Structured presentation of subject matter during both the teaching-learning situation and the assessment and demonstration of skills, so that mastery can take place systematically and logically;

• The learner being in possession of the necessary prior knowledge, insight and skills at the beginning of the teaching-learning opportunity;

• Learning at own speed to allow time for mastery to occur;

• Self-assessment opportunities so that learners can determine their own level of mastery, can act remedially, and can adapt their learning strategies.

The Economics teacher fulfils the important role of preparing learners for these demands by recognizing that learners are themselves sources of knowledge and that the teaching-learning process, although it builds on existing prior knowledge, must be a process of pushing back the borders of knowledge slowly but surely.

Curriculum development, and more specifically the development of teaching programmes and material, must have learners as the central focus point and must build on the existing

knowledge and experiences of the learner. The process of curriculum development and the teaching of subject matter must take into account the developmental characteristics of the individual learners as well as the group. Different learning styles and pace must be taken into account and accommodated. The way in which different cultural values and lifestyles construct knowledge must be recognized and incorporated in the development and implementation of teaching-learning programme. The motivation of learners with positive learning experiences, as well as the respect of different languages, cultures and personal circumstances, is a prerequisite for learning. Learners must be encouraged to reflect on their own learning experiences and processes and to develop skills and strategies to use open learning to learn distance and multimedia programme (Gultig, 1998).

The Economics teacher can meet the demands of these principles by:

• Giving the learner the opportunity to work cooperatively and in a problem- solving way as a member of a group;

• Allowing learning opportunities to adapt to and build on the field of experience of the learner;

• Allowing aspects, concepts, etc. to fall within the learner's frame of reference as far as possible;

• Giving the learner the opportunity to master the subject matter at his/her own pace and in his/her own way.

For the Economics teacher this means that the subject matter must be viewed in such a way and be presented to learners in such a way that the greater portion thereof, and the implications of the subsections for the greater whole, can be realised. The analytical skills of learners must be developed by means of problem setting, where learners must think of creative solutions to relieving aspects such as scarcity. The cause-effect relationship of Economics must be clearly presented to learners, and the consequences of the seemingly simply solution must be thoroughly explained to learners. It is only in this way that learners can be guided towards critical and creative thought in Economics, particularly when it come to the creation of business cycles(Gultig, 1998).

Thus, it would appear that the teaching of Economics, from a cooperative learning approach involving the use of didactic materials, must take place purposefully and in totality in an

illustrative manner and that, although the mutual differences of learners must be taken into consideration, the social nature of man must be kept in mind. The learners must be guided to achieve the specified outcomes by means of self-activity and motivation. By means of assessment and the diagnosis and remediation of learning problems, optimal learning must take place.

Acknowledging that students learn at particular speeds and succeed in different manners, teachers should consider this diversity when teaching the target language and when developing their materials trying, at the same time, to keep a balance among students' language learning needs, preferences, motivations and expectations, their affective needs, and the institutional policies.

In the same way, and following Oxford (2010), teachers should also bear in mind that since knowledge is socially built, fostering pair and group learning activities is a "must" as they enhance motivation, improve self-esteem in students, and lower anxiety and prejudice. Additionally, they are helpful in sharing information, cooperating with each other's learning, enhancing commitment to subject learning as well as to developing a sense of belonging to the educational institutions and classmates.

Furthermore, it is relevant to highlight the valuable element of enjoyment in our practices and in the material being produced for our students, which results in having students motivated and engaged in a comfortable, warm-hearted and challenging learning atmosphere. To that extent, Tosta (2001) assert that an essential element of success in a classroom is the possibility for the class to be an opportunity to learn and the students to find learning enjoyable. For this reason, teachers ought to create materials that promote pleasant learning settings, thereby fostering motivation interaction, and long-term learning.

2.2.4.The Determinants of Student Performance

Education is a very costly project for nations and individual families. Therefore, it is very crucial to understand certain outlined factors affecting its provisions and the performance of learners. The majority of studies on student performance have related student performance to various aspects of education, such as school quality, teaching quality, teacher remuneration, class size, and Learners' characteristics.

Teacher Remuneration

Remuneration refers to payment or compensation received for services or employment. This includes the base salary and any bonuses or other economic benefits that an employee or executive receives during employment, (oxford, 2010). Thus teacher remuneration refers to the total compensation received by a teacher, which includes not only the base salary but options, bonuses, expense accounts and other forms of compensation. A study on schools in India investigated the relationship between performance-related pay and student achievement (Kingdon & Teal, 2002), addressing the important issue of endogeneity in the relationship between pay and achievement. They found strong evidence that performance-related pay in the private sector affects student achievement, but no evidence of a similar cause-effect relationship in public schools.

In the Cameroonian educational system, private schools teachers are said to be less paid than public school teachers. The fact that a teacher is well paid plays an important role on his /her work performance and on his/her pupils' performance as well. Even though the salary may not be the main motivator of teachers, it plays a very important role in this issue. Regarding the importance of teachers in general, Archer (1999) and Armentano (2003) argue that teachers are the most important influence on student progress, even more important than socio-economic status and school location. Furthermore, Darling-Hammond (2000) concludes that measures of teacher preparation and certification are by far the strongest correlates of student achievement in reading and economics.

Teacher Quality

Teachers are central to any consideration of schools, and a majority of education policy discussions focus directly or indirectly on the role of teachers. There is a primary case for the concentration on teachers, because they are the largest single budgetary element in schools. Moreover, parents, teachers, and administrators emphasize repeatedly the fundamental role that teachers play in the determination of school quality. Yet there remains little consensus among researchers on the characteristics of a good teacher, let alone on the importance of teachers in comparison to other determinants of academic performance. Teacher quality is the concept that embodies what the teacher does and they can do in terms of their assigned roles in the school. Related to the concept of teacher quality is teaching quality and it has been

observed that one way of determining the quality of teaching in schools is by looking at the intermediate outcome of student performance (Sanders, 1999). There are several ways to evaluate a student's quality attributable to formal education, but the most tractable indicator is how he or she performs in tests (World Bank, 2004).

Teachers' Years of Experience

There is a wide range of findings on the relationship between years of teaching experience and student outcomes. Hanushek (1986) found that fewer than half of the 109 previous studies on the estimated effects of teacher experience showed that experience had any statistically significant effect on student achievement; of those, 33 studies found that additional years of experience had a significant positive effect, but seven found that more experience actually had a negative impact on student achievement.

It is also plausible that a positive finding on experience actually results from the tendency of more senior teachers to select higher-level classes with higher achieving students (Hanushek, 1986). Thus we might reasonably infer that the magnitude of the experience effect, should it exist, is not terribly large. Teacher absenteeism, an observable indicator of teacher effort and performance, has been the focus of several recent studies. Chaudhury et al. (2000) report on surveys in six developing countries that yield observational data on absence of teachers and health workers; averaging across the six countries, they found an absence rate of 29% among secondary school teachers. Teacher absence predicts lower scores of pupils in tests in general.

From the writings of these educators, one can infer that whatever facilities are available, whatever content is taught, whichever environment the school is situated and whatever kind of pupils are given to teach, the important and vital role of the teacher cannot be over-emphasized. Assuming that necessary facilities are adequately provided for, the environment is conducive to learning, the curriculum satisfies the needs of the students and the students themselves have interest in learning, learning cannot take place without the presence of the teacher. Famiye (1977) noted that schools with stable, experienced and qualified teachers usually have better school facilities in terms of school buildings, books and equipment than those schools which have difficulty in attracting experienced and qualified staff. Teachers' conditions in schools of Cameroon seem to be increasingly improving and thereby, their

motivation to use teaching materials and improving on their teaching differs accordingly; therefore, this has an effect on learners' academic performance.

School Size and Class Size

About class size, a comparative study of schools among US states found that in Tennessee, smaller class sizes contribute positively to student learning and teaching (Darling-Hammond, 2000). In another assessment, Angrist & Lavy (1999) use regression-discontinuity design and found that reducing class size increases fourth- and fifth-grade test scores in Israeli schools. For the case of schools in Cameroon, secondary schools are very crowded at an extent of 70 students and beyond per class in most public and missionary secondary schools while in private secondary schools, a big class hosts more than 35 pupils' at least. This can be a positive factor of good learners' performance in that teacher can individualize his/her teaching very easily if the class is not too big and use appropriate teaching aids that will help facilitate his teaching.

School Quality and Socio-Economic and Cultural Level of Parents/Guardians

In enumerating the factors that could be responsible for varying intra-and inter-school/academic achievement, Coombs (1970), listed four important factors including the acute scarcity of instructional resources notably didactic materials which he said constrained educational systems from responding more fully to new demands. He claimed that, in order to do their part in meeting the crisis in education, educational systems will need real resources that money can buy, they will need a fuller share of the nations' manpower, not merely to carry on the present work of education, but to raise its quality, efficiency and productivity. They will need buildings, equipment and more learning materials.

Momoh (2010) carried out a research on the effects of instructional resources on students' performances in G.C.E examination. He correlated material resources with academic achievements of students in ten subjects. Information was collected from the subject teachers in relation to the resources employed in teaching in five schools. The achievements of students in these examinations for the past five years were related to the resources available for teaching each of the subjects. He concluded that material resources have a significant effect on students' achievement in each of the subjects. In Cameroon not all the teachers, parents and schools have enough means in terms of money to buy the required didactic

materials as they have almost only one funding source which is the government for public schools.

The overall framework of schooling and schooling outcomes can be posited as having supporting inputs which flow into schools where schooling conditions are set to produce what we want to recognize as school outcomes (Copley, 1995). Contextual factors in generating school outcomes are the political will to embark on and support a schooling system, the economic muscle to support and sustain the system, the cultural milieu and how the school system aligns itself to the global trends in education. All these help to shape the kind of outcomes we expect to see in children who pass through the system. Directly linked to schooling itself are moral, material and human resources made available to the school where a conducive climate with the right mix of conditions are manipulated in a classroom to produce desirable outcomes.

Learners' Characteristics

About the learners' characteristics as factor to academic performance, very important are the students themselves with regard to how ready they are to blend into the mix we call schooling. It is clear that the factors are connected in an intricate way since we are dealing with social issues where how one factor influences an outcome cannot be entirely independent of the many other factors in the process (Kingdon & Teal, 2002).

However, when basic and fundamental elements of schooling are considered it is possible to change the outcomes considerably because there is little influence from external factors. When rudimentary schooling systems are considered most external influences become minimized and changes in the basic elements of schooling can lead to measurable changes in the outcomes. Learners' psychology and the way in which they use the materials around them influences their academic performance to a larger extend.

2.3. Theoretical Framework

In order to throw lights on the terms and concepts surrounding this research, four main theories will be reviewed and their link to the use of didactic materials in improving on learners performances' in economics established. The theoretical framework of this project has to do with the theories of learning relevant to this study. The study of learning and teaching has been of interest to many psychologists and educationists. This has led to many

developmental learning theories which could be grouped into the behaviourists, cognitive and humanistic psychologists.

The behaviourists who are known for their connectionism or associationism theories propagate that learning should be based on stimulus and response. For example, Pavlov and Skinner believed that learning constitutes a process made up of observation, imitation, reinforcement, repetition, modelling and memorization (Maureen, 2008).

The second group is the cognitivists sometimes referred to as the Gestalts for example Piaget and Bruner. They concentrate on the learners' thinking power or insight; propagating that learners should be exposed to a unified whole of learning. To them, the whole is more than the sum of its parts. A sub group here will include the socio-constructivists theory outlined by Lev Vygotsky and Bandura. Bandura has merged ideas from the behaviourists and cognitive to explain that there is a continuous interaction between the internal cognitive structure and the environment which causes human behaviour.

The last group is the humanistic psychologists like Maslow and Carl Rogers who stressed the need for teachers to have a warm and cordial relationship with learners. They equally stressed the need for teachers to understand the needs of the learners and try to ensure their satisfaction (Maureen, 2008). Theories to be examined are;

2.3.1. Lev Vygotsky's Theory of Child Development

Vygotsky earned a law degree from Moscow University in 1917. His studies included philosophy, psychology and literature. In 1924 he presented a paper at the Russian Psycho–neurological Congress. This led to his joining the Psychological Institute of Moscow University. His work was banned for political reasons and was not to emerge until the 1950's. His work has formed a foundation for constructivist theorists and theories.

Vygotsky shared many of Piaget's views about child development, but he was more interested in the social aspects of learning. Vygotsky differs from discovery learning, which is also based on Piaget's ideas, in that the teacher and older children play important roles in learning. The teacher is typically active and involved. The classroom should provide variety of learning materials (including electronic) and experiences and the classroom culture provides the child with cognitive tools such as language, cultural history, and social context.

The Zone of Proximal Development (ZPD) is a concept for which Vygotsky is well

known. It refers to the observation that children, when learning a particular task or body of information, start out by not being able to do the task. Then they can do it with the assistance of an adult or older child mentor, and finally they can do it without assistance. The ZPD is the stage where they can do it assisted, but not alone. Thus the teacher often serves to guide a child or group of children as they encounter different learning challenges. Most at times the teacher as a guide and a facilitator is required to use didactic materials in his quest for an improved performance when teaching the learners (Chaiklin, 1990).

Vygotsky's observations led him to propose a complex relationship between language and thought. He observed egocentric speech and child monologues such as Piaget wrote about, as well as internal speech. He proposed that speech (external language) and thought have different origins within the human individual. He described thought as non-verbal, and speech as having a pre-intellectual stage, in which words are not symbols for the objects they denote, but are properties of the objects. Up to about age two, they are independent. After that thought and speech become connected. At this point, speech and thought become interdependent, and thought becomes verbal. Thus, children's monologues become internalized as internal dialog.

While there can be wide variation of activities and content in a Vygotskian classroom, four principles always apply:

1. Learning and development is a social, collaborative activity.
2. The Zone of Proximal Development can serve as a guide for curricular and lesson planning.
3. Classroom activity should be reality-based and applicable to the real world.
4. Learning extends to the home and other out-of-school environments and activities and all learning situations should be related (Chaiklin, 1990).

2.3.1.1.Vygotky's Zone of Proximal Development

The Zone of proximal development (ZPD) is Vygotsky's term for the range of tasks that a child is in the process of learning to complete. The lower limit of ZPD is the level of skill reached by the child working independently (also referred to as the child's actual developmental level). The upper limit is the level of potential skill that the child is able to reach with the assistance of a more capable instructor.

Vygotsky viewed the ZPD as a way to better explain the relation between children's learning and cognitive development. Prior to the ZPD, the relation between learning and development could be boiled down to the following three major positions:

1) Development always precedes learning (e.g., constructivism): children first need to meet a particular maturation level before learning can occur;

2) Learning and development cannot be separated but instead occur simultaneously (e.g., behaviourism): essentially, learning is development;

3) Learning and development are separate but interactive processes (e.g., gestaltism): one process always prepares the other process, and vice versa(Chaiklin, 1990).

Vygotsky rejected these three major theories because he believed that learning always precedes development in the ZPD. In other words, through the assistance of a more capable person, a child is able to learn skills or aspects of a skill that go beyond the child's actual developmental or maturational level. Therefore, development always follows the child's potential to learn. In this sense, the ZPD provides a prospective view of cognitive development, as opposed to a retrospective view that characterizes development in terms of a child's independent capabilities.

Scaffolding is a concept closely related to the idea of ZPD, although Vygotsky never actually used the term. Scaffolding is changing the level of support to suit the cognitive potential of the child. Over the course of a teaching session, one can adjust the amount of guidance to fit the child's potential level of performance. More support is offered when a child is having difficulty with a particular task and, over time, less support is provided as the child makes gains on the task. Ideally, scaffolding works to maintain the child's potential level of development in the ZPD (Chaiklin, 1990).

An essential element to the ZPD and scaffolding is the acquisition of language. According to Vygotsky, language is fundamental to children's cognitive growth because language provides purpose and intention so that behaviours can be better understood.Through the use of speech, children are able to communicate to and learn from others through dialogue, which is an important tool in the ZPD. In a dialogue, a child's unsystematic, disorganized, and spontaneous concepts are met with the more systematic, logical and rational concepts of the

skilled helper which in this case could be the didactic tool the child is using or his teacher as a guide.

Empirical research suggests that the benefits of scaffolding are not only useful during a task, but can extend beyond the immediate situation in order to influence future cognitive development. For instance, a recent study recorded verbal scaffolding between mothers and their 3 and 4year-old children as they played together. Then, when the children were six years old, they underwent several measures of executive function, such as working memory and goal-directed play. The study found that the children's working memory and language skills at six years of age were related to the amount of verbal scaffolding provided by mothers at age three. In particular, scaffolding was most effective when mothers provided explicit conceptual links during play. Therefore, the results of this study not only suggest that verbal scaffolding aids children's cognitive development, but that the quality of the scaffolding is also important for learning and development (Chaiklin, 1990).

2.3.1.2. Psychology of Play

Less known is Vygotsky's research on play, or children's games, as a psychological phenomenon and its role in the child's development. Through play the child develops abstract meaning separate from the objects in the world, which is a critical feature in the development of higher mental functions. Vygotsky gives the famous example of a child who wants to ride a horse but cannot. If the child were under three, he would perhaps cry and be angry, but around the age of three the child's relationship with the world changes (Davydov, 1988).

Henceforth play is such that the explanation for it must always be that it is the imaginary, illusory realization of unrealizable desires. Imagination is a new formation that is not present in the consciousness of the very raw young child, is totally absent in animals, and represents a specifically human form of conscious activity. Like all functions of consciousness, it originally arises from action.

2.3.1.3. Vygotsky's Theory of Child Development

Vygotsky formulated several requirements or criteria that should be satisfied by a model of child development. First, the model must be explanatory, rather than descriptive. More specifically, the model should be organized by substantial principles that can explain development "as a single process of self-development" (Vygotsky, 1998). Second, the model

should consider the whole child, as an integral person. Third, childhood should be divided into periods, such that each period is characterized in a principled and unified way. That is, the same abstract explanatory principles should be used to characterize each period hence the unity, but the concrete manifestation of the abstract relations must be discovered and characterized for the particular content of each age period. To meet these requirements, Vygotsky proposed that each period of childhood be characterized abstractly by a psychological structure, a set of integral relations among psychological functions (e.g., perception, voluntary memory, speech, and thinking). This structure should reflect the whole child (i.e., as a person engaged in structured social relations with others) – not only as a description of the qualities of the child, but also as a description of the child's relationship to his/her environment (Chaiklin, 1990).

From a psychological point of view, this whole is described as an integrated structure of relationships among developed and developing higher psychological functions acquired through material interaction. This psychological description of a child focuses on interrelationships between functions, rather than considering individual psychological functions in isolation. For example, 2-year-old children tend to be directed more by reactions to what they can immediately perceive (the immediate concrete material at hand) than by their wilful formation of an imagined possibility (i.e., a thought). In this case, the functions of perception, thought, and will stand in a particular relation to each other, such that perception is dominant in relation to will and thought. The psychological structure refers to the structural relationships among a set of psychological functions.

The focus on the whole precludes a methodological approach that con- siders specific functions without considering their relation to the whole. In this way, Vygotsky can realize his goal of understanding development as a process that is characterized by a unity of material and mental aspects, a unity of the social and the personal during the child's ascent up the stages of development (Chaiklin, 1990).

These two unities (material–mental and social–personal) are alternative ways of expressing the same idea, and they are both unities because the child's psychological structure (i.e., the mental, the personal) is always reflecting a relation to the social and material. Vygotsky proposed to describe the development of children, from infancy to adolescence, as a series of

relatively long stable periods (1 to 4 years), punctuated by shorter periods of crisis (Davydov, 1988, pp. 63–87). To explain the causal-dynamic of this development, one has to give an account of how and why there is a qualitative change in the psychological structure that is characteristic for each age period. The starting point for Vygotsky's explanation is the child's specific, but comprehensive, relationship to its environment, designated as the social situation of development. "The social situation of development represents the initial moment for all dynamic changes that occur in development during the given period"; therefore, to study the dynamics of any age, one must first explain the social situation of development (Vygotsky, 1998). Each age period has a characteristic central new-formation in relation to which psychological functions develop (Chaiklin, 1990).

This new formation is organized in the social situation of development by a basic contradiction between the child's current capabilities (as manifested in the actually developed psychological functions), the child's needs and desires, and the demands and possibilities of the environment.

In trying to over- come this contradiction (so that it can realize its activity), the child engages in different concrete tasks and specific interactions, which can result in the formation of new functions or the enrichment of existing functions. The central new formation produced for a given age period is a consequence of the child's interactions in the social situation of development with relevant psychological functions that are not yet mature (Schneuwly, 1994, pp. 282–284.). Many (even most) of the child's specific actions in daily life do not need to be oriented to confronting contradictions (sometimes called the pre- dominant activity). However, the functions needed for a transition to a new age period (i.e., a structural change in the organization of functions) are formed and elaborated (in relation to the central new-formation) in those situations in which the child engages specifically in actions relevant to this contradiction. Each period has a leading activity that is the main source of development within a period (Vygotsky, 1967). The notion of "leading activity" is a way to identify the particular relations in the social situation of development that are likely to contribute to the development of the functions that lead to the structural reorganization of a child's psychological functions. The activity itself is not developing the child; rather, in order to

realize the leading activity, the child engages in actions that serve to develop the psychological functions needed for that activity.

Rather than being a passive recipient of an objective environment, the child is selective about what is perceived and interesting. This relation changes with each specific age period, reflecting the structure of the psychological functions for that age. Lampert-Shepel, (1995) Changes in historical relations would incline a researcher to predict changes in psychological functions. It is important to recognize that these periods are not reflecting a biological necessity (because of genetic or other organic sources), even though the development of higher psychological functions (e.g., perception, voluntary memory, speech, thinking) is dependent on these natural conditions. When Vygotsky writes about "age," then it is understood as reflecting a psychological category and not only a temporal characteristic. Thus, in the statement "the actual level of development is determined by that age, that stage or phase within a given age that the child is experiencing at that time" (Vygotsky, 1998), one can understand "within a given age" to refer to the period of development. Similarly, none of the psychological functions is "pure" in the sense of a biologically given module or faculty. Rather they were formed, both historically in the phylogenetic development of human societies and individually in the ontogenetic development of persons within these societies (chaiklin, 1990).

All the major new mental functions that actively participate in school instruction are associated with the important new formations of this age that is, with conscious awareness and volition. These are the features that distinguish all the higher mental functions that develop during this period. (Vygotsky, 1987, p. 213) For a given objective zone of proximal development, it is possible to assess the current state of an individual child's development (in relation to the objective zone). According to Vygotsky's theory, the maturing functions are the source of changes in the internal structure of the specific new functions for a given age (in this case, conscious awareness and volition) may be open to debate and analysis (Chaiklin, 1990).

One can refer to the extent to which a child's currently maturing functions are realizing the structure of the next age period as the subjective zone of proximal development. The subjective zone is called 'subjective' to indicate that one is speaking about the development of

an individual person in relation to the objective, historically formed period of next development. In sum, the main features of the analysis of zone of proximal development are:

(a) Whole child,

(b) Internal structure (i.e., relationships between psychological functions),

(c) Development as a qualitative change in the structural relationships,

(d) Brought about by the child's actions in the social situation of development (reflecting what the child perceives and is interested in),

(e) Each age period has a leading activity/contradiction that organizes the child's actions (within which subjective interests are operating) through which new functions develop.

Zone of proximal development is a way to refer to both the functions that are developing ontogenetically for a given age period (objective) and a child's current state of development in relation to the functions that ideally need to be realized (subjective). In this respect, the zone of proximal development is both a theoretical and an empirical discovery. Vygotsky's interest is to develop a theoretical basis for appropriate pedagogical interventions, including principles for possible instructional grouping of children and identification of specific interventions for individual children. These interventions encompass the use of didactic materials in the processes of teaching and learning. Interventions must be based on diagnostic procedures grounded in an explanatory understanding of a child's current state of development. In this view, it is not acceptable to have only (correlated) indicators or symptoms of psychological development; one must use a theoretical understanding of the processes by which a person develops. "A true diagnosis must provide an explanation, prediction, and scientific basis for practical prescription" (Vygotsky, 1998).

In sum, if we understand the causal-dynamics of child development, then we should be able to develop procedures to assess a person's current state of development in a way that provides insight into what that person needs to develop and use appropriate aids in helping him develop. Vygotsky proposes that the zone of proximal development as a diagnostic principle "allows us to penetrate into the internal causal-dynamic and genetic connections that determine the process itself of mental development" To understand Vygotsky's explanation for the existence of the zone of proximal development, we have to consider his technical concept of imitation, around which his analysis is constructed. A person's ability to imitate, as

conceived by Vygotsky, is the basis for a subjective zone of proximal development. (The objective zone exists through the social situation of development.) Imitation, as used here, is not a mindless copying of actions. Rather Vygotsky wants to break from a copying view, to give a new meaning to imitation in which imitation presupposes some understanding of the structural relations in a problem that is being solved. A child is not able to imitate anything. "Imitation is possible only to an extent and in those forms in which it is accompanied by understanding" (Vygotsky, 1987). "It is well established that the child can imitate only what lies within the zone of his intellectual potential" (Chaiklin, 1990). Imitation refers to all kinds of activity of a certain type carried out by the child in cooperation with adults or with another child and includes everything that the child cannot do independently, but which he can be taught or which he can do with direction or cooperation or with the help of leading questions.

The crucial assumption is that imitation is possible because maturing psychological functions are still insufficient to support independent performance but have developed sufficiently so that a person can understand how to use the collaborative actions (e.g., leading questions, demonstrations, illustrations via the use of materials and aids) of another. The presence of these maturing functions is the reason the zone of proximal development exists. Alternatively, one can say that the zone of proximal development is defined as referring to those intellectual actions and mental functions that a child is able to use in interaction, when independent performance is inadequate.

2.3.2. Bandura's Theory of Social Learning

Social cognitive learning theory highlights the idea that much of human learning occurs in a social environment. By observing others, people acquire knowledge of rules, skills, strategies, beliefs, and attitudes. Individuals also learn about the usefulness and appropriateness of behaviours by observing models and the consequences of modelled behaviours and they act in accordance with their beliefs concerning the expected outcomes of actions.

Bandura began building his theory of social learning by identifying 3 areas of weakness of Behaviourism which are the limited range of behaviours possible for research in a laboratory typesetting, the fact that these theories were unable to account for the acquisition of new responses to situations and lastly that this type of learning is dealt with only one type of

learning, i.e., direct learning, where the learner performs a response and experiences the consequences. (Bandura referred to this type of learning as instantaneous matching). Bandura referred to indirect learning as delayed matching where the learner observes reinforced behaviour and later enacts the same type of behaviour.

Of the many cues that influence behaviour, at any point in time, none is more common than the actions of others. (Bandura, 1986, p.206)

Social cognitive theory defines learning as an internal mental process that may or may not be reflected in immediate behavioural change (Bandura, 1998). People learn by observing others: Modelling (3 types of modelling). Generally, cognitive modelling involves modelled demonstrations, together with verbal descriptions of the model's thoughts and actions. Learning is internal.Learning is goal-directed behaviour and there are 3 types of re-enforcers of behaviours:

A. Direct reinforcement: Direct reinforcement would be directly experienced by the learner.

B. Vicarious reinforcement: Vicarious reinforcement would be observed to be consequences of the behaviour of the model.

C. Self-reinforcement: Self reinforcement would be feelings of satisfaction or displeasure for behaviour gauged by personal performance standards.

Self-regulated behaviour is essential to the learning process. Self-regulation of behaviour is the process of one using one's own thoughts and actions to achieve a goal. Self-regulated learners identify goals and adopt and maintain their own strategies for reaching the goals. Self-regulations is critical to understanding this theory because a lot of human behaviour occurs without immediate reinforcement/punishment. Often, the consequences for behaviour are too far down the road into the future to effect current behaviour. There are 4 parts to Self-regulated behaviour

1. Goal setting is critical to self-regulated behaviour because they help to establish a purpose for one's actions and provide a means of measuring one's progress.

2. Self-observation: Once goals have been set; learners monitor themselves to determine their progress. Self- monitoring behaviour can be taught in a variety of ways. Often used as a means of scaffolding.

3. Self-assessment: Teachers don't necessarily have to be the only one's doing assessment; students can be taught self-assessment skills.

4. Self-reinforcement: We tend to feel good about the things we accomplish and regretful or guilty about the things we end up not accomplishing. The point is that as individual's become more self-regulated, they learn to reinforce and punish themselves. Often, self-reinforcers and self-punishers are one's feelings, the most powerful form of self-reinforcement is the feeling of accomplishment after successfully setting and meeting challenging goals.

5. Reciprocal Causation/Determination Learning involves the interaction of several factors, such as behaviour, environment, storing information in memory and personal factors (i.e., beliefs and expectations relevant to ability).For Bandura, it is through the observations of models that an individual's perceptions and actions influence their cognitive development (Bandura, 1998).

Vicarious Experiences Occurs when people observe the consequences of another person's actions and adjust their own behaviour accordingly. Vicarious sources accelerate learning over what would be possible if people had to perform every behaviour for learning to occur. Vicarious sources also save people from personally experiencing negative consequences. Two types: Vicarious reinforcement and Vicarious Punishment exist. For social cognitive theorists, reinforcement and punishment cause individuals to form expectations about consequences that are likely to result from various behaviours. For example, if you study well and do well on an economics test, you expect to do well on a second economics test with a similar amount of study. If you see someone else being reinforced for a given behaviour, you expect to be reinforced for a similar behaviour. Reinforcement and punishment only changes behaviour when learners know what behaviours are being reinforced or punished. This implies that teachers need to specify what behaviours will be reinforced so that students can adapt their behaviour accordingly and learners need feedback so that they can know what behaviours have resulted in desirable consequences.

The characteristics of models are an important factor in determining the degree to which the attention is paid to the model by the learner. The response of the learner to the modelling behaviour is largely determined by three sets of factors: The particular attributes of the model, such as relevance and credibility for the observer; the prestige of the model, and the satisfaction already present in the situation where the behaviour is being modelled.

A second determinant of the models success is the nature of the observer. Those with a poor sense of self-esteem and those who lack self-confidence are more prone to adopt the behaviour of models. Direct Modelling is simply attempting to imitate the model's behaviour. Live models include family members, friends, work associates, teachers and others with whom the individual has direct contact.

Symbolic Modelling is imitating behaviours displayed by characters in books, plays, movies, or television. The symbolic model is a pictorial representation of behaviour. Synthesized Modelling implies developing behaviours by combining portions of observed acts. Here we can learn behaviours that we didn't know prior to observing models. Modelling can either strengthen or weaken one's given inhibition. Unlike facilitating an existing behaviour, inhibitions involve socially unacceptable behaviours, such as breaking classroom rules or general laws. For example, students are less likely to speak without permission if they see peers reprimanded for doing so and more likely to use learning aids in economics if they see the others doing so. Modelled behaviours create expectations in observers that similar consequences will occur should they model the actions. It is a form of Observational learning. A key mechanism in observational learning is the information conveyed by models to observers of ways to produce new behaviours (Maureen, 2008)

Social learning theory draws heavily on the concept of modelling, or learning by observing behaviour. Bandura outlined three types of modelling stimuli: Live model, in which an actual person is demonstrating the desired behaviour; Verbal instruction, in which an individual describes the desired behaviour in detail and instructs the participant on how to engage in the behaviour; Symbolic model, in which modelling occurs by means of the media, including movies, television, Internet, literature, and radio. Stimuli can be either real or fictional characters. The learner is not a passive recipient of information. Cognition, environment, and

behaviour all mutually influence each other. Sub processes include attention, retention, production, and motivation.

In order to learn, observers must attend to the modelled behaviour. Attention is impacted by characteristics of the observer for example, perceptual abilities, cognitive abilities, arousal, past performance and characteristics of the behaviour or event (e.g., relevance, novelty, affective valence, and functional value). In order to reproduce an observed behaviour, observers must be able to remember features of the behaviour. Again, this process is influenced by observer characteristics (cognitive capabilities, cognitive rehearsal) and event characteristics (complexity). To reproduce behaviour, the observer must organize responses in accordance with the model. Observer characteristics affecting reproduction include physical and cognitive capabilities and previous performance. The decision to reproduce (or refrain from reproducing) an observed behaviour is dependent on the motivations and expectations of the observer, including anticipated consequences and internal standards.

An important factor in social learning theory is the concept of reciprocal determinism. This notion states that just as an individual's behaviour is influenced by the environment, the environment is also influenced by the individual's behaviour. In other words, a person's behaviour, environment, and personal qualities all reciprocally influence each other. For example, a child who plays violent video games will likely influence their peers to play as well, which then encourages the child to play more often. This could lead to the child becoming desensitized to violence, which in turn will likely affect the child's real life behaviours (Bandura, 1998).

Individuals that are observed are called models. In society children are surrounded by many influential models, such as parents within the family, characters on children's TV, friends within their peer group and teachers at school. These models provide examples of behaviour to observe and imitate, e.g. masculine and feminine, pro and anti-social etc. Children pay attention to some of these people (models) and encode their behaviour. At a later time they may imitate or copy the behaviour they have observed. They may do this regardless of whether the behaviour is 'gender appropriate' or not but there are a number of processes that make it more likely that a child will reproduce the behaviour that its society deems appropriate for its sex. First, the child is more likely to attend to and imitate those people it

perceives as similar to itself. Consequently, it is more likely to imitate behaviour modelled by people of the same sex. Second, the people around the child will respond to the behaviour it imitates with either reinforcement or punishment. If a child imitates a model's behaviour and the consequences are rewarding, the child is likely to continue performing the behaviour.

In a nutshell, many classroom teaching strategies draw on principles of social learning to enhance students' knowledge acquisition and retention. For example, using the technique of guided participation, a teacher says a phrase and asks the class to repeat the phrase. Thus, students both imitate and reproduce the teacher's action, aiding retention. An extension of guided participation is reciprocal learning, in which both student and teacher share responsibility in leading discussions. Additionally, teachers can shape the classroom behaviour of students by modelling appropriate behaviour and visibly rewarding students for good behaviour. By emphasizing the teacher's role as a model and encouraging the students to adopt the position of participating observer, the teacher can make knowledge and practices explicit to students, enhancing their learning outcomes via the use of appropriate didactic materials in an Economics classroom.

2.3.3. Bruner's Theory of Motivation

Bruner (1960) as cited in Santrock (2004), postulates that children can design the fate of their academic life. He says that when children learn; they can cognitively represent or transform their experiences when the need arises. He further explains that cognitive factors such as expectations, beliefs, attitudes, strategies, thinking and intelligence influence behaviours while achievement behaviours like success or failure influence cognitive factors.

Environmental factors like schools, teachers, learning resources and resource centres influence behaviour. Meanwhile, behaviour equally influences the environment. For instance, the study-skill programs developed by the teachers will improve the achievement behaviours of their pupils. If success is improved in schools by the teachers, more schools would be willing to receive learners in their environments, thus leading to the growth and improvement in the performance of learners in Economics all over the globe, coupled with better achievement prospects for all students. In schools for example, the belief that students develop about their academic capabilities help determine what they do with the knowledge or skills they have learnt (Pintrich 1990).

Added to all this, Bruner (1960) reminds the working classroom teacher that learning should be meaningful and teachers should strive to promote conditions that can help pupils perceive the structure of a given subject which will be long lasting and not easily forgotten. If the details of a lesson are taught without any structure, it will be easily forgotten. In this case the use of useful didactic materials will be a plus to every teacher within his classroom and to every individual learner undergoing an education notably in Economics. He clarifies that his position is the theory of instruction and not that of learning. He feels that learning theory is descriptive while a theory of instruction is prescriptive; that is, it prescribes in advance how a given subject can be taught. It has four principles: motivation, structure, sequence and reinforcement.

Through motivation, Bruner lets the teacher to know that children have a built-in will to learn which can be made to surface through intrinsic motivation. In the classroom, teachers must facilitate and regulate their pupils' explorative activities. Structure by Bruner, simply implies that any body of knowledge should be organized in a way that it can be transmitted to and understood by pupils. The techniques and methods by which information is communicated and the simplicity of the manner of presentation are factors that will only lead to efficient teaching and learning by the teachers. Bruner also states that learning requires reinforcements and a sequential or systematic procedure to be followed for effective teaching to be complete. These reinforcements could be positive or negative but should be used for accomplishing a desired purpose.

The educational implication of Bruner's theory of instruction is that he has brought ways of carrying learners beyond mere conditioning, by cognitive organization, understanding and learning that results from our actions. This will help teachers and participating teachers to understand that meaningful learning requires that a child should actively search for solutions based on the theory of instruction and the only best way to guide the learner in achieving this aim is by providing for varied learning situations through the use of different didactic materials by both the teachers and learners. This sets the base for the improvements of learners' performances in economics in secondary schools in the Centre region of Cameroon.

Dublin and Biddle (1985) emphasize that efficient teachers create classroom climates in which academic rigour and intellectual challenge are accompanied by the emotional support

and encouragement necessary to meet these challenges and achieve excellence. They further point out that effective teachers take seriously their share of responsibility in nurturing the self-beliefs of their learners. Melby (1995) argues that, “teachers with low self-efficacy often become mired in classroom problems; they do not have confidence in their ability to manage their classes, become stressed and angered at students misbehaviour.” Instructional efficacy, which is the need for teachers to have the ability to transmit subject matter, also includes the belief that teachers ought to maintain an orderly classroom and manage their classrooms effectively through the use of didactic materials.

Tchombe (2004) says that teachers should have at their disposal a variety of possible teaching methods and materials. She encourages them to use, realistic goals, striking teaching aids, effective interactions between themselves and the students, punishments and rewards, etc, for effective teaching to take place. Ryan (1988) also points out that an effective teacher is fair, kind, stimulating, original, alert, attractive, responsible, steady, poised and confident.

Dublin and Biddle (1985) bring out four major components of teacher effectiveness in the didactic process. According to their model, all classroom teaching can be broken down into 4 major variables; presage, context, process and product variables. Presage variables include all teacher characteristics which affect the teaching and learning process. Context variables include those environmental characteristics to which teachers must adjust. Process variables include the actual procedures of classroom teaching and product variables include the outcomes of teaching resulting in behavioural and attitude changes. Spectra (1990) also suggest that the optimism of teachers might be somewhat tarnished when confronted with the realities and complexities of the teaching task.

Bruner essentially designed a teaching strategy to help students (or any learners) understand and construct or expand upon their knowledge. The first principle is that in order for learning to take place the instruction must incorporate relevant material that draws the learner in by way of interest. Next, instruction must be based on what the students is ready to learn. Essentially this means that the instruction should be based on the student and where they are at as far as attention span and their current knowledge base. A high school graduate will need to be presented material differently than a pre-schooler. The third and final principle instruction should be based on is that it should be designed to encourage higher level thinking.

Content should leave room for expansion on what is being learned. This is essentially constructivism at its core.

2.3.4. Piaget's constructive theory

Jean Piaget (1896-1980)was a Swiss scientist noted for his extensive research related to child development and how children learn. In studying children and the way they think, Piaget was able to form theories on how people in general develop knowledge through actual, tangible research he conducted at the Rousseau Institute in Geneva (Butler-Bowdon). In accordance with the underlying principle of constructivism, Piaget believed that knowledge is not the ability to memorize teacher directed facts, but instead knowledge is the ability to transcend what one knows into a broader or improved understanding of material and the experiences in which the material is presented. The life experiences each child brings to the classroom will help determine how they process new material. Believing this, Piaget asserted that people glean knowledge either through accommodation or through assimilation and ultimately that how each individual perceives reality affects how they perceive new information (Anderson, 1990).

Piaget has asserted that there are two main components to adaptation: assimilation and accommodation. Assimilation occurs when the child uses an old schema or skill out on a new object. For instance, a child may typically place toys into his/her mouth. When confronted with a new toy such as a beach ball the child will use his old schema for toys which is to try to place the ball into his mouth. Accommodation, on the other hand, is when the child realizes the old way will not work. For instance, the beach ball will not fit into his mouth for sucking on. The child will have to adjust his prior schema to more suitably use the beach ball. So he may still "mouth" the beach ball but will not be able to actively place the beach ball into his mouth. So the child is either applying previously acquired skills to a new situation in order to understand it or adjusting the skills or accommodating acquired skills to better understand a situation.

Garner (2008), ascertains that another key component of Piaget's learning theory is that in order for children to actively construct their knowledge and understand new content they must have the maturity required to comprehend it. Essentially, Piaget's theory implies that there is no sense in teaching material to a child until they reach a certain level of maturity because

they are not able to process it any earlier. His theory provides an explanation, based on observation and research, on when children can understand certain material. Humans progress through a series of cognitive stages including the Sensory motor Stage which is when children are from ages zero to approximately 18 months. At 18 months they cognitively mature into the Preoperational Stage and this lasts until around age seven. These first two stages are primarily based around the theory that young children are highly egocentric or that they see the world as revolving around them or based on what they know.

From the ages of seven until about 11 children are in what he refers to as the Concrete Operational Stage and from age 12 on through adulthood humans are in the Formal Operations Stage. At these level children begin to understand the viewpoints of other people, however some people never mature far into this cognitive stage. He believed that children can, indeed, learn material ahead of their current maturity and that the level of understanding is based more on approach and material rather than solely on level of maturity (Garner, 2008).

The teaching methodology, teaching materials and the learning activities should be those that are appropriate to each of the cognitive developmental stages of the learners. Since the theory says that there is a mutual interaction between the learner and the environment, teaching materials should come from the learner's environment. Teachers as instructional managers should use the hierarchy to: understand why children think and reason as they do; and to help the learners' master intellectual processes at the appropriate age.

Piaget's theories have a major impact on the theory and practice of education (Case, 1998). First, the theories focused attention on the idea of developmentally appropriate education—an education with environments, curriculum, materials, and instruction that are suitable for students in terms of their physical and cognitive abilities and their social and emotional needs (Elkind, 1989). In addition, several major approaches to curriculum and instruction are explicitly based on Piagetian theory (Weikart 1984), and this theory has been influential in constructivist models of learning.

Berk (2001) summarizes the main teaching implications drawn from Piaget as follows:

-A focus on the process of children's thinking, not just its products.

In addition to checking the correctness of children's answers, teachers must understand the processes children use to get to the answer. Appropriate learning experiences build on

children's current level of cognitive functioning, and only when teachers appreciate children's methods of arriving at particular conclusions are they in a position to provide such experiences.

-Recognition of the crucial role of children's self-initiated, active involvement in learning activities.

In a Piagetian classroom the presentation of ready-made knowledge is deemphasized, and children are encouraged to discover for themselves through spontaneous interaction with the environment. Therefore, instead of teaching non-didactically, teachers provide a rich variety of activities that permit children to act directly on the physical world.

-A de-emphasis on practices aimed at making children adult like in their thinking.

Piaget referred to the question "How can we speed up development?" as "the American question." Among the many countries he visited, psychologists and educators in the United States seemed most interested in what techniques could be used to accelerate children's progress through the stages. Piagetian-based educational programs accept his firm belief that premature teaching could be worse than no teaching at all, because it leads to superficial acceptance of adult formulas rather than true cognitive understanding via the use of concrete materials (May & Kundert, 1997).

-Acceptance of individual differences in developmental progress.

Piaget's theory assumes that all children go through the same developmental sequence but that they do so at different rates. Therefore, teachers must make a special effort to arrange classroom activities for individuals and small groups of children rather than for the total class group. In addition, because individual differences are expected, assessment of children's educational progress should be made in terms of each child's own previous course of development, not in terms of normative standards provided by the performances of same-age peers (Berk, 2001).

Constructivism is a theory of learning that is developed from the principle of children's thinking. Constructivism states that children learn through adaptation. Children are not passive in knowledge, but active at making meaning, testing out theories, and trying to make sense out of the world and themselves. Constructivism is a philosophy of learning founded on the premise that, by reflecting on our experiences, we construct our own understanding of the

world we live in. Each of us generates our own “rules” and “mental models,” which we use to make sense of our experiences. Learning, therefore, is simply the process of adjusting our mental models to accommodate new experiences. It is also considered to be a child centred theory that focuses on the knowledge of interpretation and experience-based activities. The focus of the knowledge is no to be reproduced, but it is to construct context-rich activities.

According to Piaget (1971), children build the knowledge they acquire. This simply refers to the fact that a child is completely involved in the construction of his knowledge. But this is only possible if the teacher gives opportunities for them to manipulate concrete didactic materials and to carry out personal experiences. Today with the new pedagogic approach learners must acquire knowledge by themselves with the teacher only occupying the position of a guide or facilitator whose occupation is putting at the disposal of pupils’ didactic materials that are going to help them be better in their performance.

Conclusion

Economics is a discipline that develops the learners’ inner resources; it hitherto implies the thinking processes that take place in the learners mind in relationship to his household or environment. It also implies clarity of thought and pursuing assumptions to over-whelming logical conclusion. Learning economics provides the right attitude in solving problems in a systematic manner. Our lives are surrounded by economic activities in the way we estimate our finances and expenditures, the kind and quantity of food we eat, our consumption patterns, measuring and evaluating our daily lives. Economics being a very important subject in our daily lives requires the use of appropriate didactic aids or materials in order to enhance both its teaching and learning. Tambo (2003) classified didactic materials into five but three of them are used for this study, these are; visual display devices, print materials and graphic materials. Theories like Lev Vygotsky’s zone of proximal development and child development theories, Piaget’s socio constructivism theory, Brunner’s theory of Motivation and Bandura’s theory of Social Learning was used in a bit to ascertain the value, use and importance of didactic materials to Economics students in secondary schools.

Knowledge is actively constructed by the learner, not passively received from the outside. Learning is something done by the learner, not something that is imposed on the learner. Learners come to the learning situation in social sciences like Economics with existing ideas

about many phenomena. Some of these ideas are ad hoc and unstable; others are more deeply rooted and well developed. Also, learners have their own individual ideas about the world, but there are also many similarities and common patterns in their ideas. Some of these ideas are socially and culturally accepted and shared, and they are often part of the language, supported by metaphors etc. They also often function well as tools to understand many phenomena. These ideas are often at odds with accepted scientific ideas, and some of them may be persistent and hard to change. Teachers have to take the learner's existing ideas seriously if they want to change or challenge these and also although knowledge in one sense is personal and individual, the learners construct their knowledge through their interaction with the physical world, collaboratively in social settings and in a cultural and linguistic environment. The table below summarises differences between a traditional and a constructivist classroom .

Traditional Classroom	**Constructivist Classroom**
Curriculum begins with the parts of the whole. Emphasizes basic skills.	Curriculum emphasizes big concepts, beginning with the whole and expanding to include the parts.
Strict adherence to fixed curriculum is highly valued.	Pursuit of student questions and interests is valued.
Materials are primarily textbooks and workbooks.	Materials include primary sources of material and manipulative materials.
Learning is based on repetition.	Learning is interactive, building on what the student already knows.
Teachers disseminate information to students; students are recipients of knowledge.	Teachers have a dialogue with students, helping students construct their own knowledge.

Teacher's role is directive, rooted in authority.	Teacher's role is interactive, rooted in negotiation.
Assessment is through testing, correct answers.	Assessment includes student works, observations, and points of view, as well as tests. Process is as important as product.
Knowledge is seen as inert.	Knowledge is seen as dynamic, ever changing with our experiences.
Students work primarily alone.	Students work primarily in groups.

Source: Journal of environmental education in kingdom and Teal, 2002.pg 24.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

This study is aimed at investigating the use of didactic materials in teaching and learning Economics in secondary schools in the Centre Region of Cameroon. In this chapter, the procedures used in carrying out this study are highlighted. This chapter will treat and discuss the research design, the area of the study, the population of the study, the sample size and sampling technique, the research instruments for data collection and administration as well as data collection procedure and method of analysis.

3.1. The Research Design

Mbangwana& Mambeh (2006) define a research design as referring to all procedures selected by the researcher for studying a particular set of questions or hypotheses. A research design is a plan or blueprint that specifies how data relating to a given problem should be collected and analysed, it is the methodology or plan people use to actually complete their work.

The research design used for this study is the survey research design. This type of research design is that in which a group of people or items is studied by collecting and analysing information or data from a few people or items considered being representatives of the entire population. This research design has been chosen because of its capability of providing vital relevant data within the limited time and also because of its great efficiency in providing information for this study.

3.2. Area of the Study

The area of study for this research is the Centre Region of Cameroon, notably Yaoundé, the capital of Cameroon because it is highly populated and suitable for this study. It was founded in 1888 by German traders as a base for the ivory trade and as an agricultural research station. It was occupied by Belgian troops during World War I. After Germany's defeat, France became the colonial power of eastern Cameroon. Yaoundé therefore became

the capital of French Cameroon, and continued as the main capital of Cameroon after independence. Yaoundé is very famous for its very prominent geologic features. It is commonly called the city of seven hills. Yaoundé features a wet and dry climate with constant temperatures throughout the year.

Schools in Yaoundé are bilingual because Cameroon is a bilingual country as well as single language schools (French or English). There are a vast number of secondary schools, both public and private in this region of Cameroon. Five schools both public and private have been selected in order to carry out this study, these are; Government Bilingual Practicing High School (L.B.A) Yaoundé, Government Bilingual Secondary School (G.B.S.S) Etoug-Ebe, National Educational College of Arts and Science (N.E.S.C.A.S) Yaoundé, Christians Foundations Secondary and High school (C.F..H.S) Yaoundé and English High School (E.H.S) Yaoundé.

3.3. Population of the Study

3.3.1.Target Population of the Study

Amin (2005) defines the target population as the population to which the researcher ultimately wants to generalize the results. In this study, the target population is the students of secondary school that study economics in the Anglophone sub-system within the Yaoundé municipality. Of all the numerous public and private schools in this municipality, the researcher decided to select five schools as representatives for this research. This decision was based on the interaction of research need with availability of the students and proximity of the researcher. The availability of learners was sufficient for this research to be carried out in five schools. In addition, the researcher believes that five schools were highly representative and enough to provide us with meaningful research answers that could be generalized to the entire municipality.The targeted population also comprised of all the secondary school teachers teaching economics in this municipality.

3.3.2.Accessible Population

The accessible population is that portion of the population from which the sample is actually drawn. In other words, the accessible population can be seen as all members of a real or hypothetical set of learners, events or objects used to generalize the results of our research. The accessible population of this study is made up of all the students in form four offering

economics in Government Bilingual Practicing High School (LBA) Yaoundé, Government Bilingual Secondary School Etoug-Ebe, National Educational College of Arts and Science (NESCAS) Yaoundé, Christians Foundations Secondary and High school Jouvance and English High School (E.H.S) Yaoundé and also all the teachers teaching the students of form four in these schools.

Two main methodologies exist under which we have subsets. They are the probabilistic sampling and the non-probabilistic sampling technique. The non-probabilistic sampling technique: convenient sampling which is a sampling methodology based on the judgement of the researcher was used to select the schools as well as the class that is subjected to this study, considering the fact that economics studies in Anglo-Saxon Cameroon schools both private and public offer Economics only from forms three. All the teachers teaching Economics in form four in the five schools selected were sampled.

Table 1: Distribution of Economics Students, in form four in the various schools chosen.

SCHOOL	NUMBER OF STUDENTS IN FORM FOUR	NUMBER OF TEACHERS TEACHING FORM FOUR ECONOMICS
Government Bilingual Practicing High School (LBA) Yaoundé.	30	6
Government Bilingual Secondary School (G.B.S.S) ETOUG-EBE.	35	8
National Educational College of Arts and Science (NESCAS) Yaoundé	35	5
Christians Foundations Secondary and High school (C.F.H.S) Jouvance	24	5
English High School (E.H.S) Yaoundé	36	6
TOTAL	160	30

Source: Records and Admission Office, of each school visited, Yaoundé -2014/2015 admission statistics.

3.4.The Sampling Techniqueand Sample

The sample was chosen from the accessible population through the non-probabilistic sampling technique; convenient sampling. The sample of the study includes all the selected students offering Economics in form four in the five schools above this is a total of 160students offering Economics in forms four secondary schools in Yaoundé. The researcher intends to

work with the form four classes because they are considered mature enough to be able to provide essential answers to the questionnaire.

Since secondary schools are comprised of forms one to five and Economics in the Anglophone sub systems of Cameroon is offered only from forms three to five, from these three classes, form four (4) was selected as a sample for this study. Also, the number of teachers teaching Economics in form four in these schools were small so all the teachers were chosen as a sample for this study.

Table 2: Distribution sample of secondary school form four Economic students and teachers selected for study

SCHOOL	# OF STUDENTS IN FORM FOUR	% OF STUDENTS CHOSEN FORM EACH SCHOOL	# OF TEACHERS TEACHING FORM FOUR ECONOMICS	% OF TEACHERS CHOSEN FORM EACH SCHOOL
LBA Yaoundé.	30	18.74	6	20
G.B.S.S ETOUG-EBE.	35	21.88	8	26.66
(NESCAS) Yaoundé	35	21.88	5	16.67
(C.F.H.S) Jouvence	24	15.00	5	16.67
(E.H.S) Yaoundé	36	22.50	6	20
TOTAL	160	100	30	100

Source: Adapted from Table1 above.

The table above shows that 160 students and 30 teachers were selected for this study. Of the 160 students selected, 65 (40.62%) of them were sampled from public bilingual secondary schools while 95(59, 38%) of students were sampled form private schools. On the other hand, of the 30 teachers sampled, 14(46.66%)of them taught in public schools while 16 (53.34%) was sampled from private schools.

3.5. Research Instrument

A questionnaire is used to collect information from the student and from the teachers. A questionnaire is used to obtain data on feelings and perceptions of a group of people towards certain issues. The questionnaire used here is closed-ended. The questionnaire is made up of five sections divided as follows:

Section A: on demographic information consisting of 3 items.

Section B: consists of 6 items on how the appropriate use of visual display devices will influence the academic performance of students in Economics.

Section C: consists of 10 items on uses of print materials and their importance towards the academic performance of students in the teaching/learning process of Economics at the secondary level of education.

Section D: consists of 5 items on the use of graphic materials and their influences on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Section E: lastly comprises of 5 items related to the dependent variable of the study which is students' academic performance and their relation to the study as a whole.

The items of the questionnaire would be responded to by using a scale with acronyms: SA for strongly agree, A for agree, D for disagree, SD for strongly disagree and N for neutral.

3.6. Validation and Reliability of Instrument

According to Amin (2005), *validity is the ability to produce findings that are in agreement with theoretical or conceptual values, in other words, to produce accurate results and to measure what is supposed to be measured.* It refers to the extent and accuracy in which a research instrument actually measures what it intends to measure.

3.6.1.Validity of Instrument

Validity is one of the most important aspects to consider when preparing or selecting an instrument for data collection and interpretation. The drawing of conclusions based on the data obtained by the use of an instrument is what validity is all about. According to Amin (2005) a test or instrument is not valid per se; it is valid for a particular purpose and for a particular group. In this study, the questionnaire designed is valid to the students in form four and in an economics classroom.

This study intends to evaluate the usefulness of didactic materials to the teaching and learning of economics via the learner's performance. One way to determine if learning has taken place is when learners perform better than usual. The questionnaire was constructed based on the research questions and research hypotheses of this study. During completion of items on the questionnaires, the objective of the research was explained to the form four students and they were instructed on how to complete the questionnaires. The copies were

collected immediately on the spot after completion. Amin (2005), elaborates that construct validity focuses on the assessment of whether a particular measure relates to the other measures consistent with theoretically derived hypothesis concerning the relationships among the concepts.

3.6.2.Reliability of Instrument

According to Amin (2005), reliability is the dependability and trustworthiness of a measuring instrument. It is the degree to which the instrument consistently measures whatever it is measuring. When an instrument is repeatedly used and it produces the same results, it implies that it is reliable. In order to ensure reliability in this study, the researcher embarked on the following steps;

After the questionnaire was constructed and validated, it was pre-tested on 20 economics students in form four and five form four economics teachers in National Educational Service College of Arts and science. The responses they gave was similar to what the researcher expected and their approach in responding to the items enabled the researcher to modify the items on the questionnaire for better data collection during proper administration of the questionnaire. The researcher then proceeded to administer the questionnaire.

3.7. Administration of Instrument

The questionnaire was administered to the 160 respondents or students of form four offering economics as well as to the 30 teachers who teach this subject by the researcher in person. This was in order to ascertain the effects of the use of didactic materials and aids on students' academic performances in economics after explanations on the purpose of the questionnaire and a promise to confidentially handle respondents' diverse opinions.

3.8. Method of Data Analysis

Bhattacherjee (2012) asserts that numerical data collected in a study can be analysed quantitatively using statistical tools in two different ways: descriptive analysis and inferential analysis. According to him, descriptive analysis refers to statistically describing, aggregating and presenting the construct of interest or associations between the constructs while inferential analysis refers to the statistical testing of hypothesis. Test concemed with using

selected sample data compared with population data in a variety of ways is called inferential statistic test.

Descriptive statistics is used because it provides us with an overall picture of the characteristics of the population. This overall picture is presented through graphs, tables, charts, mean, mode, median standard deviation and variance. The above listed are parameters that help us to do inferential statistical calculations. Data collected by the use of questionnaires shall be analysed descriptively and inferentially. The responses shall be analysed using simple frequencies and percentages (relative frequencies) in search of trends in the opinions of students and teachers. Inferentially, contingency tables shall be established and chi-square calculated to determine whether or not differences in opinions exist arising from such categories as class, schools, nature of schools, opinions of teachers, opinions of students and teaching/ learning aids.

Conclusion

This chapter outlined in relation to this study the research design of the study which is the survey research design, the area of the study which is the Centre Region of Cameroon, and the population of the study. The population of this study was divided into the target population which is the Centre Region of Cameroon and the accessible population which is form four economics teachers and students from five selected schools in the Anglophone sub-system of education in Yaoundé. The non-probabilistic convenient sampling technique was used in this study in selecting the schools under study and the class to be studied. 160 students are selected as well as 30 teachers to be sampled for this study. A questionnaire is used in collecting data from both the teachers and the students and the chi-square is used as a method of data analysis for this study. Data collected is analysed descriptively and inferentially. The responses of respondents were analysed using simple frequencies and percentages in search of trends in the opinions of students and teachers. Inferentially, contingency tables were established and chi-square calculated to determine whether or not differences in opinions exist arising from such categories as class, schools, age, school performance, teachers opinions, students opinions and teaching/ learning aids. Economics is a subject that requires tact for it to be properly incorporated by the learners when they are taught by their teachers. Therefore, for

it to be taught effectively and for the learners to reach their end game the use of didactic materials cannot be undermined in improving learning and creativity.

Table 3:TABLE OF OPERATIONALIZATION OF VARIABLES

General research question	General research hypotheses	Specific research hypotheses	Variables	Indicators	Modalities
Does the use of didactic materials in Economics influence the academic performances of learners in secondary schools in the Centre Region of Cameroon	There is a significant relationship between the use of didactic materials and the academic performance of learners in Economics in secondary schools in the Centre Region of Cameroon.	The appropriate use of Visual display devices has a significant impact on the academic performances of learners in Economics in secondary schools in the Centre Region of Cameroon.	IV_1 :Visual display devices	Chalkboards, Magnetic boards, Bulletin Boards, Cloth Boards	Always Sometimes Never
			DV: Students'academic performance	-Good -Average -Poor	Always Sometimes Never
		The organized use of Print materials has a significant impact on the academic performance of learners in Economics in secondary schools in the Centre Region of Cameroon.	IV_2 : Print materials	Textbooks, Encyclopedias, Dictionaries, journals	Always Sometimes Never
			DV: Students' academic performance	-Good -Average -Poor	Always Sometimes Never
		The use of Graphic materials has an extensive influence on the academic performance and improvements of learners in Economics in secondary schools in the center region of Cameroon.	IV_3 : Graphic materials	Graphs, Charts, Maps, Globes, Pictures	Always Sometimes Never
			DV: Students' academic performance	-Good -Average -Poor -Academic performance	Always Sometimes Never

CHAPTER FOUR

PRESENTATION OF DATA AND ANALYSIS

4.0. Introduction

This chapter consists of presentation of data gotten from the field and analysed using the SPSS (Statistical Package for Social Sciences) software. The data consist of opinions gotten from 160 questionnaires answered by students and the 30 questionnaires answered by teachers in economics in the central region of Cameroon. The use of visual display devices, print materials, graphic materials and didactic materials in general by both the teacher and learners during and after the teaching-learning process is assessed. The types of analysis used in this study consist of descriptive and inferential analysis.

Descriptive statistic is used to describe the basic features of the data in this study. They provide simple summary about the sample and the measures. It is used simply to describe what is going on in our data. On the other hand, inferential statistic is used to make judgments and inferences from this data to more general condition. This study was analysed in two parts: data gotten from the students of form four studying economics was analysed, another data gotten from the teachers of Economics in form four was also analysed and both results compared.. Following every analysis, the tables and charts below will be explained.

PART I

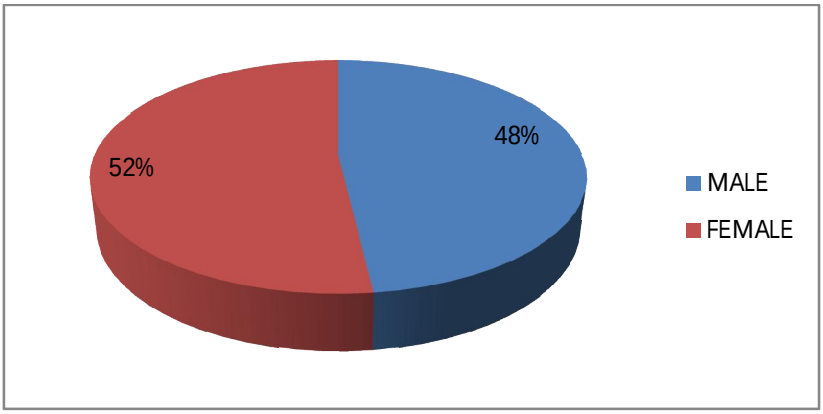
4.1. Personal Information of the Study

SECTION A: Demographic Information

The personal information of the study includes; gender, age and religion of the students sampled.

Table 4: Distribution of Gender in form four

		frequency	percentage
Modalities	MALE	77	48.1
	FEMALE	83	51.9
	TOTAL	160	100.0

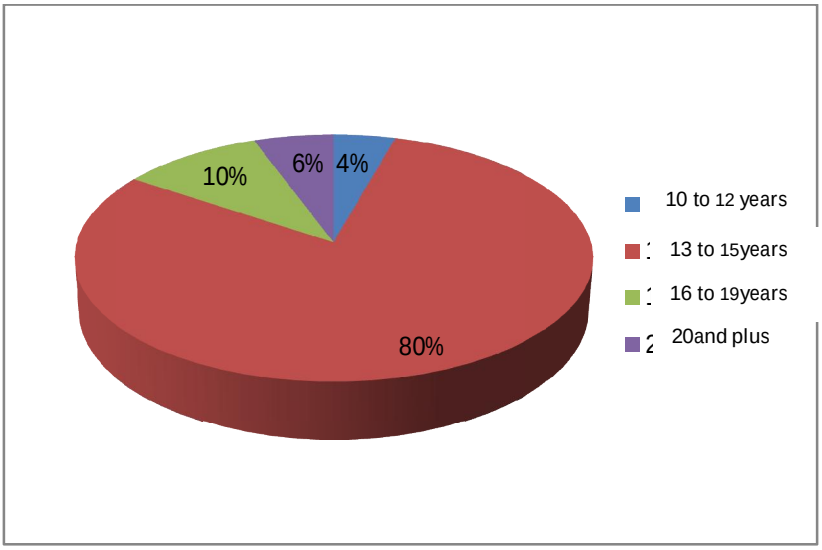


The table above shows the distribution of sex in form four of the five schools selected in the central region of Cameroon, Yaoundé. The table shows that 77 (48%) of males and 83 (52%) of females were sampled making a total of 160 students offering economics effectively sampled for this study. This distribution shows that more of females than males offering economics were sampled.

The chart above shows the distribution of the respondents (students). The red part of the chart indicates the percentage of females sampled (52%), while the blue part indicates the number of males sampled (48%) out of 160 students making a total of 83 females and 77 males sampled. The red part is larger than the blue part, demonstrating that more girls or females than males were sampled for this study.

Table 5: Ages of form four students

	frequency	Percentage
Modalities 10-12	7	4.4
13-15	128	80.0
16-19	16	10.0
20AND PLUS	9	5.6
TOTAL	160	100.0

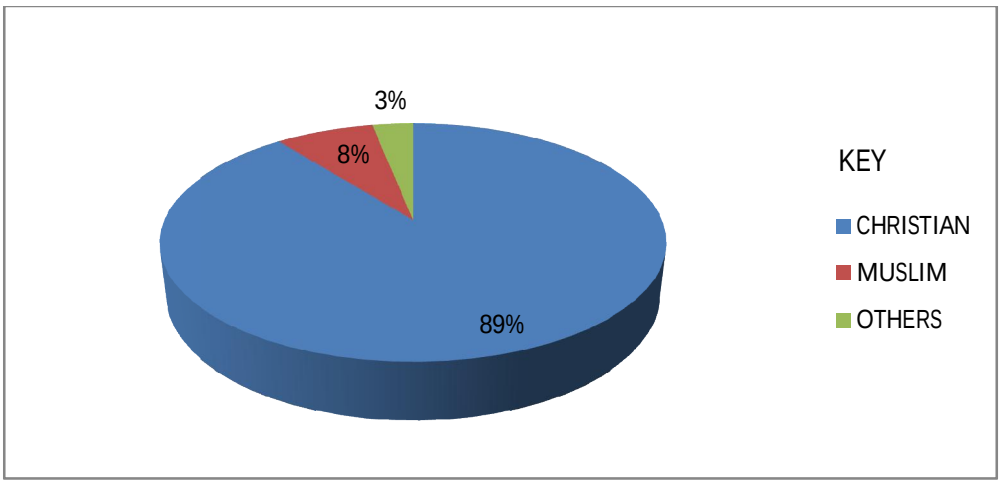


The table above shows the distribution of ages in form four of the five schools selected in the central region of Cameroon, Yaoundé. The table shows that the learners' ages range from 10 to 20+ years old. It also shows that 128 (80%) of the students ranged from the ages 13 to 15years with the highest percentage, 16 students (10%) range from ages 16 to 19, 9 students (6%) are 20 years old and above and lastly 7 students (4%) ranging from 10 to 12years in form four. This distribution shows that the highest number of students range from the ages 13 to 15.

The chart above shows the distribution of the respondents (students). The red part (ages 13 to 15) of the chart being the largest with 128(80%) students, followed by the green part, ages 16 to 19 with 16 (10%)students, the purple part with a number of 9(6%) students sampled that are 20 years old and above in form four. Finally, the smallest percentage which is 4 % (6 students) indicated that they ranged between the ages 10 to 12.

Table 6:Religiousbackgrounds

		frequency	Percentage
Modalities	CHRISTIAN	143	89.4
MUSLIM		12	7.5
OTHERS		5	3.1
TOTAL		160	100.0



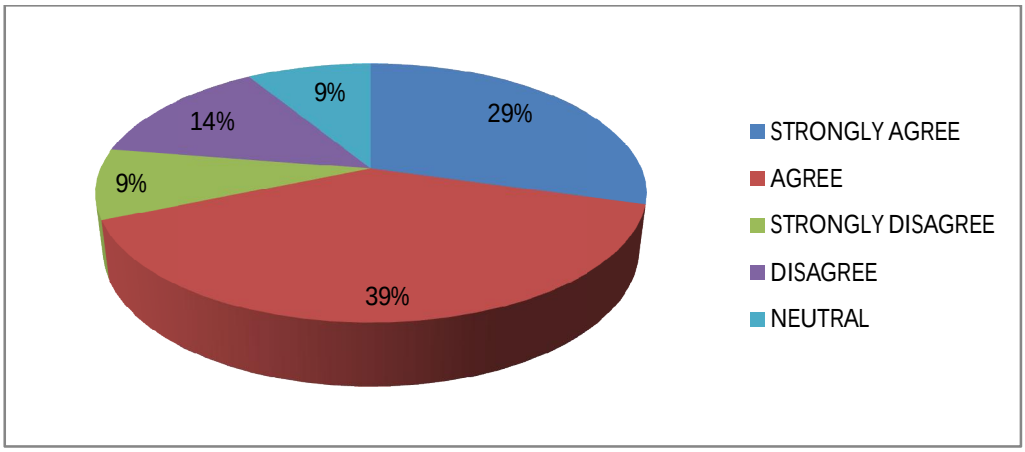
The table above shows the distribution of religion or religious backgrounds in form four of the five schools selected in the Centre Region of Cameroon, Yaoundé. The table shows that 143 (89.4%) of the students sampled are Christians, 12 (7.5%) of the students sampled are Muslims and lastly only 5 (3.1%) of the students sampled are from other religious denominations. They may as well be Pagans, Buddhist or from any other denomination unknown to us.

The chart above shows the distribution of the respondents (students). The red part of the chart indicates the percentage of Muslims sampled (48%) making a total of 12 Muslim out of 160, the green part of the graph shows the students of other religious denominations who are neither Christians nor Muslims sampled with 5(3%) of the students, while the blue part indicates the highest number sampled out of the 160 students with 143 (89%) of them being Christians.

SECTION B: Theme 2: Visual Display Devices

Table 7: The use of the chalkboard by the teacher constantly motivates me to learn

	frequency	Percentage
Modalities STRONGLY AGREE	47	29.4
AGREE	63	39.4
STRONGLY DISAGREE	14	8.8
DISAGREE	22	13.8
NEUTRAL	14	8.8
TOTAL	160	100.0

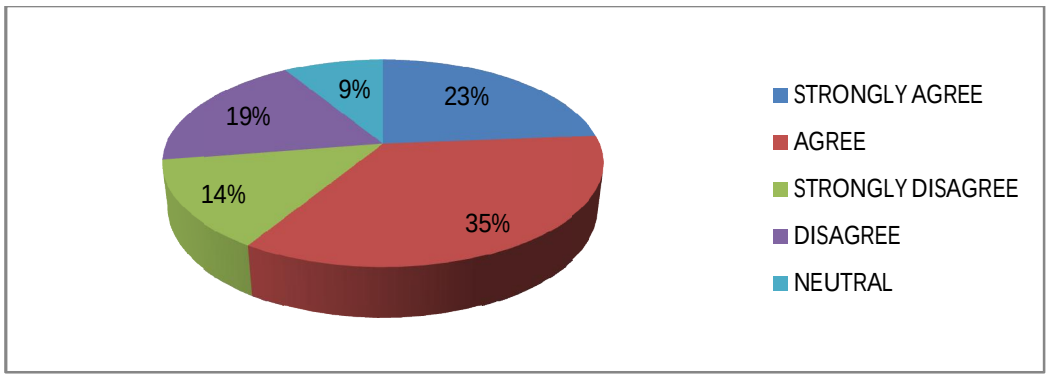


The table above shows that 47 (29.4%) of the students strongly agreed, 63 (39.4%) of the students just agreed to the fact that the use of the chalkboard by the teacher constantly motivates them to learn, while 14(8.8%) of the students strongly disagreed, 22 (13.8%) of the students disagreed and 14 (8.8%) of the students were neutral about the use of the chalkboard by the teacher and its constant motivation to their learning process.

The chart above also indicates that a larger percentage of the sample 63(39%) and 47(29%) indicated by the red part and the blue part agreed and strongly agreed to the fact that the use of the chalkboard by the teacher constantly motivates them to learn the subject Economics. the green part 14(9%) of the students strongly disagreed, the purple part 22(14%) of the students disagreed and the sky blue part indicates that 14(9%) of the students were neutral to the fact that the use of the chalkboard by the teacher constantly motivates them to learn.

Table 8: Be it a blackboard, a green board, bulletin board or white ink board learning with it effectively at all times makes no difference

	frequency	Percentage
Modalities STRONGLY AGREE	38	23.8
AGREE	56	35.0
STRONGLY DISAGREE	22	13.8
DISAGREE	30	18.8
NEUTRAL	14	8.8
TOTAL	160	100.0

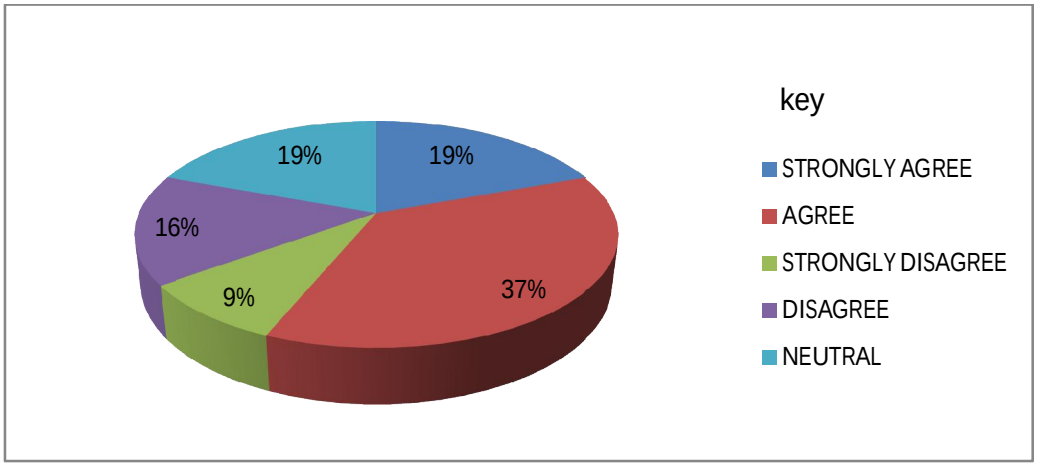


The table above shows that 38 (23.8%) of the students strongly agreed, 56 (35.0%) of the students just agreed to the fact that be it a blackboard, a green board, bulletin board or white ink board learning with it effectively at all times makes no difference them, while 22(13.8%) of the students strongly disagreed, 30 (18.8%) of the students disagreed and 14 (8.8%) of the students were neutral about the fact that be it a blackboard, a green board, bulletin board or white ink board learning with it effectively at all times made no difference to them.

The chart above also indicates that a larger percentage of the sample 38(23%) and 56(35%) indicated by the blue part and the red part agreed and strongly agreed to the fact that be it a blackboard, a green board, bulletin board or white ink board learning with it effectively at all times made no difference to them when learning the subject Economics. The green part 22(13.8%) of the students strongly disagreed, the purple part 30(19%) of the students disagreed and the sky blue part indicated that 14(9%) of the students were neutral to the fact be it a blackboard, a green board, bulletin board or white ink board learning with it effectively at all times made no difference to them.

Table 9: Learning is a lot easier when my teacher diverse his use of the board aesthetically

	frequency	Percentage
Modalities STRONGLY AGREE	31	19.4
AGREE	59	36.9
STRONGLY DISAGREE	14	8.8
DISAGREE	25	15.6
NEUTRAL	31	19.4
TOTAL	160	100.0

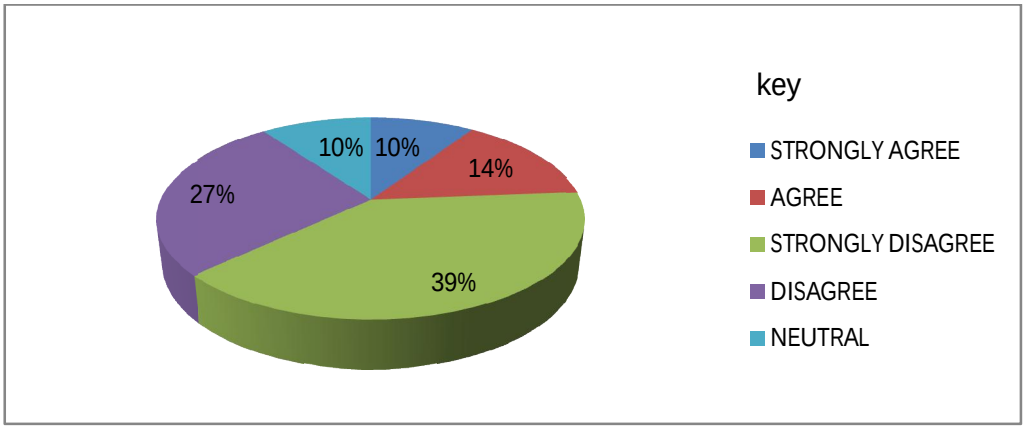


The table above shows that 31(19.4%) of the students strongly agreed, 59(36.9%) of the students agreed to the fact that learning is a lot easier when their Economics teacher diverse his use of the chalkboard aesthetically, while 14(8.8%) of the students strongly disagreed, 25 (15.6%) of the students disagreed and 31 (8.8%) of the students were neutral about the fact that learning is a lot easier when their teacher diverse his use of the board aesthetically during the teaching-learning process.

The chart above also indicates that a larger percentage of the sample 31(19%) and 59(37%) indicated by the red part and the blue part agreed and strongly agreed to the fact that learning was a lot easier when their teacher diverse his use of the board aesthetically in teaching Economics. While the green part 14(9%) of the students strongly disagreed, the purple part 25(16%) of the students disagreed and the sky blue part indicated that 31(19%) of the students were neutral to the fact that learning was a lot easier when their teacher diverse his use of the board aesthetically.

Table 10: More often than never I find it hard to see on the chalkboard

	frequency	Percentage
Modalities STRONGLY AGREE	15	9.4
AGREE	23	14.4
STRONGLY DISAGREE	63	39.4
DISAGREE	43	26.9
NEUTRAL	16	10.0
TOTAL	160	100.0

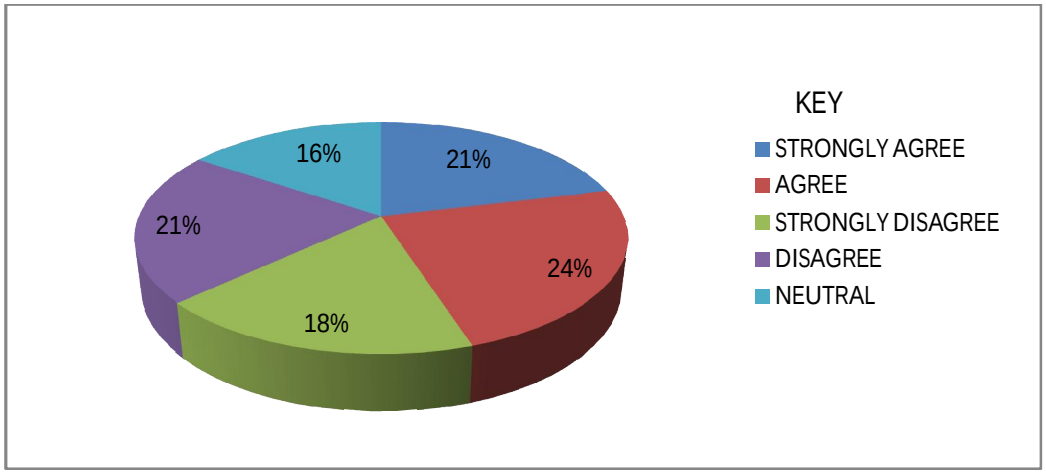


The table above shows that only 15 (9.4%) of the students strongly agreed, 23 (14.4%) of the students agreed to the statement that more often than never they found it hard to see on the board so they did not need it, while 63(39.4%) of the students strongly disagreed, 43 (26.9%) of the students disagreed and only 16 (10%) of the students were neutral about the fact that more often than never they found it hard to see on the board and therefore did not need it. This shows how important the use of the chalkboard by the teacher during the didactic process motivates students in Economics.

The chart above also indicates that a smaller percentage of the sample 15(10%) and 23(14%) indicated by the blue part and the red part agreed and strongly agreed to the fact that more often than never they found it hard to see on the board and therefore did not need it. While the largest portion the green part 63 (39%) of the students strongly disagreed, the purple part 44(27%) of the students disagreed and the sky blue part indicated that 15(10%) of the students were neutral to the fact that more often than never they found it hard to see on the board and therefore did not need it. Showing how important the chalkboard is to them.

Table 11: I have never seen a cloth board

	frequency	Percentage
Modalities STRONGLY AGREE	34	21.3
AGREE	38	23.8
STRONGLY DISAGREE	29	18.1
DISAGREE	34	21.3
NEUTRAL	25	15.6
TOTAL	160	100.0

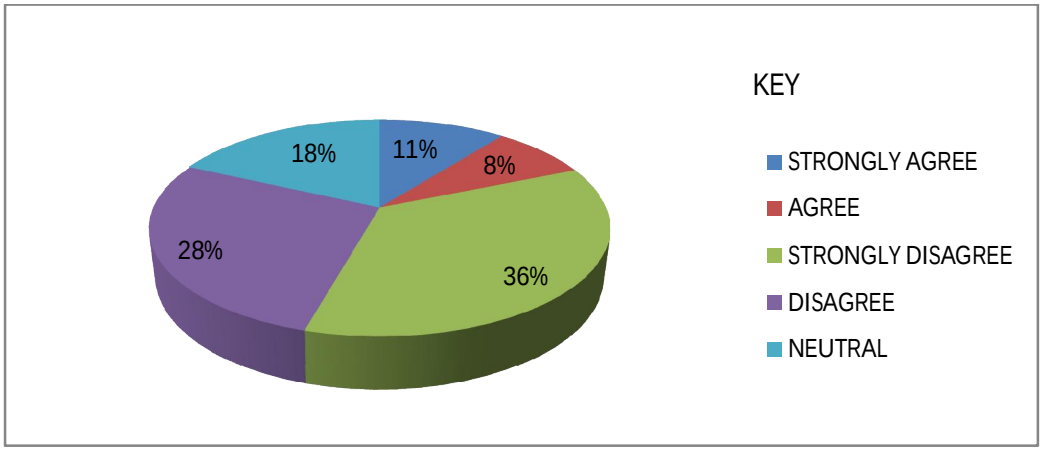


The table above shows that 34(21.3%) of the students strongly agreed, 38 (23.8%) of the students agreed, while 29(18.1%) of the students strongly disagreed, 34 (21.3%) of the students disagreed and 25 (15.6%) of the students were neutral about the fact that they had never seen a cloth board. This shows that more than half of the students studying economics in secondary schools in Yaoundé do not even have knowledge of the basic materials that will help them during their study.

The chart also indicates 34 (21%) and 38 (24%) of the students indicated by the blue part and the red part agreed and strongly agreed to the fact that they had never seen a cloth board. While the green part 29(18%) of the students strongly disagreed, the purple part 34(21%) of the students disagreed and the sky blue part indicated that 25(16%) of the students were neutral about the statement if they had ever seen a cloth board.

Table 12: There is a bulletin board at the corner of my classroom

	frequency	Percentage
Modalities STRONGLY AGREE	17	10.6
AGREE	13	8.1
STRONGLY DISAGREE	57	35.6
DISAGREE	44	27.5
NEUTRAL	29	18.1
TOTAL	160	100.0



The table above shows that 17 (10.6%) of the students strongly agreed, 13 (8.1%) of the students agreed, while 57(35.6%) of the students strongly disagreed, 44 (27.5%) of the students disagreed and 29 (18.1%) of the students were neutral about the existence of a bulletin board at the corner of their classroom provided for either by their teacher or the school.

The chart above also indicates that a smaller percentage of the sample 17 (11%) indicated by the blue part strongly agreed and 13 (8%) indicated by the red part, agreed to the existence of a bulletin board at the corner of their classroom, While the green part 57 (36%) of the students strongly disagreed, the purple part 44(27%) of the students disagreed and the sky blue part indicated that 29(18%) of the students were neutral about the existence of a bulletin board at the corner of their classroom.

Table 13: SUMMARY OF SECTION B

Crossed table VISUAL DISPLAY DEVICES * ACADEMIC PERFORMANCE

Frequency

		ACADEMIC PERFORMANCES																
		6,00	7,00	8,00	9,00	10,00	11,00	12,00	13,00	14,00	15,00	16,00	17,00	18,00	19,00	20,00	21,00	Total
VISUAL DISPLAY DEVICES	9.00					1												1
	10.00							1										1
	11.00										2							2
	12.00		1										1					2
	13.00			1	1	1	3	2	1				1		1	1	1	13
	14.00	1		1		1	2	5	1		1			1				13
	15.00		1	2		2		7	2	1	1		1					17
	16.00		2	1	2	2	1	4	2	2	2			1		1		20
	17.00	1	2	1	1	2	1	1	3	2	1	3	1					19
	18.00			1	2	2	5	2	2	3	1	4			1			23
	19.00			3		1	1	2	3	1	4	2		1	1			19
	20.00	1	1		1	2	1	1				3			3			13
	21.00				1		2	1		1	1			1				7
	22.00		1		1			1		2			1	1				7
	23.00			1										1				2
	24.00									1								1
	24,00																	
Total		3	8	11	9	14	16	27	14	13	13	12	5	6	6	2	1	160

The chi square statistical table that follows determines whether or not teachers' use of important visual display devices or materials in secondary school influences student's academic performance in Economics.

Table 14: Summary of Chi-Square Statistics for Contingency table 13

Chi-Square Tests

	Value	df	Asymp. Sig. (2-tailed)
Pearson Chi-square	232.871[a]	225	.345
Likelihood Ratio	187.460	225	.968
Linear-by-Linear association	.943	1	.331
N of valid Cases	160		

Table 15: decision rule

df	225	Since $\chi^2_{cal}(232.871) > \chi^2_{crit}(231.994)$, H_o is rejected and H_a is accepted.
χ^2_{crit}	231.994 (s.l. = 0.05)	
χ^2_{cal}	232.871	
Decisions	(a) Reject H_o if $\chi^2_{cal} > \chi^2_{crit}$ (b) Accept H_o if $\chi^2_{cal} < \chi^2_{crit}$	

Ho: The appropriate use of visual display devices has no significant impact on the academic performances of students in Economics at the secondary level of education in the Centre Region of Cameroon.

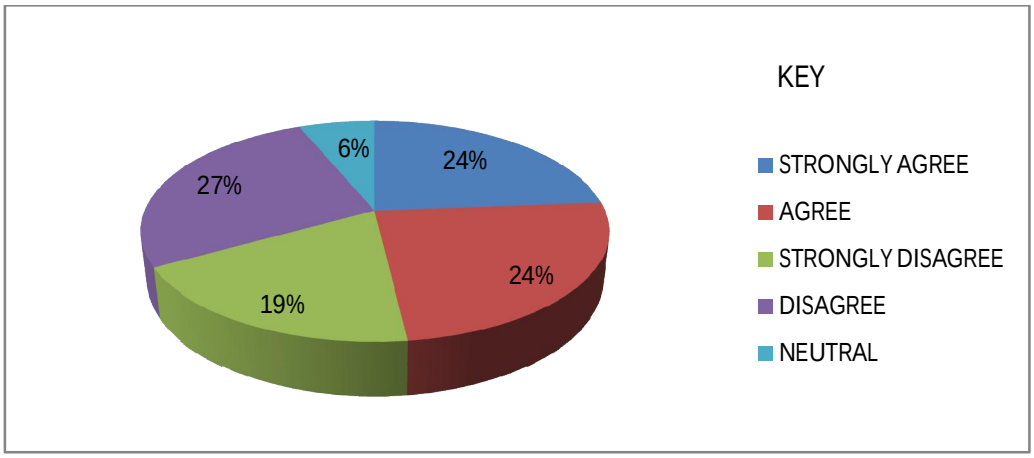
Ha: The appropriate use of visual display devices has a significant impact on the academic performances of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Decision: Ho is rejected thereby accepting Ha. Accepting Ha will imply that the appropriate use of visual display devices has a significant impact on the academic performances of students in Economics at the secondary level of education in the Centre Region of Cameroon as per the information gotten from the teachers sampled.

SECTION C: Theme 3: Print Materials

Table 16: My teacher obliges me to purchase all my textbooks before attaining his lessons

	frequency	Percentage
Modalities STRONGLY AGREE	38	23.8
AGREE	39	24.4
STRONGLY DISAGREE	30	18.8
DISAGREE	43	26.9
NEUTRAL	10	6.3
TOTAL	160	100.0

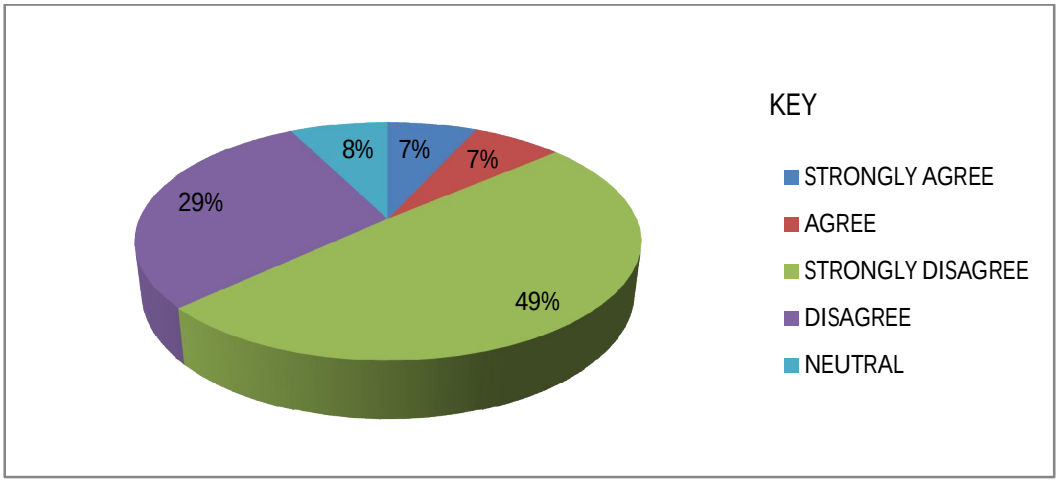


The table above shows that 38 (23.8%) of the students strongly agreed, 39(24.4%) of the students agreed, 30(18.8%) of the students strongly disagreed, 43(26.9%) of the students disagreed and 10 (6.3%) of the students were neutral about the fact that their teacher obliged them to purchase all their textbooks before attending his lessons. This showed that more economics teachers in private secondary schools insisted on the purchase of these books while those of public schools did not consider it a necessity.

The chart above indicates that of the sample 38(24%) and 38(24%) indicated by the red part and the blue part agreed and strongly agreed, while the green part 30(19%) of the students strongly disagreed, the purple part 43(27%) of the students disagreed and the sky blue part indicated that 10(6%) of the students were neutral about the fact that their teacher obliged them to purchase all their textbooks before attending his lessons.

Table 17: I hate reading textbooks since I consider them very boring and not colourful

	Frequency	Percentage
Modalities STRONGLY AGREE	11	6.9
AGREE	11	6.9
STRONGLY DISAGREE	79	49.4
DISAGREE	47	29.4
NEUTRAL	12	7.5
TOTAL	160	100.0

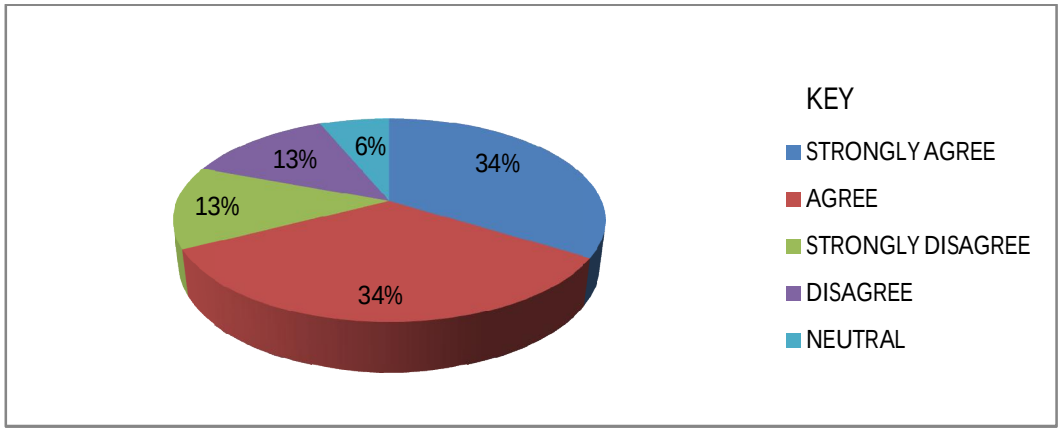


The table above shows that 11(6.9%) of the students strongly agreed, 11 (6.9%) of the students also agreed to the fact that they hate reading textbooks since they consider them very boring and not colourful, while 79(49.4%) of the students strongly disagreed, 47 (29.4%) of the students disagreed and 12(7.5%) of the students were neutral about hating to read textbooks since they consider them very boring and not colourful. This implies that at least a larger part of the students enjoy using and reading their textbooks.

The chart above also indicates that a smaller percentage of the sample 11(7%) and 11(7%) indicated by the red part and the blue part agreed and strongly agreed to the fact they hated reading textbooks since they considered them very boring and not colourful. While the green part 79(49%) of the students strongly disagreed, the purple part 47(29%) of the students disagreed and the sky blue part indicated that 12(8%) of the students were neutral to the statement I hate reading textbooks since I consider them very boring and not colourful.

Table 18: For each lesson I take in class I always make sure I read a textbook the previous day

	frequency	Percentage
Modalities STRONGLY AGREE	54	33.8
AGREE	54	33.8
STRONGLY DISAGREE	21	13.1
DISAGREE	21	13.1
NEUTRAL	10	6.3
TOTAL	160	100.0

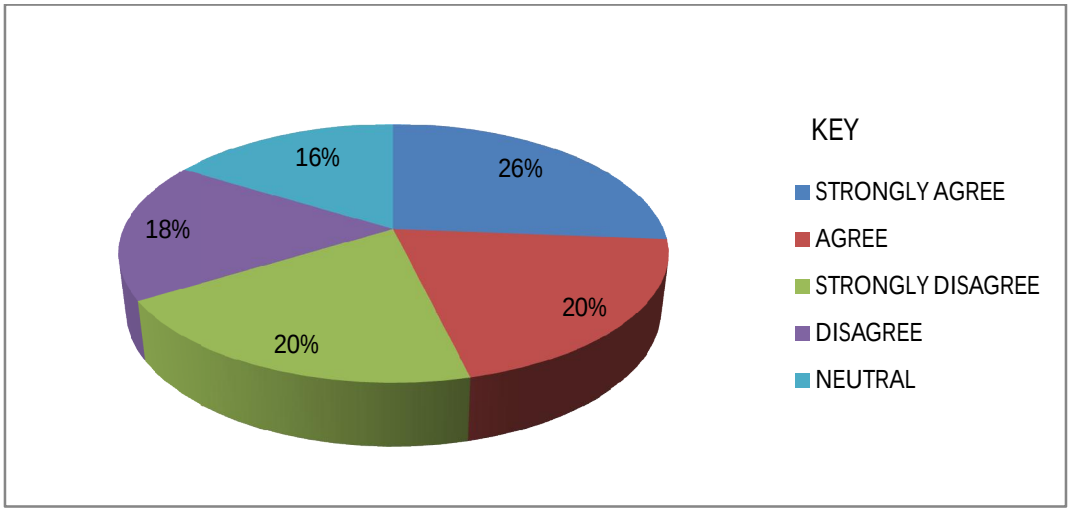


The table above shows that 54 (33.8%) of the students strongly agreed, the same 54 (33.8%) of the students agreed to the statement that for each lesson they take in class they always make sure they read a textbook the previous day before their lesson in Economics, while 21(13.1%) of the students strongly disagreed, 21 (13.1%) of the students disagreed and lastly 10(6.3%) of the students were neutral about the statement that for each lesson they take in class they always made sure they read a textbook the previous day before their lesson in Economics.

The chart above also indicates that a smaller percentage of the sample 54(34%) and 54(34%) indicated by the red part and the blue part agreed and strongly agreed to the fact that for each lesson they take in class they always make sure they read a textbook the previous day before their lesson in Economics. While the green part 21(13%) of the students strongly disagreed, the purple part 21(13%) of the students disagreed and the sky blue part indicated that 10(6%) of the students were neutral to the statement that for each lesson they take in class they always make sure they read a textbook the previous day before their lesson in economics.

Table 19: Since day one of my schooling, I have never read an electronic book

	frequency	Percentage
Modalities STRONGLY AGREE	42	26.3
AGREE	32	20.0
STRONGLY DISAGREE	32	20.0
DISAGREE	28	17.5
NEUTRAL	26	16.3
TOTAL	160	100.0

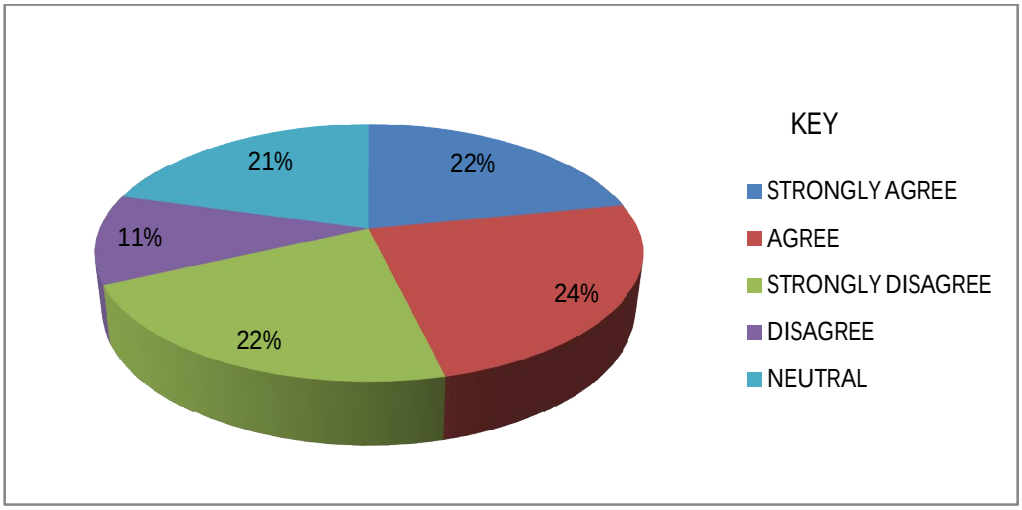


The table above shows that 42 (26.3%) of the students strongly agreed, 32 (20%) of the students agreed, 32(20%) of the students strongly disagreed, 28 (17.5%) of the students disagreed and 26 (16.3%) of the students were neutral about the statement since day one of my schooling, I have never read an electronic book. An e-book is any book written out in an electronic form that can be accessed via electronic means this could be on the internet or a blog by the use of a computer or a phone for example. The data shows that more than half of the students in economics do not know what an electronic book is.

The chart above also indicates that 42(26%) of the students indicated by the blue part strongly agreed and 32(20%) indicated by the red part agreed while the green part 32(20%) of the students strongly disagreed, the purple part 28(18%) of the students disagreed and the sky blue part indicated that 26(16%) of the students were neutral to the fact that Since day one of their schooling, they had never read an electronic book.

Table 20: I do not know what an encyclopedia is

	frequency	Percentage
Modalities STRONGLY AGREE	35	21.9
AGREE	39	24.4
STRONGLY DISAGREE	35	21.9
DISAGREE	18	11.3
NEUTRAL	33	20.6
TOTAL	160	100.0

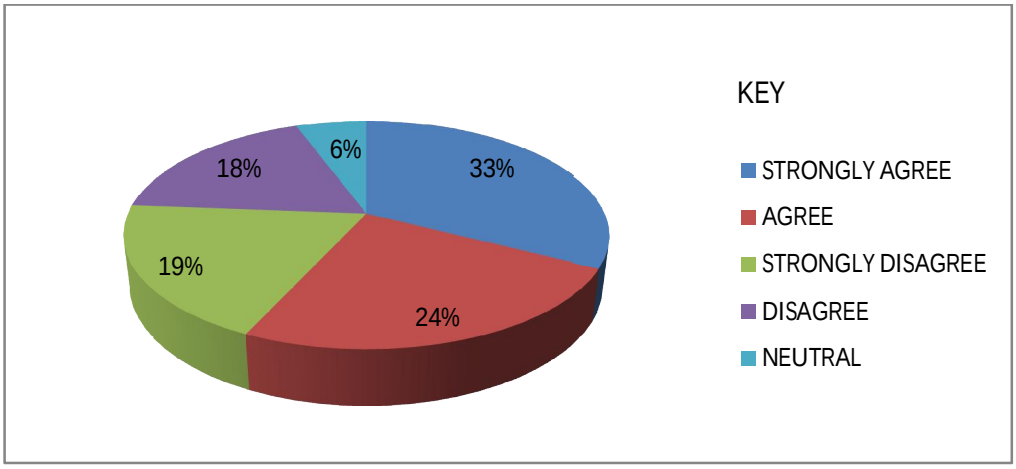


The table above shows that in a bit to find out if the learners knew what an encyclopaedia, a type of economics didactic material was, 35(21.9%) of the students strongly agreed, 39(24.4%) of the students just agreed, 35(21.9%) of the students strongly disagreed, 18 (11.3%) of the students disagreed and 33 (20.6%) of the students were neutral. This implies that a larger percentage of the students do not know what an encyclopaedia is.

The chart above also indicates that 39(24%) and 35(22%) indicated by the red part and the blue part agreed and strongly agreed, while the green part 35(22%) of the students strongly disagreed, the purple part 18(11%) of the students disagreed and the sky blue part indicated that 33(21%) of the students were neutral about the knowledge and use of an encyclopaedia.

Table 21: Each time I do not understand a word in economics I use a dictionary to clarify my doubts

	frequency	Percentage
Modalities STRONGLY AGREE	52	32.5
AGREE	39	24.4
STRONGLY DISAGREE	31	19.4
DISAGREE	29	18.1
NEUTRAL	9	5.6
TOTAL	160	100.0

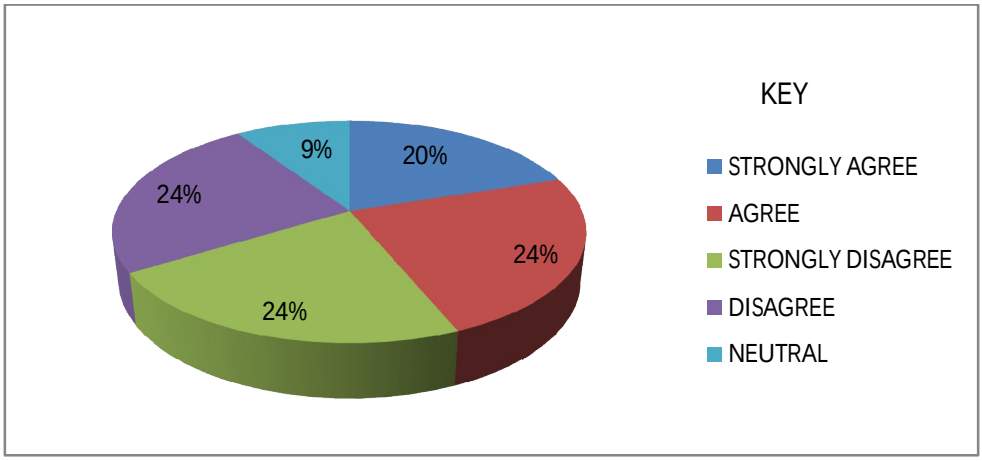


The table above shows that 52 (32.5%) of the students strongly agreed, 39 (24.4%) of the students agreed, while 31(19.4%) of the students strongly disagreed, 29 (18.1%) of the students disagreed and only 9 (5.6%) of the students were neutral about the fact that each time they did not understand a word or phrase in Economics, they used a dictionary to clarify their doubts.

The chart above also indicates that a 52 (33%) and 39(24%) indicated by the blue part and the red part agreed and strongly agreed, while the green part 31 (19%) of the students strongly disagreed, the purple part 29(18%) of the students disagreed and the sky blue part indicated that 9(6%) of the students were neutral to the fact that each time they did not understand a word or phrase in Economics, they used a dictionary to clarify their doubts.

Table 22: I read newspapers and journals on Economic matters each time I lay my hands on them

	frequency	Percentage
Modalities STRONGLY AGREE	32	20.0
AGREE	38	23.8
STRONGLY DISAGREE	36	22.5
DISAGREE	39	24.4
NEUTRAL	15	9.4
TOTAL	160	160

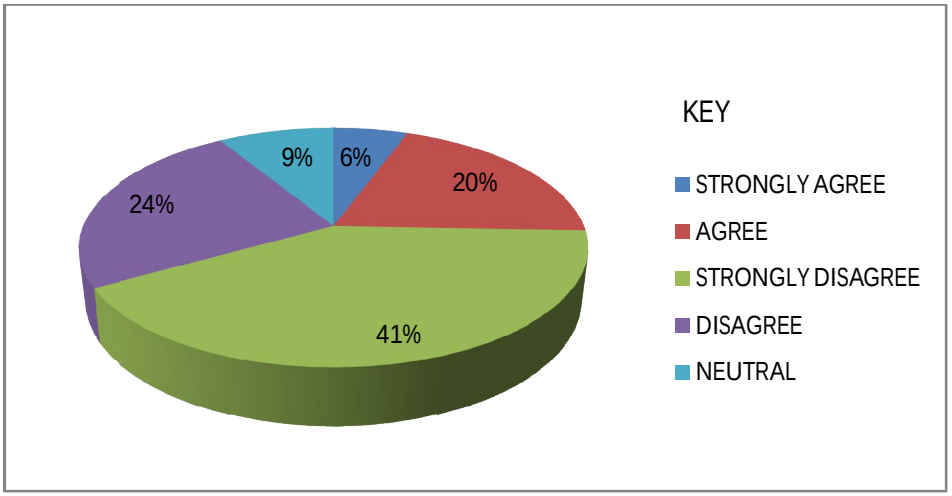


The table above shows that 32 (20%) of the students strongly agreed, 38 (23.8%) of the students agreed, while 36(22.5%) of the students strongly disagreed, 39 (24.4%) of the students disagreed and only 15 (9.4%) of the students were neutral about the statement, I read newspapers and journals on economic matters each time I lay my hands on them. This implies that more than 46% of the students do not read newspapers and journals on Economic matters even when they lay their hands on them.

The chart above also indicates that 32(20%) and 38(24%) indicated by the blue part and the red part agreed and strongly agreed, the green part 36 (23%) of the students strongly disagreed, the purple part 39(24%) of the students disagreed and the sky blue part indicated that 15(9%) of the students were neutral about the statement, I read newspapers and journals on Economic matters each time I lay my hands on them.

Table 23: My teacher presents to us new information on Economics from newspapers daily

	frequency	Percentage
Modalities STRONGLY AGREE	9	5.6
AGREE	32	20.0
STRONGLY DISAGREE	66	41.3
DISAGREE	39	24.4
NEUTRAL	14	8.8
TOTAL	160	100.0

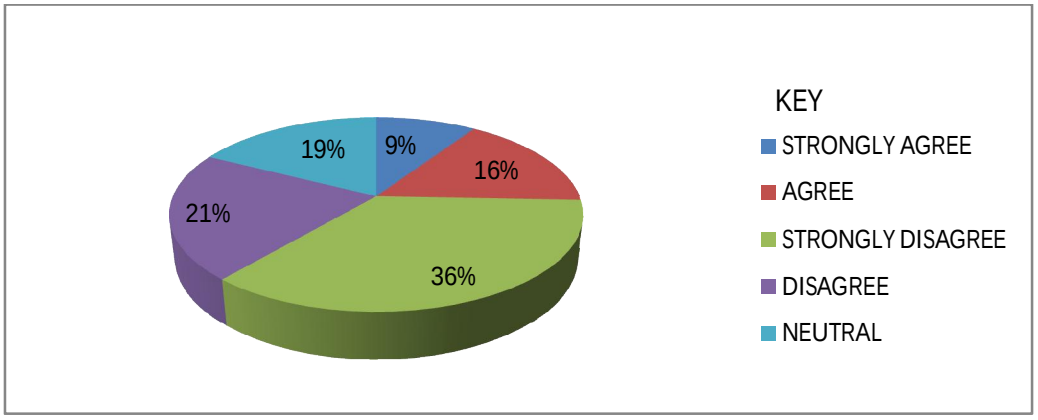


The table above shows that only 9 (5.6%) of the students strongly agreed, 32 (20%) of the students agreed, while 66(41.3%) of the students strongly disagreed, 39 (24.4%) of the students disagreed and only 14 (8.8%) of the students were neutral about the fact that their teacher presents to them new information on Economics from newspapers daily.

The chart above also indicates that a smaller percentage of the sample 9(6%) and 32(20%) indicated by the blue part and the red part agreed and strongly agreed, the largest portion the green part 66 (41%) of the students strongly disagreed, the purple part 14(24%) of the students disagreed and the sky blue part indicated that 14(6%) of the students were neutral about the fact that their teacher presents to them new information on Economics from newspapers daily.

Table 24: I do not know how to use an encyclopedia and a dictionary

	frequency	Percentage
Modalities STRONGLY AGREE	15	9.4
AGREE	26	16.3
STRONGLY DISAGREE	57	35.6
DISAGREE	34	21.3
NEUTRAL	28	17.5
TOTAL	160	100.0

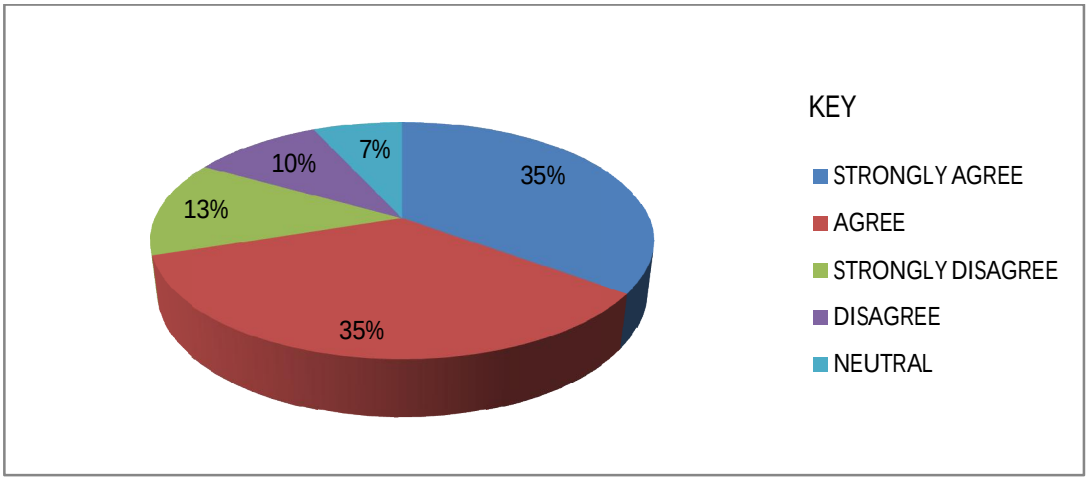


The table above shows that only 15 (9.4%) of the students strongly agreed, 26 (16.3%) of the students agreed, while 57(35.6%) of the students strongly disagreed, 34 (21.3%) of the students disagreed and only 28 (17.5%) of the students were neutral about the fact that they did not know how to use an encyclopaedia and a dictionary in Economics.

The chart above also indicates that a smaller percentage of the sample 15(9%) and 26(16%) indicated by the blue part and the red part agreed and strongly agreed, while the largest portion the green part 57 (36%) of the students strongly disagreed, the purple part 34(21%) of the students disagreed and the sky blue part indicated that 28(18%) of the students were neutral about the fact that they did not know how to use an encyclopaedia and a dictionary in Economics.

Table 25: I always use Economics textbooks back at home to do my assignments

	frequency	Percentage
Modalities STRONGLY AGREE	56	35.0
AGREE	56	35.0
STRONGLY DISAGREE	21	13.1
DISAGREE	16	10.0
NEUTRAL	11	6.9
TOTAL	160	100.0



The table above shows that 56(35%) of the students strongly agreed, the same 56 (35%) of the students agreed, while only 21(13.1%) of the students strongly disagreed, 16 (10%) of the students disagreed and only 11 (7%) of the students were neutral about the fact that they always used Economics textbooks back at home to do their assignments and other homework. The chart above also indicates that a larger percentage of the sample 56(35%) and 56(35%) indicated by the blue part and the red part agreed and strongly agreed, while the smallest portion the green part 21 (13%) of the students strongly disagreed, the purple part 16(10%) of the students disagreed and the sky blue part indicated that 11(7%) of the students were neutral about the fact that they always used Economics textbooks back at home to do their assignments and other homework.

Table 26: **SUMMARY OF SECTION C:**

Frequency **Crossed table PRINT MATERIALS * ACADEMIC PERFORMANCE**

		ACADEMIC PERFORMANCES																
		6,00	7,00	8,00	9,00	10,00	11,00	12,00	13,00	14,00	15,00	16,00	17,00	18,00	19,00	20,00	21,00	Total
PRINT MATERIALS	17,00							1										1
	18,00					2	1											3
	19,00			1		1	1											3
	20,00		1	1		2												4
	21,00	1	3	1	2		1				1							9
	22,00	1		2	2		1	2				1						9
	23,00			2				4			2							8
	24,00			1	1	2	1	2	2						1			10
	25,00		2			1	3	3		1		2						12
	26,00	1		1	3	1		2	2			1	1		1	1		14
	27,00					1	2	3		3			1		1			11
	28,00					1	1	2		1	4	1		1				11
	29,00		1			1		1	1	2	1		1					8
	30,00		1	2				1	3	1	1			1	1	1		12
	31,00					1			2	2	1	2			1		1	10
	32,00				1			2	1	2	1	1		1				9
	33,00						2	2			1	2	1					8
	34,00						1	1	1					1				4
	35,00						1		1	1				1				4
	36,00										1	1		1				3
	37,00												1					1
	38,00						1	1	1						1			4
	39,00					1												1
	42,00											1						1
Total		3	8	11	9	14	16	27	14	13	13	12	5	6	6	2	1	160

The chi square statistic that follows is to determine whether or not teacher's agreement to the use and importance of print materials in secondary school influences students' academic performance and teachers' effectiveness in Economics.

Table 27: **Summary of Chi Square Statistic for Contingency Table C**

Chi-Square Tests

	Value	df	Asymp. Sig. (2-tailed)
Pearson Chi-square	349.354[a]	300	.424
Likelihood Ratio	292.322	300	.982
Linear-by-Linear association	30.753	1	.000
N of valid Cases	160		

Table 28: Decision rule

df	300	Since $\chi^2_{cal}(349.354) > \chi^2_{crit}(341.395)$, H_o is rejected and H_a is accepted.
χ^2_{crit}	341.395 (s.l. = 0.05)	
χ^2_{cal}	349.354	
Decisions	(a) Reject H_o if $\chi^2_{cal} > \chi^2_{crit}$ (b) Accept H_o if $\chi^2_{cal} < \chi^2_{crit}$	

Ho: The organized use of print materials has no significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon.

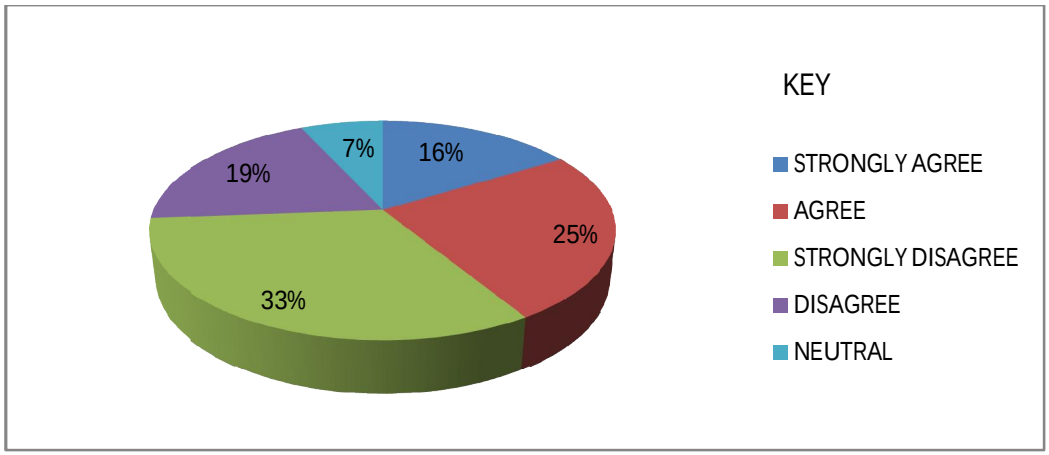
Ha: The organized use of print materials has a significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon.

Decision: Ho is rejected thereby accepting Ha. Accepting Ha will imply that the organized use of print materials has a significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon, Yaoundé.

SECTION D: Theme 4: Graphic Materials

Table 29: My teacher currently uses pictures during most of his lessons as an aid to our study

	frequency	Percentage
Modalities STRONGLY AGREE	26	16.3
AGREE	40	25.0
STRONGLY DISAGREE	52	32.5
DISAGREE	31	19.4
NEUTRAL	11	6.9
TOTAL	160	100.0

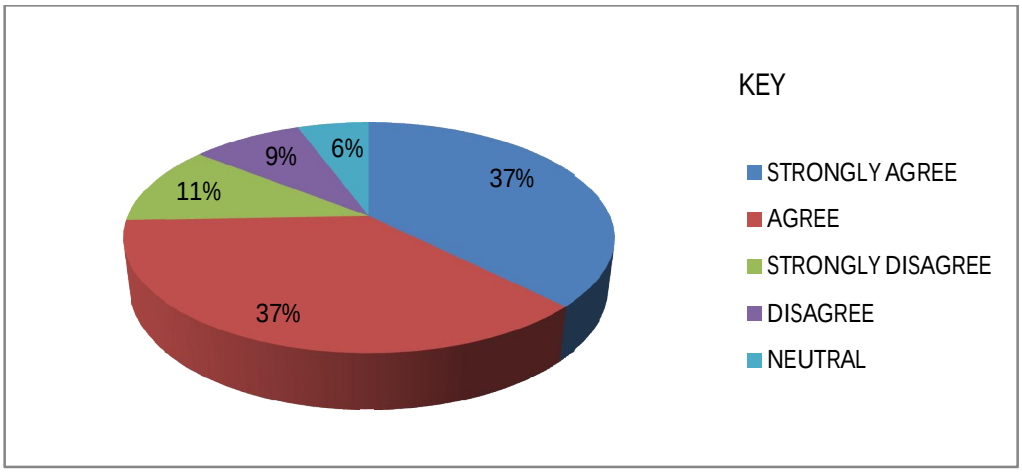


The table above shows that 26(16.3%) of the students strongly agreed, 40 (25%) of the students agreed, while 52(32.5%) of the students strongly disagreed, 31(19.4%) of the students disagreed and only 11 (6.6%) of the students were neutral about the fact that their teacher currently uses pictures during most of his lessons as an aid to their study in Economics.

The chart above also indicates that 26(16%) and 40(25%) indicated by the blue part and the red part agreed and strongly agreed, while the green part 52(33%) of the students strongly disagreed, the purple part 31(19%) of the students disagreed and the sky blue part indicated that 11(7%) of the students were neutral about the fact that their teacher currently used pictures during most of his lessons as an aid to their study in Economics.

Table 30: The use of charts during lessons enables one to easily understand and incorporate the lesson

	frequency	Percentage
Modalities STRONGLY AGREE	60	37.5
AGREE	59	36.9
STRONGLY DISAGREE	18	11.3
DISAGREE	14	8.8
NEUTRAL	9	5.6
TOTAL	160	100.0

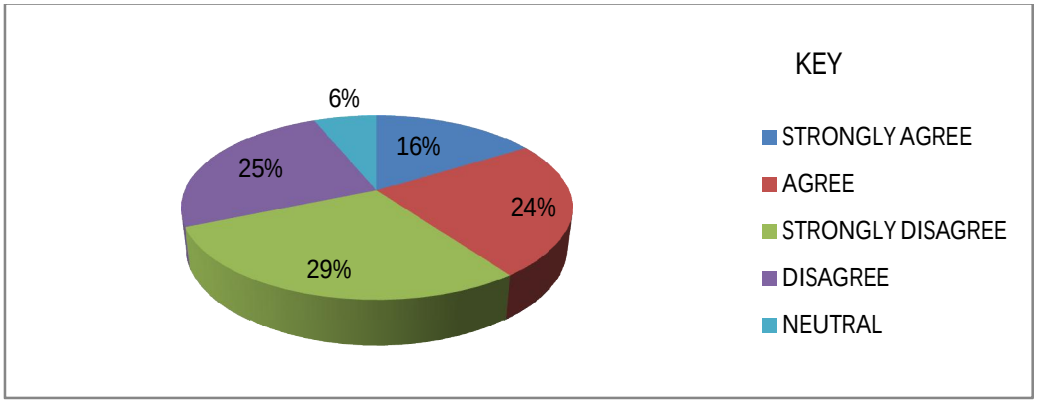


The table above shows that 60(37.5%) of the students strongly agreed, 59 (36.9%) of the students agreed, while 18(11.3%) of the students strongly disagreed, 14(8.8%) of the students disagreed and only 9(5.6%) of the students were neutral about the fact that the use of charts during lessons enables them to easily understand and incorporate their lessons in Economics.

The chart above also indicates that 60(37%) and 59(37%) indicated by the blue part and the red part agreed and strongly agreed, while the green part 18(11%) of the students strongly disagreed, the purple part 14(9%) of the students disagreed and the sky blue part indicated that 9(6%) of the students were neutral about the fact that the use of charts during lessons enables them to easily understand and incorporate their lessons in Economics. This data shows the immense consideration and the importance the students' accord to the use of didactic materials in Economics.

Table 31: I am always intimidated because I don't understand drawings and notes on charts and graphs most often

	frequency	Percentage
Modalities STRONGLY AGREE	26	16.3
AGREE	38	23.8
STRONGLY DISAGREE	46	28.8
DISAGREE	40	25.0
NEUTRAL	10	6.3
TOTAL	160	100.0

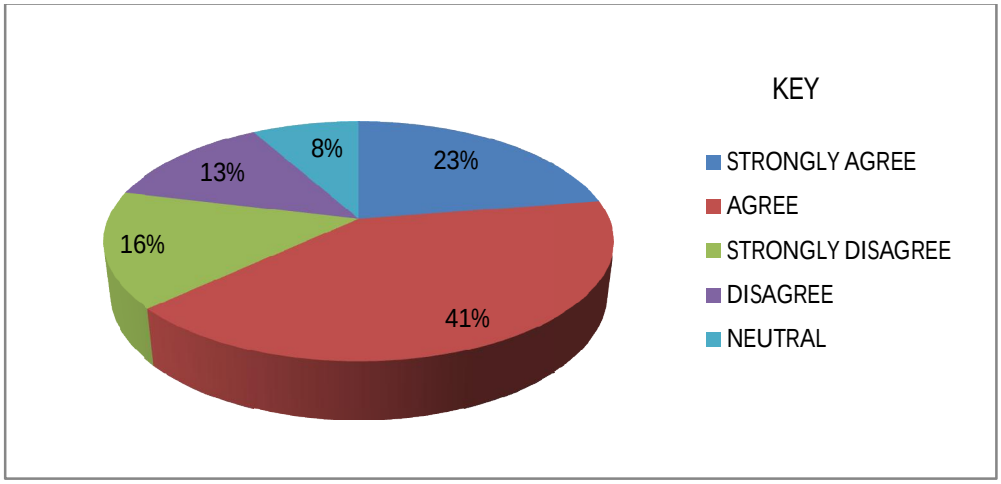


The table above shows that 26(16.3%) of the students strongly agreed, 38 (23.8%) of the students agreed, while 46(28.8%) of the students strongly disagreed, 40(25%) of the students disagreed and only 10(6.3%) of the students were neutral about the fact that they are always intimidated because they do not understand drawings and notes on charts and graphs most often when it is being presented to them.

The chart above also indicates that 26(16%) and 38(24%) indicated by the blue part and the red part agreed and strongly agreed, while the green part 46(29%) of the students strongly disagreed, the purple part 40(25%) of the students disagreed and the sky blue part indicated that 10(6%) of the students were neutral about the fact that they are always intimidated because they do not understand drawings and notes on charts and graphs most often when it is being presented to them by their teachers in Economics.

<u>Table 32:</u> To easily understand my lessons, I try as much as possible to reproduce my teachers' charts into my books during and after the lesson

	frequency	Percentage
Modalities STRONGLY AGREE	36	22.5
AGREE	65	40.6
STRONGLY DISAGREE	25	15.6
DISAGREE	21	13.1
NEUTRAL	13	8.1
TOTAL	160	100.0

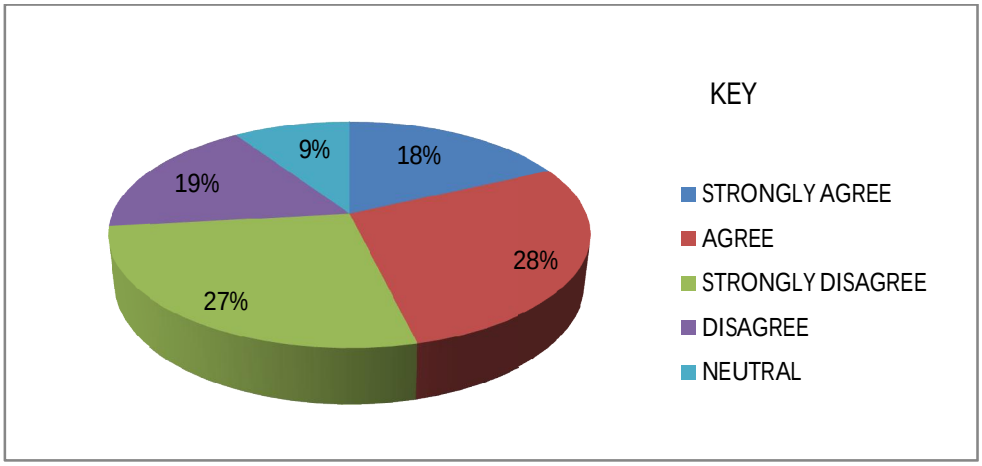


The table above shows that 36(22.5%) of the students strongly agreed, 65 (40.6%) of the students agreed, while 25(15.6%) of the students strongly disagreed, 21(13.1%) of the students disagreed and 13(8.1%) of the students were neutral about the statement that to easily understand their lessons, they tried as much as possible to reproduce their teachers' charts into their books during and after their lessons in Economics.

The chart above also indicates that 36(23%) and 65(41%) indicated by the blue part and the red part agreed and strongly agreed, while the green part 25(16%) of the students strongly disagreed, the purple part 21(13%) of the students disagreed and the sky blue part indicated that 13(8%) of the students were neutral about the statement that to easily understand their lessons, they tried as much as possible to reproduce their teachers' charts into their books during and after their lessons in Economics.

Table 33: My teacher uses maps and globes most often in his teachings

	frequency	Percentage
Modalities STRONGLY AGREE	29	18.1
AGREE	45	28.1
STRONGLY DISAGREE	43	26.9
DISAGREE	28	17.5
NEUTRAL	15	9.4
TOTAL	160	100.0



The table above shows that 29(18.1%) of the students strongly agreed, 45 (28.1%) of the students agreed, while 43(26.9%) of the students strongly disagreed, 28(17.5%) of the students disagreed and 15(9.4%) of the students were neutral about the fact that their teacher used maps and globes most often in his teachings during lessons in Economics.

The chart above also indicates that 29(18%) and 45(28%) indicated by the blue part and the red part agreed and strongly agreed, while the green part 43(27%) of the students strongly disagreed, the purple part 28(18%) of the students disagreed and the sky blue part indicated that 15(9%) of the students were neutral about the fact that their teacher used maps and globes most often in his teachings during lessons in Economics. This shows how the use of these didactic aids is neglected and even completely inexistent in some secondary schools in the Centre Region of Cameroon.

Table 34: **SUMMARY OF SECTION D:**

Crossed table GRAPHIC MATERIALS * ACADEMIC PERFORMANCE

Frequency

		ACADEMIC PERFORMANCES																
		6,00	7,00	8,00	9,00	10,00	11,00	12,00	13,00	14,00	15,00	16,00	17,00	18,00	19,00	20,00	21,00	Total
GRAPHIC MATERIALS	6,00								1									1
	7,00		1	1			1				1			1				5
	8,00	1		1	1			1										4
	9,00		3	2			2	1	1	1							1	11
	10,00			2	2	4	1	3		1					1			14
	11,00	1	1		1	2	3	3	1	1					1			14
	12,00			2	1	2	4	3	3	1		1		1	1	1		20
	13,00		1		2	1	2	2			2	4			2			16
	14,00	1		1		2	1	9	1	5	1	2	2	2				27
	15,00			2	1	2	2	3	2	3	6	2	2					25
	16,00		1		1	1		2	3	1	3	2	1	2				17
	17,00		1															1
	18,00								2						1	1		4
	21,00											1						1
Total		3	8	11	9	14	16	27	14	13	13	12	5	6	6	2	1	160

The chi square statistic that follows is to determine whether or not teacher's agreement to the use and importance of graphic materials in secondary school influences student's academic performance in Economics.

Table 35: **Summary of Chi Square Statistic for Contingency Table D**

Chi-Square Tests

	Value	df	Asymp. Sig. (2-tailed)
Pearson Chi-square	235.519[a]	195	.025
Likelihood Ratio	188.324	195	.621
Linear-by-Linear association	15.417	1	.000
N of valid Cases	160		

Table 36: Decision rule

df	195	Since $\chi^2_{cal}(235.519) > \chi^2_{crit}(228.580)$, H_o is rejected and H_a is accepted.
χ^2_{crit}	228.580 (s.l. = 0.05)	
χ^2_{cal}	235.519	
Decisions	(a) Reject H_o if $\chi^2_{cal} > \chi^2_{crit}$ (b) Accept H_o if $\chi^2_{cal} < \chi^2_{crit}$	

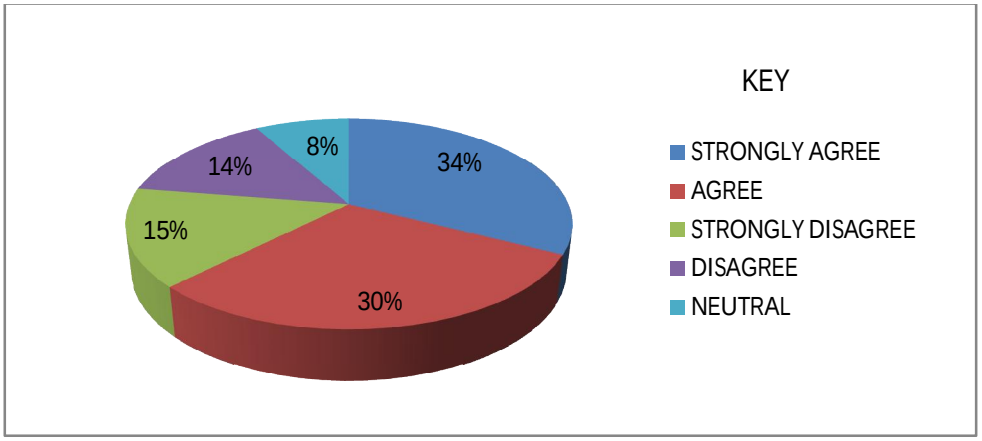
Ho: The use of graphic materials has no influences on the academic performance and improvement of students in Economics at the secondary level of Education in the Centre Region of Cameroon.

Ha: The use of graphic materials has an extensive influence on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Decision: Ho is rejected thereby accepting Ha. Accepting Ha will imply that the use of graphic materials has an extensive influence on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Table 37: All my assignments and home works are done by the use of didactic aids like textbooks and research practices on the web

	frequency	Percentage
Modalities STRONGLY AGREE	52	32.5
AGREE	48	30.0
STRONGLY DISAGREE	24	15.0
DISAGREE	23	14.4
NEUTRAL	13	8.1
TOTAL	160	100.0

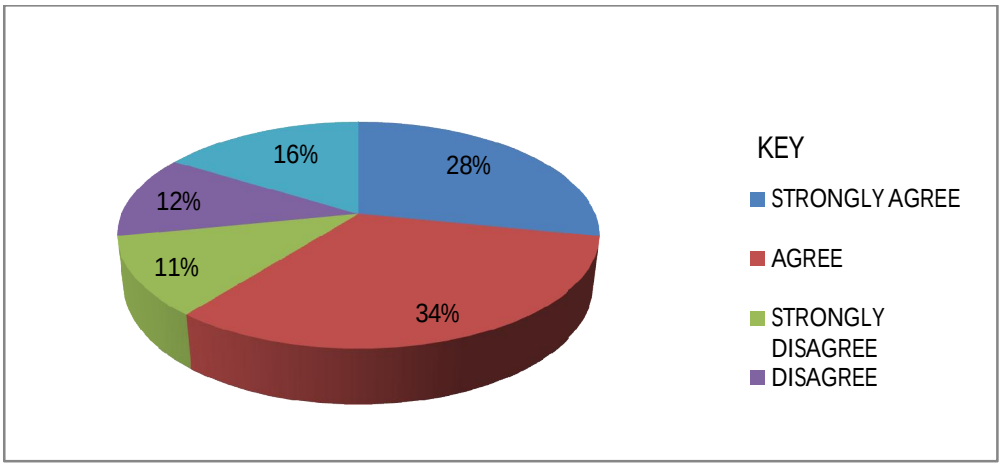


The table above shows that 52(32.5%) of the students strongly agreed, 48 (30%) of the students agreed, while 24(15%) of the students strongly disagreed, 23(14.4%) of the students disagreed and 13(8.1%) of the students were neutral about the fact that all their assignments and home works are done by the use of didactic aids like textbooks and research practices on the web.

The chart above also indicates that 52(33%) and 48(30%) indicated by the blue part and the red part agreed and strongly agreed, while the green part 24(15%) of the students strongly disagreed, the purple part 23(14%) of the students disagreed and the sky blue part indicated that 13(8%) of the students were neutral about the fact that all their assignments and home works were done by the use of didactic aids like textbooks and research practices on the web in the subject Economics. This data shows the immense consideration and the importance the students' accord to the use of didactic materials in Economics.

Table 38: **I consider the use of didactic materials to be a basic necessity in my educational growth**

	frequency	Percentage
Modalities STRONGLY AGREE	45	28.1
AGREE	52	32.5
STRONGLY DISAGREE	18	11.3
DISAGREE	19	11.9
NEUTRAL	26	16.3
TOTAL	160	100.0

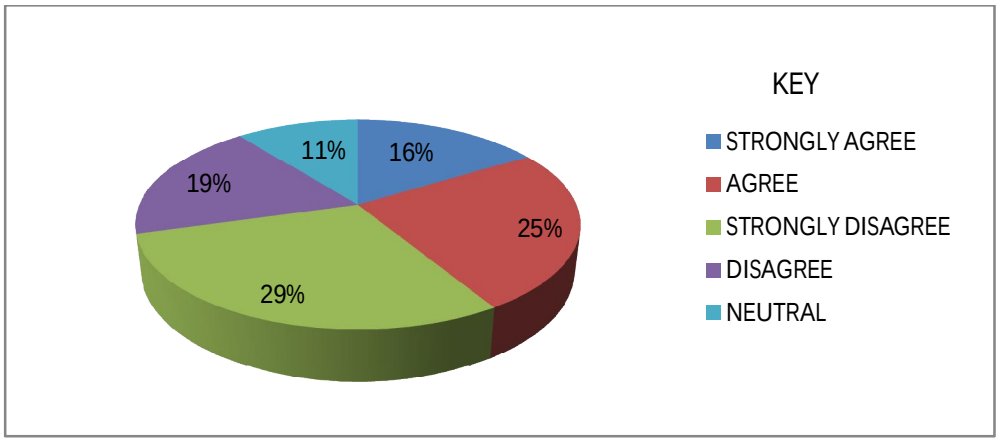


The table above shows that 45(28.1%) of the students strongly agreed, 52 (32.5%) of the students agreed, while 18(11.3%) of the students strongly disagreed, 19(11.9%) of the students disagreed and 26(16.3%) of the students were neutral about the statement, I consider the use of didactic materials to be a basic necessity in my educational growth in Economics.

The chart above also indicates that 45(28%) and 52(33%) indicated by the blue part and the red part agreed and strongly agreed respectively, while the green part 18(11%) of the students strongly disagreed, the purple part 19(12%) of the students disagreed and the sky blue part indicated that 26(16%) of the students were neutral about the statement, I consider the use of didactic materials to be a basic necessity in my educational growth in Economics.

Table 39: I always spend a lot of my time on social networks and other entertainments rather than studies

	frequency	Percentage
Modalities STRONGLY AGREE	26	16.3
AGREE	40	25.0
STRONGLY DISAGREE	47	29.4
DISAGREE	30	18.8
NEUTRAL	17	10.6
TOTAL	160	100.0

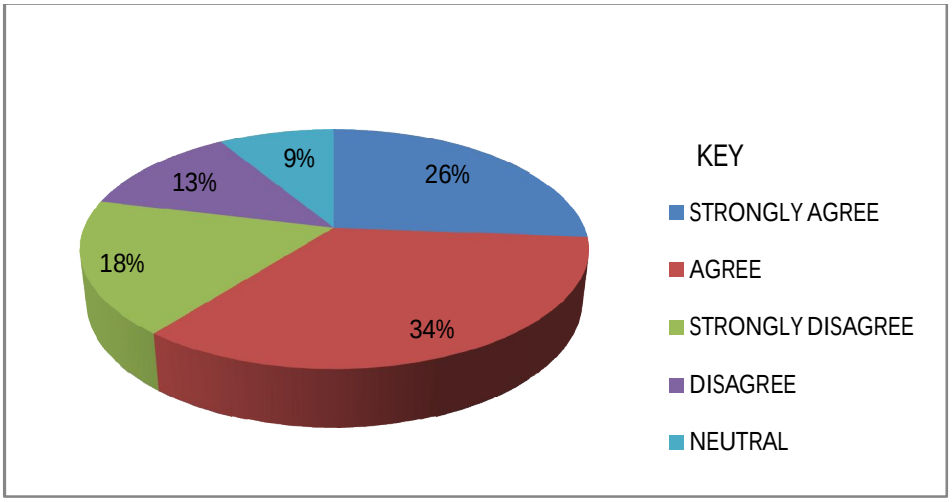


The table above shows that 26(16.3%) of the students strongly agreed, 40 (25%) of the students agreed, while 47(29.4%) of the students strongly disagreed, 30(18.8%) of the students disagreed and 17(10.6%) of the students were neutral about the fact that they always spend a lot of their time on social networks and other entertainments rather than on their studies. This implies that many of the students are easily distracted and lack focus on their subject matter probably because of the lack of appropriate didactic materials.

The chart above also indicates that 26(16%) and 40(25%) indicated by the blue part and the red part agreed and strongly agreed, while the green part 47(29%) of the students strongly disagreed, the purple part 30(19%) of the students disagreed and the sky blue part indicated that 17(11%) of the students were neutral about the fact that they always spend a lot of their time on social networks and other entertainments rather than on their studies.

Table 40: My performance in Economics has been on the increase thanks to my teachers' use of teaching aids

	frequency	Percentage
Modalities STRONGLY AGREE	42	26.3
AGREE	55	34.4
STRONGLY DISAGREE	29	18.1
DISAGREE	20	12.5
NEUTRAL	14	8.8
TOTAL	160	100.0

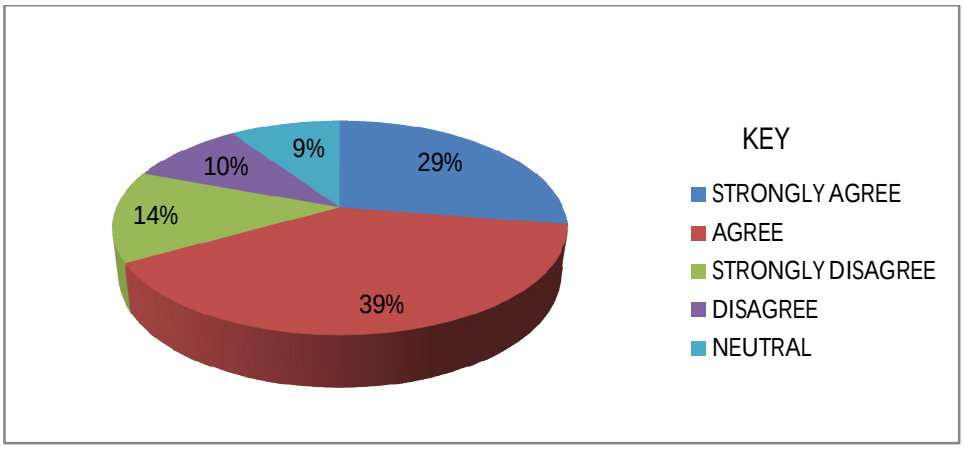


The table above shows that to the statement my performance in Economics has been on the increase thanks to my teachers' use of teaching aids, 42(26.3%) of the students strongly agreed, 55 (34.4%) of the students agreed, while 29(18.1%) of the students strongly disagreed, 20(12.5%) of the students disagreed and 14(8.8%) of the students were neutral.

The chart above also indicates that 42(26%) and 55(34%) indicated by the blue part and the red part agreed and strongly agreed, while the green part 29(18%) of the students strongly disagreed, the purple part 12(13%) of the students disagreed and the sky blue part indicated that 14(9%) of the students were neutral about the statement my performance in Economics has been on the increase thanks to my teachers' use of teaching aids.

Table 41: I always use learning aids at home and in school to revise the concepts taught in Economics

	frequency	Percentage
Modalities STRONGLY AGREE	44	27.5
AGREE	63	39.4
STRONGLY DISAGREE	22	13.8
DISAGREE	16	10.0
NEUTRAL	15	9.4
TOTAL	160	100.0



The table above shows that 44 (27.5%) of the students strongly agreed, 63 (39.4%) of the students agreed to the statement that they always use learning aids at home and in school to revise the concepts taught by their teachers in Economics, while 22(13.8%) of the students strongly disagreed, 16(10%) of the students disagreed and 15 (9.4%) of the students were neutral about the fact that they always used learning aids at home and in school to revise the concepts taught by their teachers in Economics and to incorporate the material appropriately.

The chart above also indicates that larger percentage of the sample 44(28%) and 63(39%) indicated by the blue part and the red part agreed and strongly agreed to the statement that they always use learning aids at home and in school to revise the concepts taught by their teachers in Economics. While the smallest portion the green part 22 (14%) of the students strongly disagreed, the purple part 16(10%) of the students disagreed and the sky blue part indicated that 15(9%) of the students were neutral about the fact that they always used learning aids at home and in school to revise the concepts taught by their teachers in Economics.

PART II

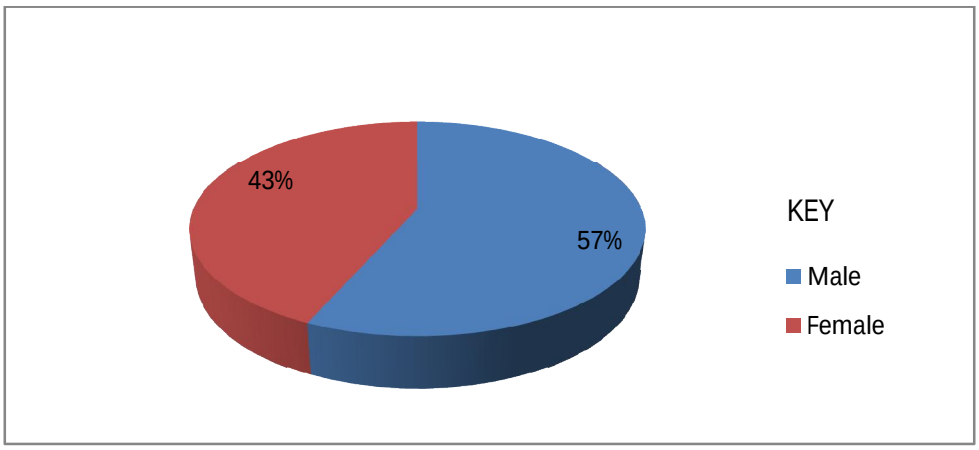
DATA ANALYSIS FOR ECONOMICS TEACHERS

This part includes data analysis and interpretation derived from the questionnaires given to the Economics teachers and the interviews given to the heads of the Economic departments in the five chosen schools.

SECTION A: DEMOGRAPHIC INFORMATION

Table 42: Sex of Economics Teachers

		frequency	Percentage
Modalities	MALE	17	56.7
	FEMALE	13	43.3
	TOTAL	30	100.0

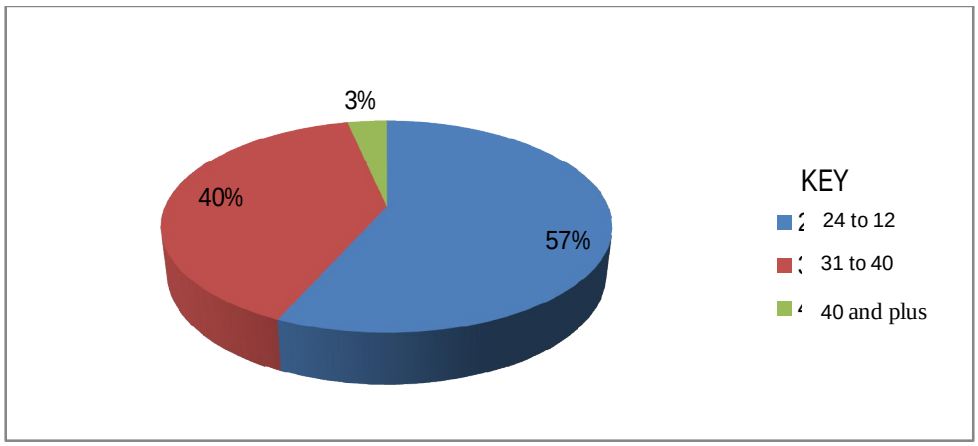


The table above shows the distribution of sex of Economics teachers of the five schools selected in the Centre Region of Cameroon, Yaoundé. The table shows that 17 (56.7%) of males and 13 (43.3%) of females were sampled making a total of 30 Economics teachers sampled for this study. This distribution shows that more of males than females were sampled.

The chart above shows the distribution of the teachers. The red part of the chart indicates the percentage of females sampled 13(43%) while the blue part indicates the number of males sampled out of 17(57%). The blue part is larger than the red part demonstrating that more males than females were sampled for this study.

Table 43: Age Range of Economics Teachers

	frequency	Percentage
Modalities 24-20	17	56.7
31-40	12	40.0
40 and plus	1	3.3
Total	30	100.0

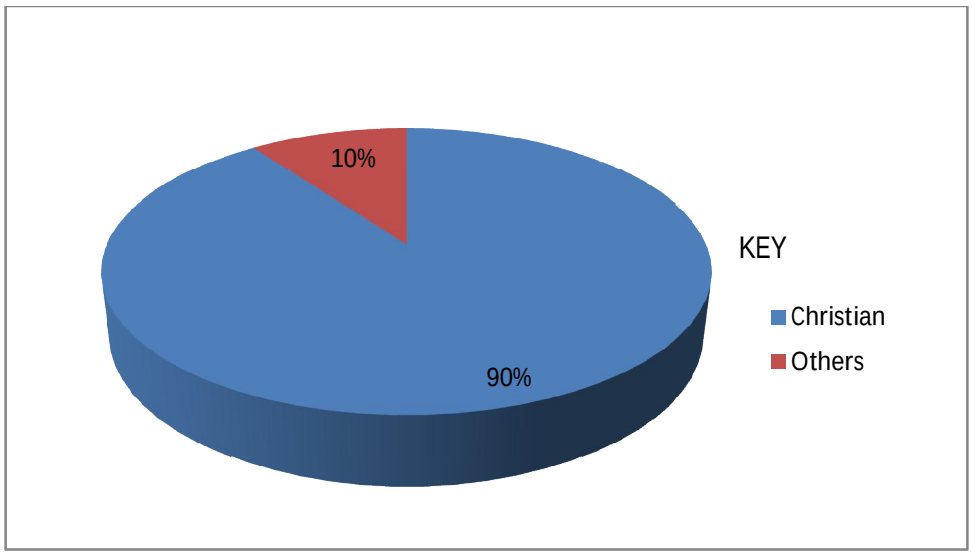


The table above shows the distribution of ages of Economics teachers of form four in the five schools selected in the central region of Cameroon, Yaoundé. The table shows that the teachers' ages range from 24 to 40+ years old. It also shows that 17 (56.7%) of the teachers ranged from the ages 24 to 30 years with the highest percentage, 12 teachers (40%) range from ages 31 to 40 and lastly only one teacher is aged 40+ (3.3%).

The chart above shows the distribution of the teachers' ages. The blue part (ages 24 to 30) of the chart being the largest with 17(57%) teachers, followed by the red part, ages 31 to 40 with 12 (40%) teachers and finally, the smallest percentage which is 1(3%) indicated by the green part with a teacher aged above 40 years. This shows that there are more of beginners or novices in the profession and less experienced Economics teachers.

Table 44: Religion of Teachers

		frequency	Percentage
Modalities	CHRISTIAN	27	90.0
	OTHERS	3	10.0
	TOTAL	30	100.0



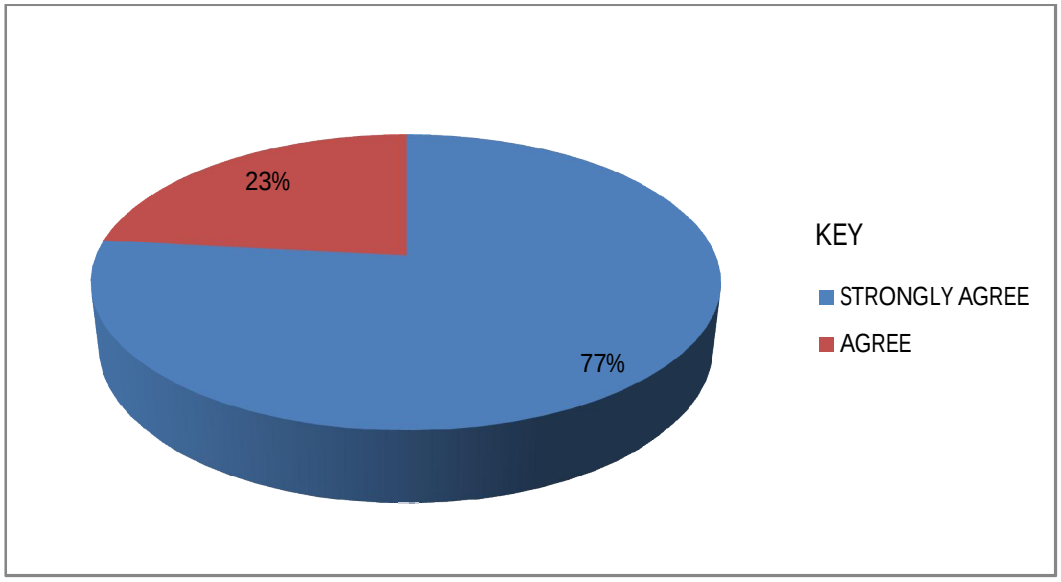
The table above shows the distribution of religion or religious backgrounds of Economics teachers of form four of the five schools selected in the central region of Cameroon, Yaoundé. The table shows that 27(90%) of the teachers sampled are Christians, only 3(10%) of the teachers sampled are from other religious backgrounds and lastly there were zero Muslims.

The chart above shows the distribution of the teachers' religious backgrounds. The blue part of the chart indicates the percentage of Christians sampled (90%) making a total of 27 Christians out of 30, the red part of the graph shows the teachers of other religious denominations who are neither Christians nor Muslims sampled with 1(3%) of the teachers sampled.

SECTION B: THEME 2: VISUAL DISPLAY DEVICES

Table 45: The use of the chalkboard during my teachings constantly motivates students to learn

		frequency	Percentage
Modalities	STRONGLY AGREE	23	76.7
	AGREE	7	23.3
	TOTAL	30	100.0

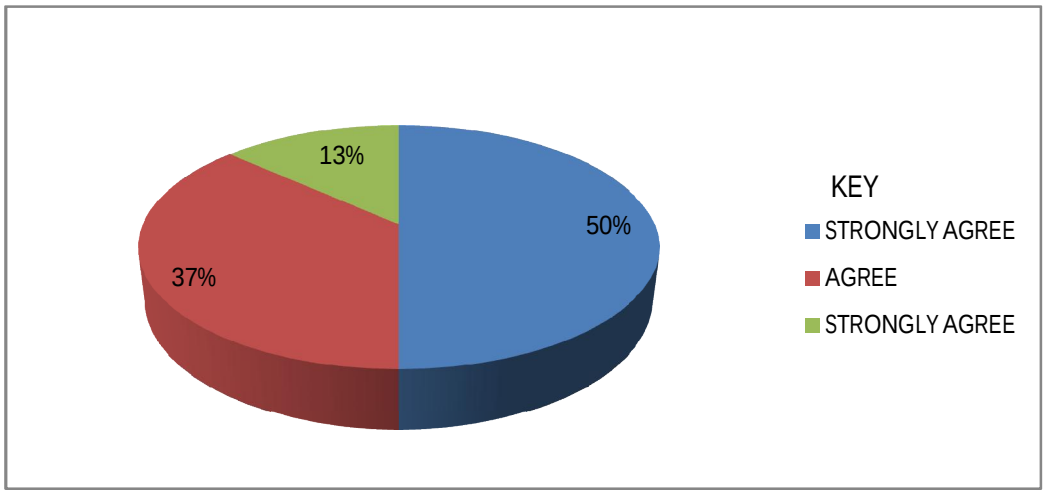


The table above shows that to the item the use of the chalkboard during my teachings constantly motivates students to learn 23 (76.7%) of the teachers sampled strongly agreed and 7(23.3%) of the teachers agreed. while none of the teachers disagreed nor strongly disagreed. This shows how important the use of the chalkboard is to Economics teachers.

The chart above also indicates that a larger percentage of the sample 23(77%) indicated by the blue part strongly agreed and 7(23%) indicated by the red part agreed to the fact that the use of the chalkboard constantly motivates their students to learn the subject Economics.

Table 46: Be it a blackboard, a green board, bulletin board or white ink board teaching with it effectively at all times makes no difference to me.

	frequency	Percentage
Modalities STRONGLY AGREE	15	50.0
AGREE	11	36.7
STRONGLY DISAGREE	4	13.3
TOTAL	30	100.0

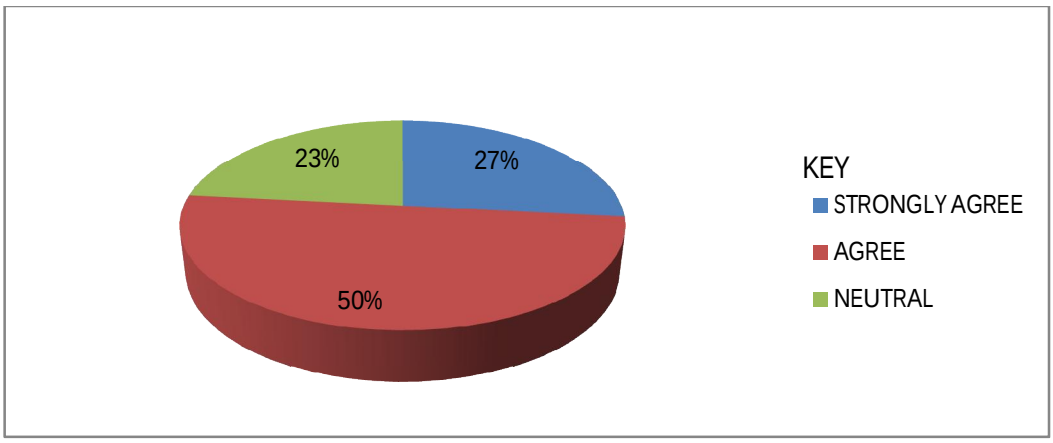


The table above shows that to the item, be it a blackboard, a green board, bulletin board or white ink board teaching with it effectively at all times makes no difference to me 15 (50%) of the teachers sampled strongly agreed, 11(36.7%) of the teachers agreed and 4(13.3%) of the teachers strongly disagreed. while none of the teachers disagreed.

The chart above also indicates that a larger percentage of the sample 15(50%) indicated by the blue part strongly agreed, 11(37%) indicated by the red part agreed and 4(13%) indicated by the green part strongly disagreed to the fact that be it a blackboard, a green board, bulletin board or white ink board teaching with it effectively at all times makes no difference to them.

Table 47: Teaching and Learning is a lot easier when I use the board aesthetically

		frequency	Percentage
Modalities	STRONGLY AGREE	8	26.7
	AGREE	15	50.0
	NEUTRAL	7	23.3
	TOTAL	30	100.0

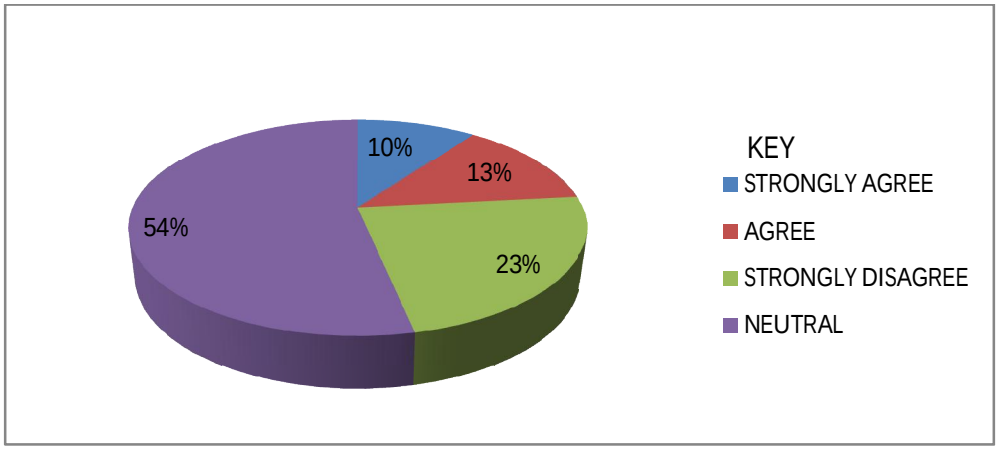


The table above shows that to the item Teaching and Learning is a lot easier when I use the board aesthetically, only 8 (26.7%) of the teachers sampled strongly agreed, 15(50%) of the teachers agreed and 7 (23.3%) of the teachers were neutral. while none of the teachers disagreed nor strongly disagreed. This shows how important the use of the chalkboard aesthetically is to the Economics teachers for a facilitated instruction.

The chart above also indicates that of the sample 8 (27%) indicated by the blue part strongly agreed, 15 (50%) indicated by the red part agreed and 7(23%) indicated by the green part were neutral to the fact that teaching and learning is a lot easier when they use the board aesthetically.

Table 48: I always use a magnetic board in teaching for more comprehension

	frequency	Percentage
Modalities STRONGLY AGREE	3	10.0
AGREE	4	13.3
STRONGLY DISAGREE	7	23.3
NEUTRAL	16	53.3
TOTAL	30	100.0

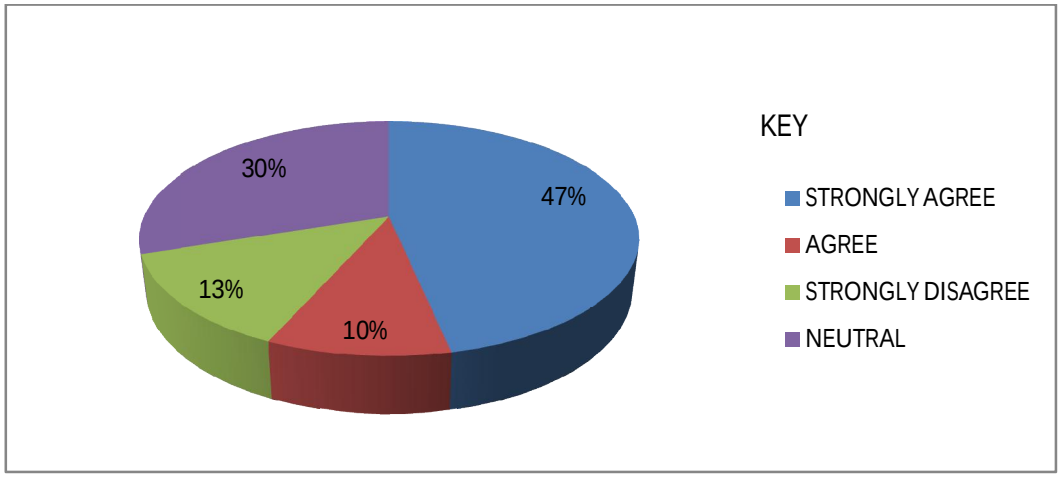


The table above shows that to the item the I always use a magnetic board in teaching for more comprehension 3 (10%) of the teachers sampled strongly agreed, 4(13.3%) of the teachers agreed, 7(23.3%) of the teachers sampled strongly disagreed and 16(53.3%) of the teachers were neutral

The chart above also indicates that a larger percentage of the sample 16(53.3%) indicated by the purple part were neutral, while 3(10%) indicated by the blue part strongly agreed, 4(13%) indicated by the red part agreed and 7(23%) indicated by the green part strongly disagreed agreed to the fact that they always use a magnetic board in teaching for more comprehension in their Economics classes in form four.

Table 49: I have never seen a cloth board

	frequency	Percentage
Modalities STRONGLY AGREE	14	46.7
AGREE	3	10.0
STRONGLY DISAGREE	4	13.3
NEUTRAL	9	30.0
TOTAL	30	100.0

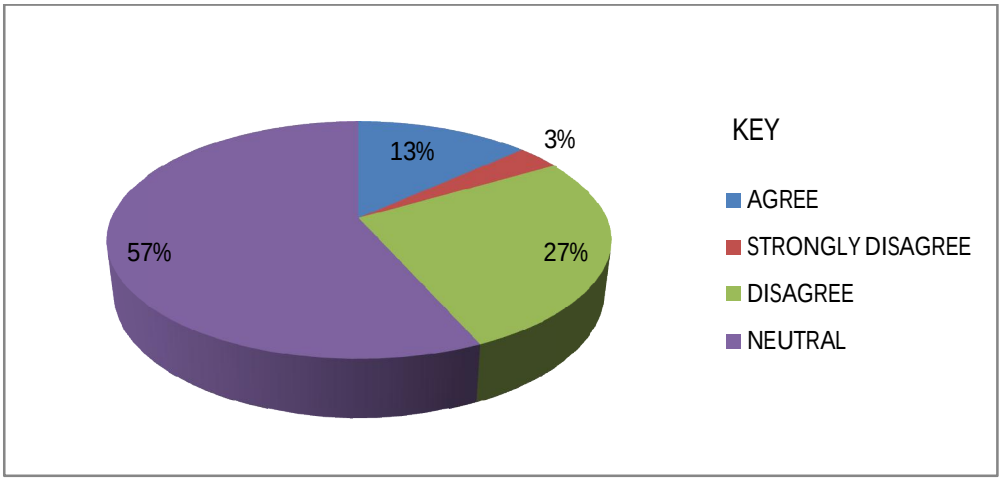


The table above shows that to the item I have never seen a cloth board, 14 (46.7%) of the teachers sampled strongly agreed, 3(10%) of the teachers agreed, 4(13.3%) of the teachers sampled strongly disagreed and 9(30%) of the teachers were neutral. This shows that more than 90% of the teachers sampled do not know what a cloth board is and have never used it in teaching Economics in their classrooms.

The chart above also indicates that a larger percentage of the sample 14(46.7%) indicated by the blue part strongly agreed, while 3(10%) indicated by the red part agreed, 4(13%) indicated by the green part strongly disagreed and 9(30%) indicated by the purple part were neutral to the statement I have never seen a cloth board.

Table 50: There is a bulletin board at the corner of my classroom

	frequency	Percentage
Modalities AGREE	4	13.3
STRONGLY DISAGREE	1	3.3
DISAGREE	8	26.7
NEUTRAL	17	56.7
TOTAL	30	100.0



The table above shows that to the item there is a bulletin board at the corner of my classroom only 4(13.3%) of the teachers sampled strongly agreed, 1(3.3%) of the teachers agreed, 8(26.7%) of the teachers disagreed and 17(56.7%) of the teachers were neutral.

The chart above also indicates that a larger percentage of the sample 17(57%) indicated by the green part were neutral, 4(13%) of the teachers indicated by the blue part agreed, 8(27%) of the teachers indicated by the green part disagreed and 1(3%) indicated by the red part strongly disagreed to the fact that there was a bulletin board at the corner of their classroom.

Table 51: **SUMMARY OF SECTION B**

Crossed table VISUAL DISPLAY DEVICES * ACADEMIC PERFORMANCE

Size

		ACADEMIC PERFORMANCES							
		5,00	6,00	7,00	9,00	10,00	12,00	14,00	Total
VISUAL DISPLAY DEVICES	11.00		1						1
	12.00		3						3
	13.00			1					1
	14.00	6	1				1		8
	15.00						6	1	7
	16.00					1			1
	17.00			1					1
	18.00				1				1
	19.00					7			7
	21.00								
Total		6	5	2	1	8	7	1	30

The chi square statistic that follows is to determine whether or not respondents' agreement to the use and importance of didactic materials in secondary school influences students'' performance in Economics.

Table 52: **Summary of Chi Square Statistic for Contingency Table**

Chi-Square Tests

	Value	df	Asymp. Sig. (2-tailed)
Pearson Chi-square	134.112[a]	48	.000
Likelihood Ratio	85.678	48	.001
Linear-by-Linear association	5.074	1	.024
N of valid Cases	30		

Table 53: Decision rule

df	48	Since $\chi^2_{cal}(134.112) > \chi^2_{crit}(65.171)$, H_o is rejected and H_a is accepted.
χ^2_{crit}	65.171 (s.l. = 0.05)	
χ^2_{cal}	134.112	
Decisions	(a) Reject H_o if $\chi^2_{cal} > \chi^2_{crit}$ (b) Accept H_o if $\chi^2_{cal} < \chi^2_{crit}$	

Ho: The appropriate use of visual display devices has no significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

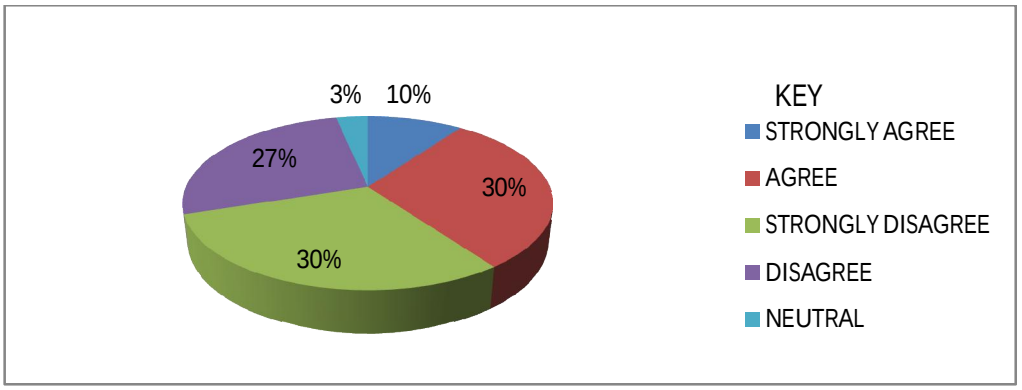
Ha: The appropriate use of visual display devices has a significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Decision: Ho is rejected thereby accepting Ha. Accepting Ha will imply that the appropriate use of visual display devices has a significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

SECTION C: THEME 3: PRINT MATERIALS

Table 54: I oblige my students to purchase all their Economics textbooks before attaining any of my lessons

	frequency	Percentage
Modalities STRONGLY AGREE	3	10.0
AGREE	9	30.0
STRONGLY DISAGREE	9	30.0
DISAGREE	8	26.7
NEUTRAL	1	3.3
TOTAL	30	100.0

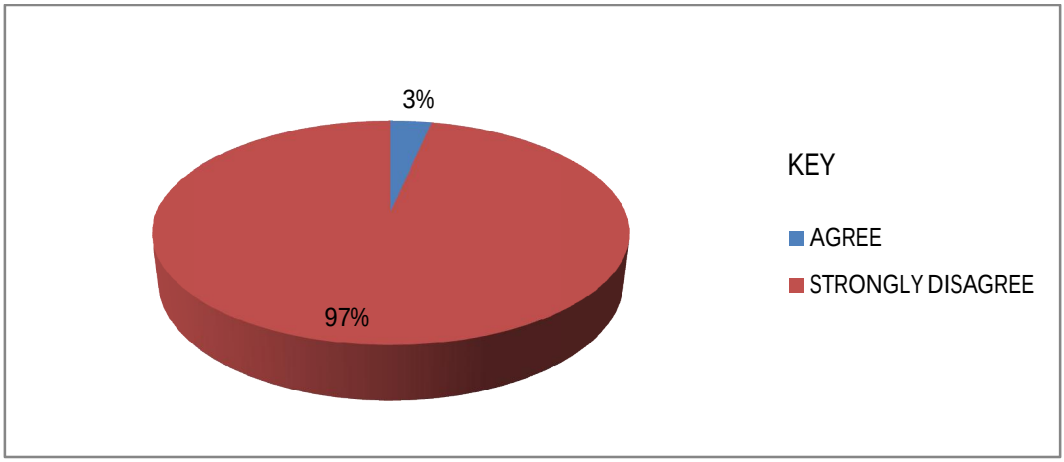


The table above shows that, to the item I oblige my students to purchase all their economics textbooks before attaining any of my lessons 3 (10%) of the teachers sampled strongly agreed, 9(30%) of the teachers sampled agreed, 9(30%) of the teachers sampled strongly disagreed 8(26.7%) of the teachers sampled disagreed and 1(3.3%) of the teachers was neutral.

The chart above also indicates that a smaller percentage of the sample 3(10%) indicated by the blue part strongly agreed, 9(30%) indicated by the red part agreed, 9(30%) indicated by the green part strongly disagreed, 8(27%) indicated by the purple part disagreed and 1(3.3%) indicated by the sky blue part were neutral to the statement I oblige my students to purchase all their economics textbooks before attaining any of my lessons in Economics.

Table 55: I hate reading textbooks since I consider textbooks very boring and not colourful

	frequency	Percentage
Modalities AGREE	1	3.3
STRONGLY DISAGREE	29	98.7
TOTAL	30	100.0

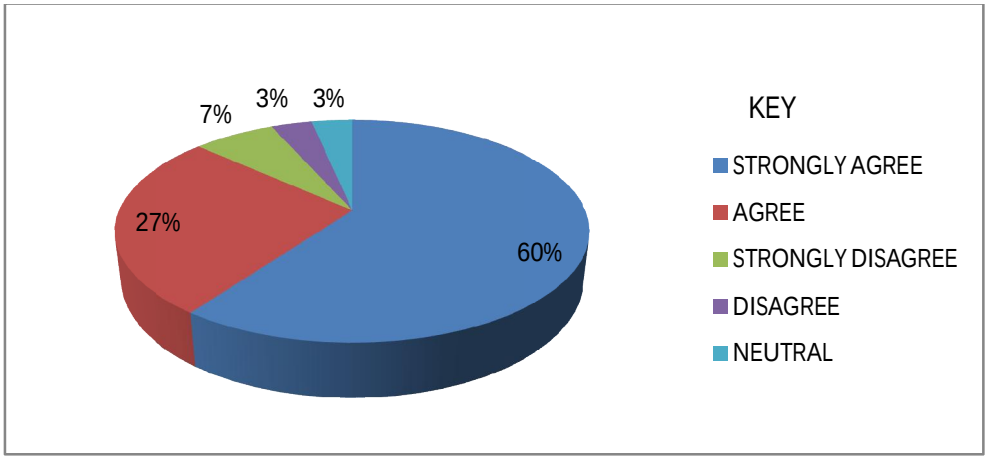


The table above shows that, to the item "I hate reading textbooks since I consider textbooks very boring and not colourful", only 1(3.3%) of the teachers sampled agreed and 29(96.7%) of the teachers sampled strongly disagreed. This shows how important the use of textbooks is to Economics teachers.

The chart above also indicates that a larger percentage of the sample 29(97%) indicated by the red part strongly disagreed and only 1(3%) indicated by the blue part agreed to the fact that they hate reading textbooks since they consider textbooks very boring and not colourful. This implies that about 97% of the teachers sampled in Economics love reading textbooks in Economics.

Table 56: For each lesson I have to teach I make sure I read at least two or more textbooks the previous day

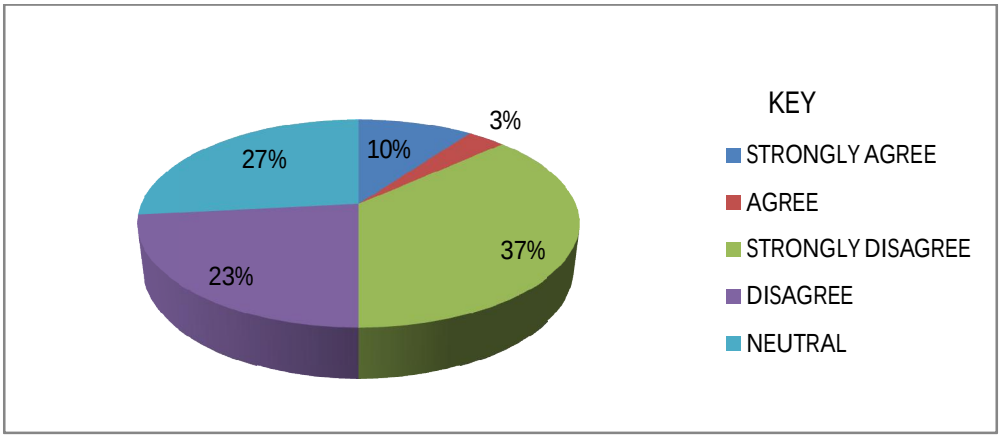
	frequency	Percentage
Modalities STRONGLY AGREE	18	60.0
AGREE	8	26.7
STRONGLY DISAGREE	2	6.7
DISAGREE	1	3.3
NEUTRAL	1	3.3
TOTAL	30	100.0



The table above shows that to the item, For each lesson I have to teach I make sure I read at least two or more textbooks the previous day, 18 (60%) of the teachers sampled strongly agreed, 8(26.7%) of the teachers sampled agreed, 2(6.7%) of the teachers sampled strongly disagreed 1(3.3%) of the teachers sampled disagreed and 1(3.3%) of the teachers was neutral. The chart above also indicates that a larger percentage of the sample 18(60%) indicated by the blue part strongly agreed, 8(27%) indicated by the red part agreed, 2(7%) indicated by the green part strongly disagreed, 1(3%) indicated by the purple part disagreed and 1(3%) indicated by the sky blue part were neutral to the statement, for each lesson I have to teach I always make sure I read at least two or more textbooks the previous day.

Table 57: Since I started teaching, I have never read an electronic book

	frequency	Percentage
Modalities STRONGLY AGREE	3	10.0
AGREE	1	3.3
STRONGLY DISAGREE	11	36.7
DISAGREE	7	23.3
NEUTRAL	8	26.7
TOTAL	30	100.0

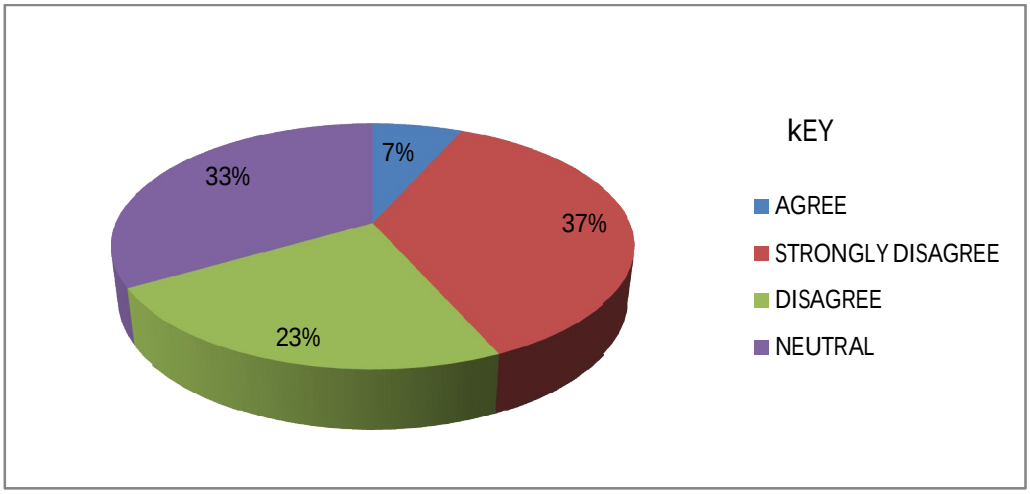


The table above shows that to the item, “since I started teaching, I have never read an electronic book”, 3(10%) of the teachers sampled strongly agreed, 1(3.3%) of the teachers sampled agreed, 11(36.7%) of the teachers sampled strongly disagreed 7(23.3%) of the teachers sampled disagreed and 8(26.7%) of the teachers were neutral.

The chart above also indicates that of the sample 3(10%) indicated by the blue part strongly agreed, 1(3%) indicated by the red part agreed, 11(37%) indicated by the green part strongly disagreed, 7(23%) indicated by the purple part disagreed and 8(27%) indicated by the sky blue part were neutral to the fact that they had never seen an electronic book.

Table 58: I do not know what an encyclopaedia is

	frequency	Percentage
Modalities AGREE	2	6.7
STRONGLY DISAGREE	11	36.7
DISAGREE	7	23.3
NEUTRAL	10	33.3
TOTAL	30	100.0

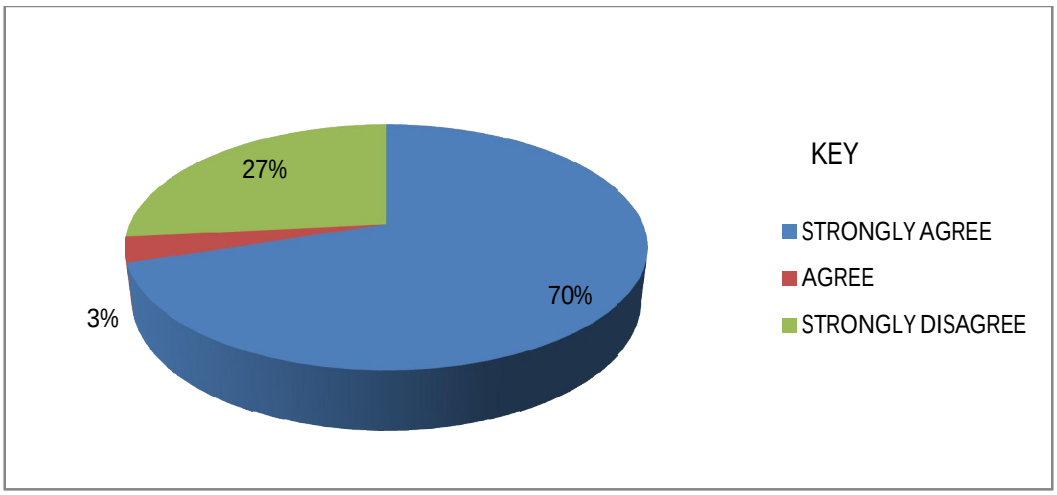


The table above shows that in trying to verify if the teachers knew what an encyclopaedia was, 2(6.7%) of the teachers sampled agreed, 11(36.7%) of the teachers sampled strongly disagreed, 7(23.3%) of the teachers sampled disagreed, and 10(33.3%) of the teachers were neutral.

The chart above also indicates that a larger percentage of the sample 11(37%) indicated by the red part strongly disagreed, 7(23%) indicated by the green part disagreed, 2(7%) indicated by the blue part agreed and 10(33%) indicated by the purple part were neutral to the fact that they did not know about the encyclopaedia.

Table 59: Each time I do not understand a word in economics I use a dictionary to clarify my doubts

	frequency	Percentage
Modalities STRONGLY AGREE	21	70.0
AGREE	1	3.3
STRONGLY DISAGREE	8	26.7
TOTAL	30	100.0

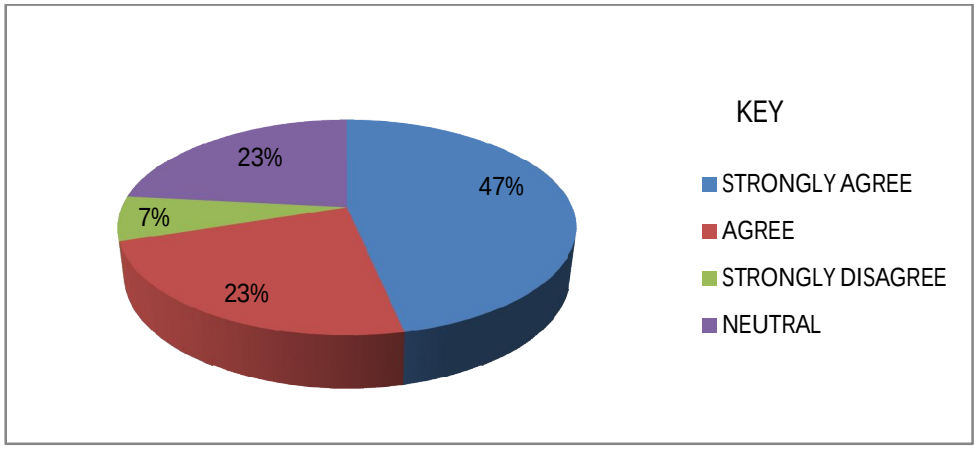


The table above shows that to the item, each time I do not understand a word in economics I use a dictionary to clarify my doubts, 21(70%) of the teachers sampled strongly agreed, 1(3.3%) of the teachers sampled agreed, and 8(26.7%) of the teachers sampled strongly disagreed.

The chart above also indicates that a larger percentage of the sample 21(70%) indicated by the blue part strongly agreed, 1(3%) indicated by the red part agreed, while 8(27%) indicated by the green part agreed to the fact that each time they did not understand a word in economics they used a dictionary to clarify their doubts.

Table 60: I read newspapers and journals on economic matters each time i lay my hands on them.

	frequency	Percentage
Modalities STRONGLY AGREE	14	46.7
AGREE	7	23.3
STRONGLY DISAGREE	2	6.7
NEUTRAL	7	23.3
TOTAL	30	100.0

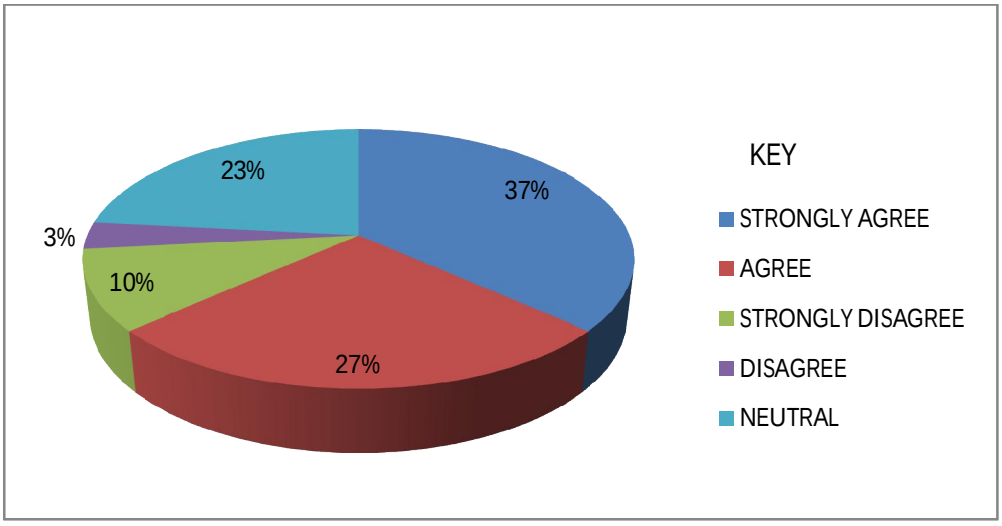


The table above shows that to the item, I read newspapers and journals on economic matters each time i lay my hands on them, 14(46.7%) of the teachers sampled strongly agreed, 7(23.3%) of the teachers sampled agreed, 2(6.7%) of the teachers sampled strongly disagreed, and 7(23.3%) of the teachers were neutral.

The chart above also indicates that of the teacher sampled, 14(47%) indicated by the blue part strongly agreed, 7(23%) indicated by the red part agreed, 2(7%) indicated by the green part strongly disagreed and 7(23%) indicated by the purple part were neutral to the fact that they read newspapers and journals on economic matters each time they laid their hands on them.

Table 61: I presents to my students new information on economics from newspapers daily

	frequency	Percentage
Modalities STRONGLY AGREE	11	36.7
AGREE	8	26.7
STRONGLY DISAGREE	3	10.0
DISAGREE	1	3.3
NEUTRAL	7	23.3
TOTAL	30	100.0

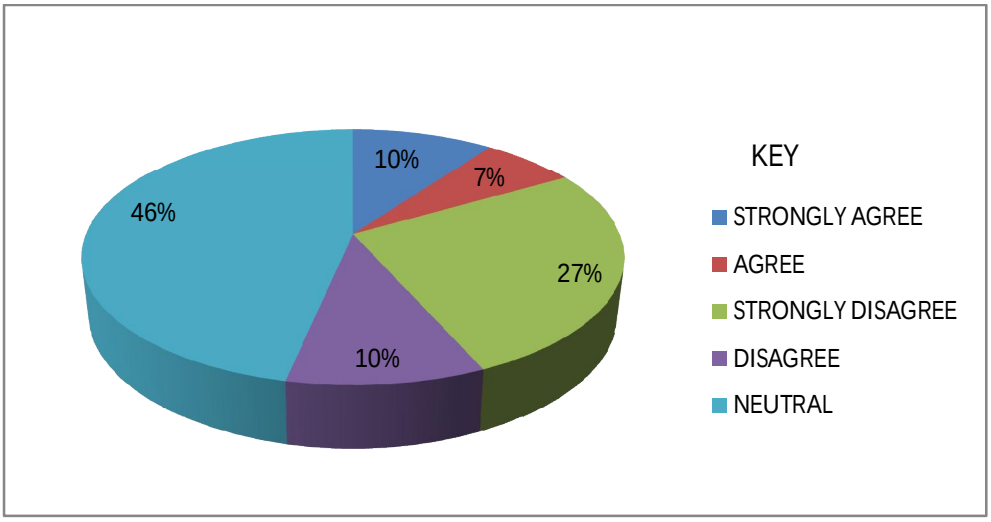


The table above shows that to the item I presents to my students new information on economics from newspapers daily, 11(36.7%) of the teachers sampled strongly agreed, 8(26.7%) of the teachers sampled agreed, 3(10%) of the teachers sampled strongly disagreed 1(3.3%) of the teachers sampled disagreed and 7(23.3%) of the teachers were neutral.

The chart above also indicates that a larger percentage of the sample 11(37%) indicated by the blue part strongly agreed, 8(27%) indicated by the red part agreed, 3(10%) indicated by the green part strongly disagreed 1(3%) indicated by the purple part disagreed and 7(23%) indicated by the sky blue part were neutral to the fact that they present to their students new information on economics from newspapers on a daily bases.

Table 62: **I do not know how to use an encyclopaedia and a dictionary**

	frequency	Percentage
Modalities STRONGLY AGREE	3	10.0
AGREE	2	6.7
STRONGLY DISAGREE	8	26.7
DISAGREE	3	10.0
NEUTRAL	14	46.7
TOTAL	30	100.0

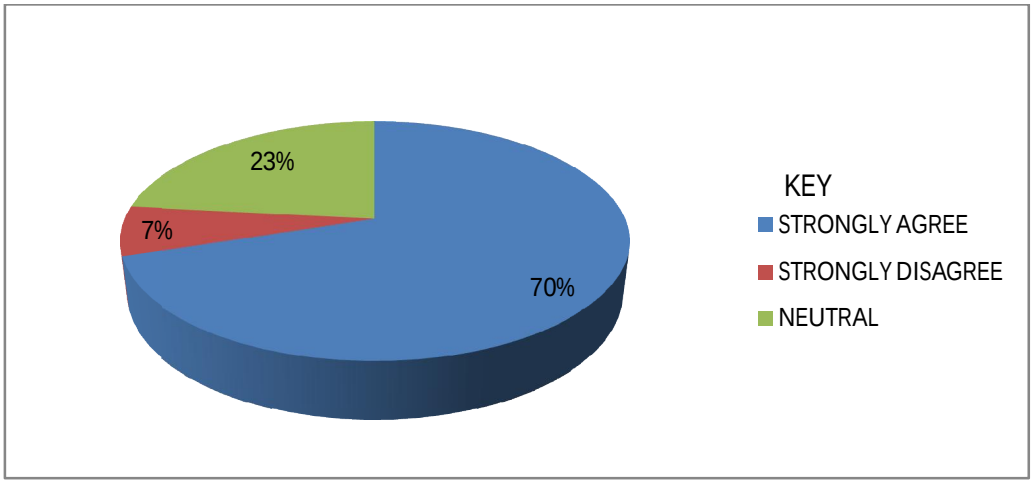


The table above shows that in trying to sample if the teachers knew how to use an encyclopaedia and a dictionary, 3(10%) of the teachers sampled strongly agreed, 2(6.7%) of the teachers sampled agreed, 8(26.7%) of the teachers sampled strongly disagreed 3(10%) of the teachers sampled disagreed and 14(46.7%) of the teachers were neutral.

The chart above also indicates that a larger percentage of the sample 11(37%) indicated by the blue part strongly agreed, 8(27%) indicated by the red part agreed, 3(10%) indicated by the green part strongly disagreed 1(3%) indicated by the purple part disagreed and 7(23%) indicated by the sky blue part were neutral to the fact that they did not know how to use an encyclopaedia and a dictionary.

Table 63: I always use Economics textbooks back at home to plan my lessons for the year and to give assignments to my students

	size	Percentage
Modalities STRONGLY AGREE	21	70.0
STRONGLY DISAGREE	2	6.7
NEUTRAL	7	23.3
TOTAL	30	100.0



The table above shows that to the item I always use Economics textbooks back at home to plan my lessons for the year and to give assignments to my students, 21 (70%) of the teachers sampled strongly agreed, 2(6.7%) of the teachers agreed and 7(23.3%) of the teachers were neutral. while none of the teachers disagreed. This shows how important the use of the textbook is to the Economics teachers.

The chart above also indicates that a larger percentage of the sample 21(70%) indicated by the blue part strongly agreed, 2(7%) of the teachers indicated by the red part strongly disagreed and 7(23%) of the teachers indicated by the green part were neutral to the fact that they always use Economics textbooks back at home to plan their lessons for the year and to give assignments to their students in form four Economics.

Table 64: SUMMARY OF SECTION C

Crossed table PRINT MATERIALS * ACADEMIC PERFORMANCE

Frequency

		ACADEMIC PERFORMANCES							
		5,00	6,00	7,00	9,00	10,00	12,00	14,00	Total
PRINT MATERIALS	19.00	3	1						4
	20.00	3	1						4
	21.00					1			1
	22.00		3						3
	23.00				1		1		2
	24.00			1					1
	28.00			1					1
	30.00						6	1	7
	37.00					7			7
Total		6	5	2	1	8	7	1	30

The chi-square statistic that follows is to determine whether or not respondents' agreement to the use and importance of print materials in secondary school influences students' academic performance in Economics.

Table 65: Summary of Chi Square Statistic for Contingency Table 2

Chi-Square Tests

	Value	df	Asymp. Sig. (2-tailed)
Pearson Chi-square	116.969[a]	48	.000
Likelihood Ratio	85.678	48	.001
Linear-by-Linear association	13.651	1	.000
N of valid Cases	30		

Table 66: Decision Ho and Ha

df	48	Since $\chi^2_{cal}(116.969) > \chi^2_{crit}(65.171)$, H_o is rejected and H_a is accepted.
χ^2_{crit}	65.171 (s.l. = 0.05)	
χ^2_{cal}	116.969	
Decisions	(a) Reject H_o if $\chi^2_{cal} > \chi^2_{crit}$ (b) Accept H_o if $\chi^2_{cal} < \chi^2_{crit}$	

Ho: The organized use of print materials has no significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon.

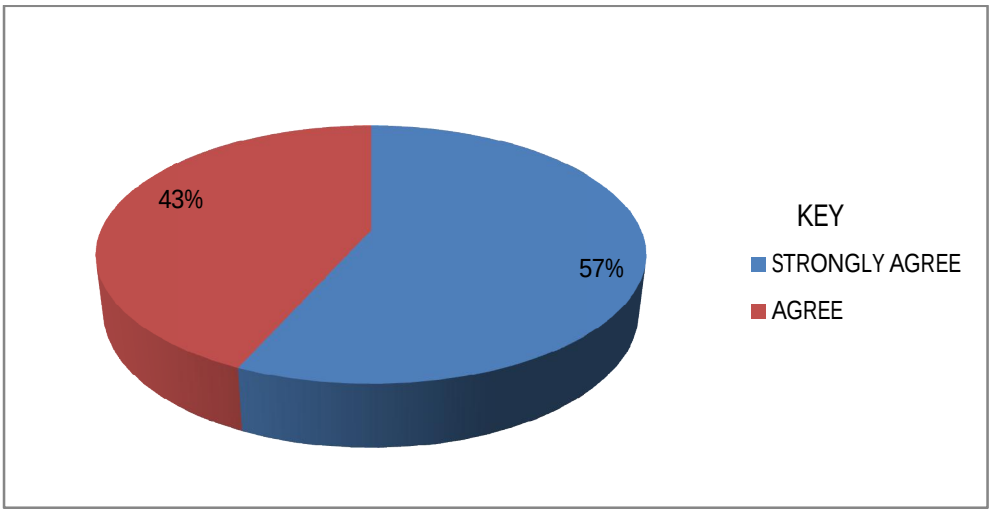
Ha: The organized use of print materials has a significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon.

Decision: Ho is rejected thereby accepting Ha. Accepting Ha will imply that the organized use of print materials has a significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon, Yaoundé.

SECTION D: Theme 4: Graphic Materials

Table 67: I currently use picture, globes and graphs during most of my lessons in Economics as an aid to its study

		frequency	Percentage
Modalities	STRONGLY AGREE	17	56.7
	AGREE	13	43.3
	TOTAL	30	100.0

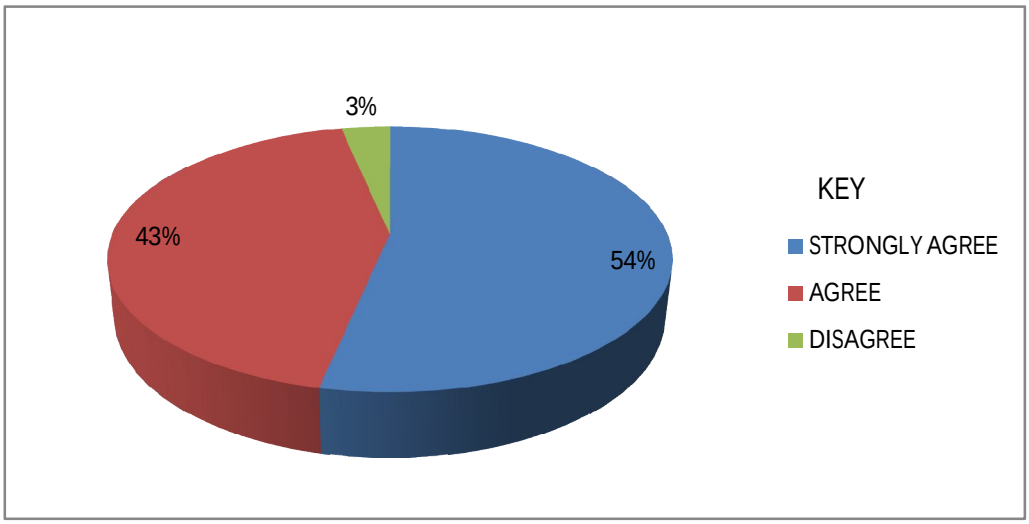


The table above shows that to the statement I currently use picture, globes and graphs during most of my lessons in economics as an aid to its study, 17 (56.7%) of the teachers sampled strongly agreed and 13(43.3%) of the teachers agreed. while none of the teachers disagreed nor strongly disagreed. This shows a major contradiction between what the learners affirmed and the statements of the teachers in Economics.

The chart above also indicates that a larger percentage of the sample 17(57%) indicated by the blue part strongly agreed and 13(43%) indicated by the red part agreed to the fact that they constantly use picture, globes and graphs during most of their lessons in Economics as an aid to its study.

Table 68: The use of charts during lessons enables students to easily understand and incorporate the lesson

		frequency	Percentage
Modalities	STRONGLY AGREE	16	53.3
	AGREE	13	43.3
	DISAGREE	1	3.3
	TOTAL	30	100.0

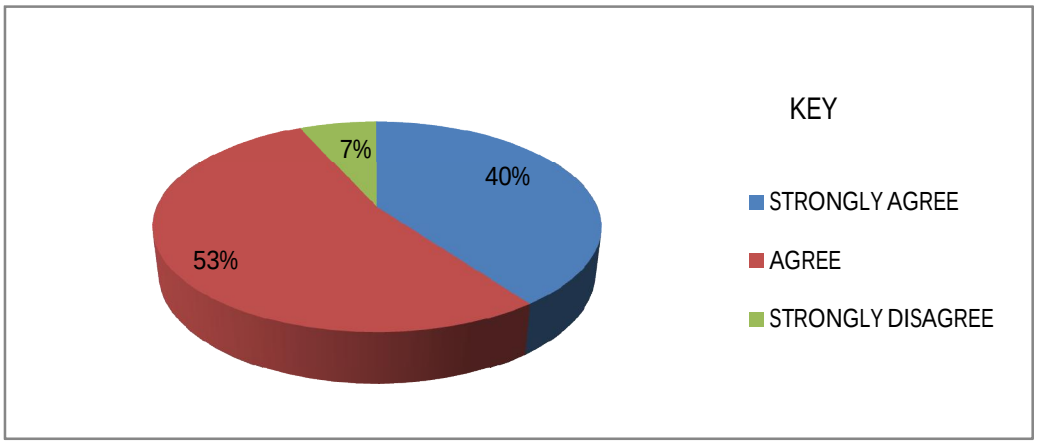


The table above shows that to the item the use of charts during lessons enables students to easily understand and incorporate the lesson 16(53.3%) of the teachers sampled strongly agreed, 13(43.3%) of the teachers agreed and 1(3.3%) of the teachers disagreed .

The chart above also indicates that a larger percentage of the sample 16(54%) indicated by the blue part strongly agreed, 13(43%) indicated by the red part agreed and 1(3%) of the teachers indicated by the green part disagreed to the fact that the use of charts during lessons enables students to easily understand and incorporate the lesson in Economics.

Table 69: I am always disturbed because my students seem not to understand drawings and notes on charts and graphs most often

	frequency	Percentage
Modalities STRONGLY AGREE	12	40.0
AGREE	16	53.3
STRONGLY DISAGREE	2	6.7
TOTAL	30	100.0

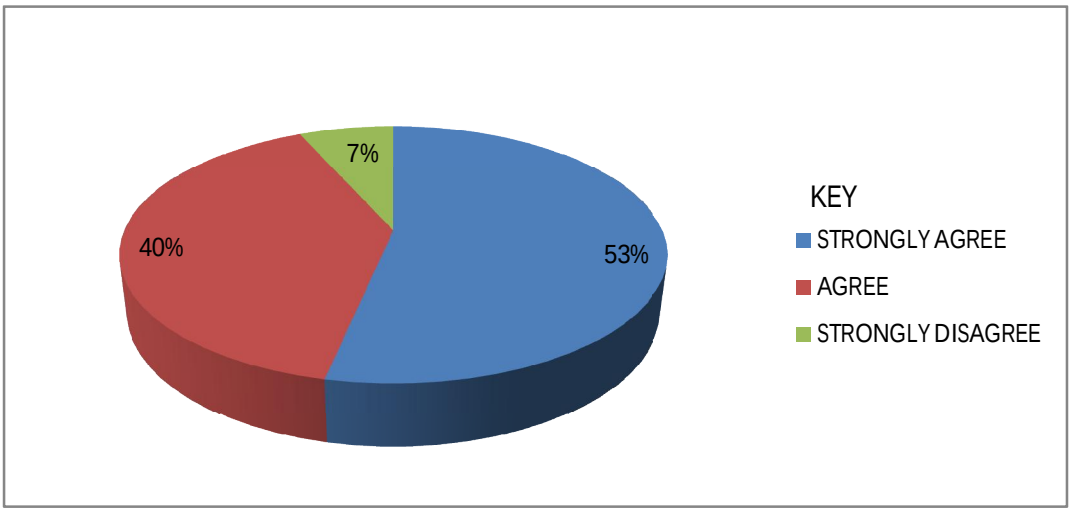


The table above shows that to the statement I am always disturbed because my students seem not to understand drawings and notes on charts and graphs most often 12(40%) of the teachers sampled strongly agreed, 16(53.3%) of the teachers agreed and only 2(6.7%) of the teachers disagreed .

The chart above also indicates that a larger percentage of the sample 12(40%) indicated by the blue part strongly agreed, 16(53%) indicated by the red part agreed and 2(7%) of the teachers indicated by the green part disagreed to the fact that they are always disturbed because their students seem not to understand drawings and notes on charts and graphs most often in Economics.

Table 70: To make learning easier, I ask my students to reproduce my drawings and charts in Economics into their books

	frequency	Percentage
Modalities STRONGLY AGREE	16	53.3
AGREE	12	40.0
STRONGLY DISAGREE	2	6.7
TOTAL	30	100.0

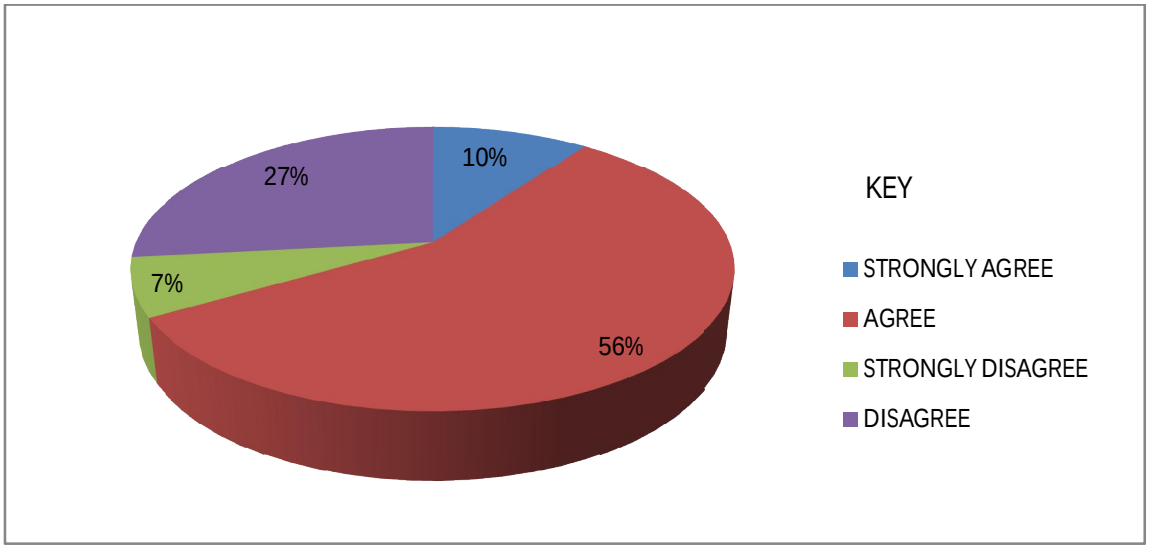


The table above shows that to the statement, to make learning easier, I ask my students to reproduce my drawings and charts in Economics into their books, 16(53.3%) of the teachers sampled strongly agreed, 12(40%) of the teachers agreed and only 2(6.7%) of the teachers strongly disagreed .

The chart above also indicates that a larger percentage of the sample 16(53%) indicated by the blue part strongly agreed, 12(40%) indicated by the red part agreed and 2(7%) of the teachers indicated by the green part strongly disagreed to the fact that to make learning easier, they ask their students to reproduce their drawings and charts in Economics into their exercise books.

Table 71: I use maps and globes most often in my teachings

	frequency	Percentage
Modalities STRONGLY AGREE	3	10.0
AGREE	17	56.7
STRONGLY DISAGREE	2	6.7
DISAGREE	8	26.7
TOTAL	30	100.0



The table above shows that to the item I use maps and globes most often in my teachings, 3(10%) of the teachers sampled strongly agreed, 17(56.7%) of the teachers sampled agreed, 2(6.7%) of the teachers sampled strongly disagreed and 8(26.7%) of the teachers sampled disagreed.

The chart above also indicates that of the sample 3(10%) indicated by the blue part strongly agreed, 17(56%) indicated by the red part agreed, 2(7%) indicated by the green part strongly disagreed and 8(27%) indicated by the purple part disagreed to the fact that they used maps and globes most often in their teachings in Economics.

Table 72: SUMMARY OF SECTION D

Crossed table GRAPHIC MATERIALS * ACADEMIC PERFORMANCE

Frequency

		ACADEMIC PERFORMANCES							
		5,00	6,00	7,00	9,00	10,00	12,00	14,00	Total
GRAPHIC MATERIALS	6,00		1						1
	7,00	6	3	1					10
	8,00			1	1		1		3
	9,00						5	1	6
	10,00					7	1		8
	12,00		1						1
	14,00					1			1
Total		6	5	2	1	8	7	1	30

The chi square statistic that follows is to determine whether or not respondents' agreement to the use and importance of graphic materials in secondary school influences students' academic performance in Economics.

Table 73: Summary of Chi Square Statistic for Contingency Table 3

Chi-Square Tests

	Value	df	Asymp. Sig. (2-tailed)
Pearson Chi-square	73.440[a]	36	.000
Likelihood Ratio	67.204	36	.001
Linear-by-Linear association	8.661	1	.003
N of valid Cases	30		

Table 74: Decision Rule

df	36	Since $\chi^2_{cal}(73.440) > \chi^2_{crit}(50.998)$, H_o is rejected and H_a is accepted.
χ^2_{crit}	50.998 (s.l. = 0.05)	
χ^2_{cal}	73.440	
Decisions	(a) Reject H_o if $\chi^2_{cal} > \chi^2_{crit}$ (b) Accept H_o if $\chi^2_{cal} < \chi^2_{crit}$	

Ho: The use of graphic materials has no influences on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon.

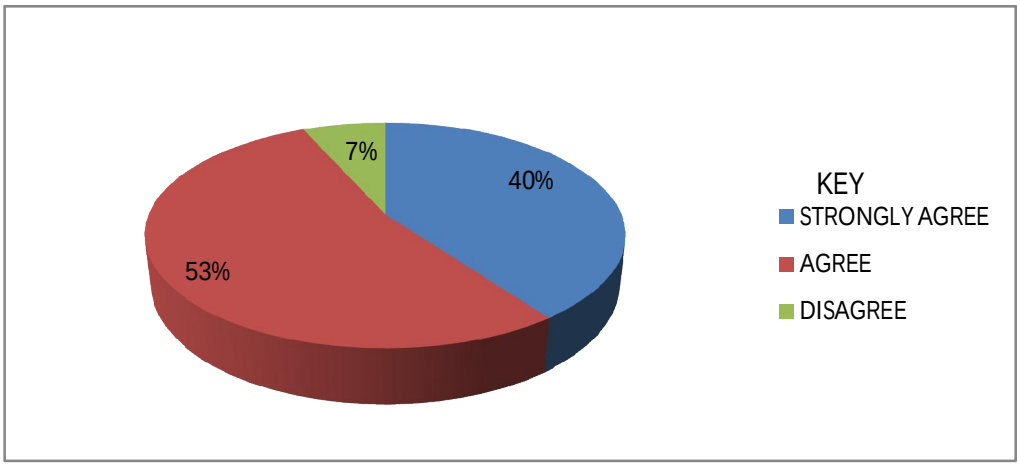
Ha: The use of graphic materials has an extensive influence on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Decision: Ho is rejected thereby accepting Ha. Accepting Ha will imply that the use of graphic materials has an extensive influence on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon.

SECTION E: Theme 5: Academic Performances

Table 75: I ask my students to do all their assignments and home works by the use of didactic aids like textbooks and research practices on the web

		frequency	Percentage
Modalities	STRONGLY AGREE	12	40.0
	AGREE	16	53.3
	DISAGREE	2	6.7
	TOTAL	30	100.0

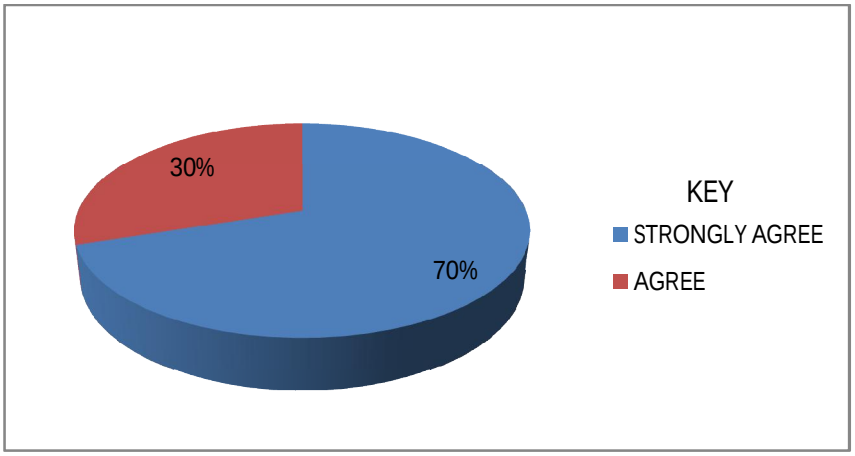


The table above shows that to the item I ask my students to do all their assignments and home works by the use of didactic aids like textbooks and research practices on the web, 12(40%) of the teachers sampled strongly agreed, 16(53.3%) of the teachers sampled agreed, and 2(6.7%) of the teachers sampled disagreed.

The chart above also indicates that a larger percentage of the sample 12(40%) indicated by the blue part strongly agreed, 16(53%) indicated by the red part agreed, and 2(7%) indicated by the green part disagreed to the fact that they ask their students to do all their assignments and home works by the use of didactic aids like textbooks and research practices on the web.

Table 76: I consider the use of didactic materials to be a basic necessity in education

	frequency	Percentage
Modalities STRONGLY AGREE	21	70.0
AGREE	9	30.0
TOTAL	30	100.0

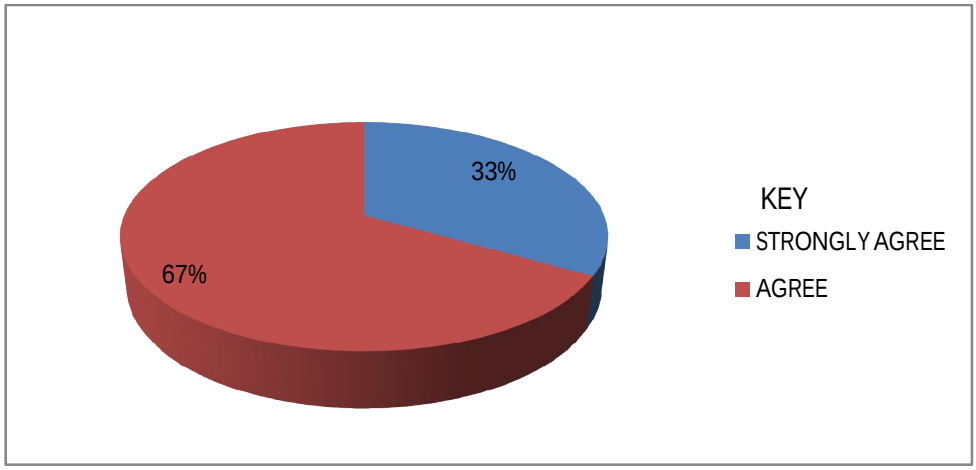


The table above shows that to the item I consider the use of didactic materials to be a basic necessity in education 21 (70%) of the teachers sampled strongly agreed and 9(30%) of the teachers agreed. while none of the teachers disagreed nor strongly disagreed.

The chart above also indicates that a larger percentage of the sample 21(70%) indicated by the blue part strongly agreed and 9(30%) indicated by the red part agreed to the fact that they consider the use of didactic materials to be a basic necessity in education.

Table 77: Teaching using didactic materials is much easier than without their use

		frequency	Percentage
Modalities	STRONGLY AGREE	10	33.3
	AGREE	20	66.7
	TOTAL	30	100.0

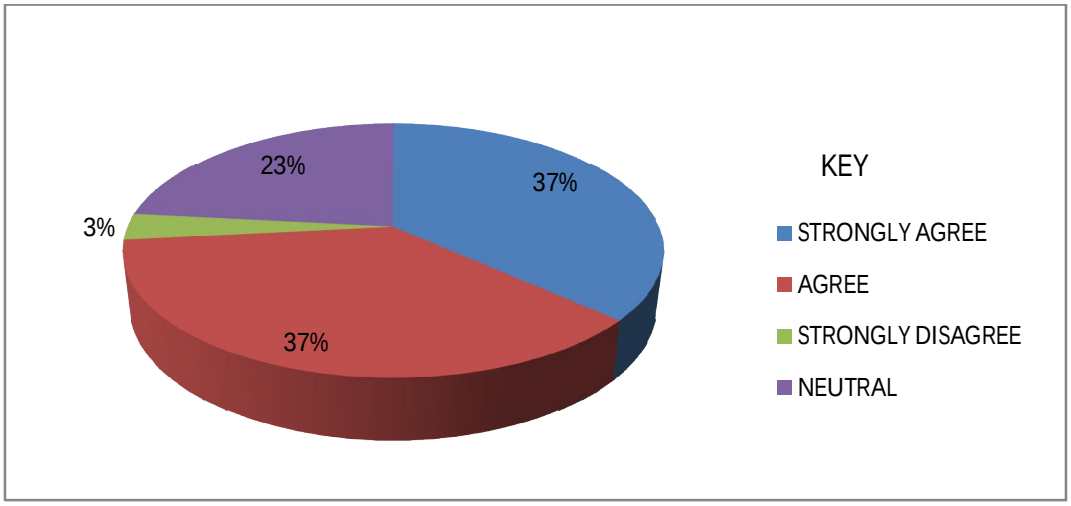


The table above shows that to the item teaching using didactic materials is much easier than without their use 10 (33.3%) of the teachers sampled strongly agreed and 20(66.7%) of the teachers agreed. while none of the teachers disagreed nor strongly disagreed. This shows how important the teachers of economics consider didactic materials to be.

The chart above also indicates that a larger percentage of the sample 10(33%) indicated by the blue part strongly agree and 20(67%) indicated by the red part agree to the fact that teaching using didactic materials is much easier than without their use.

Table 78: My performance in Economics has been on the increase thanks to my use of teaching aids

	frequency	Percentage
Modalities STRONGLY AGREE	11	36.7
AGREE	11	36.7
STRONGLY DISAGREE	1	3.3
NEUTRAL	7	23.3
TOTAL	30	100.0

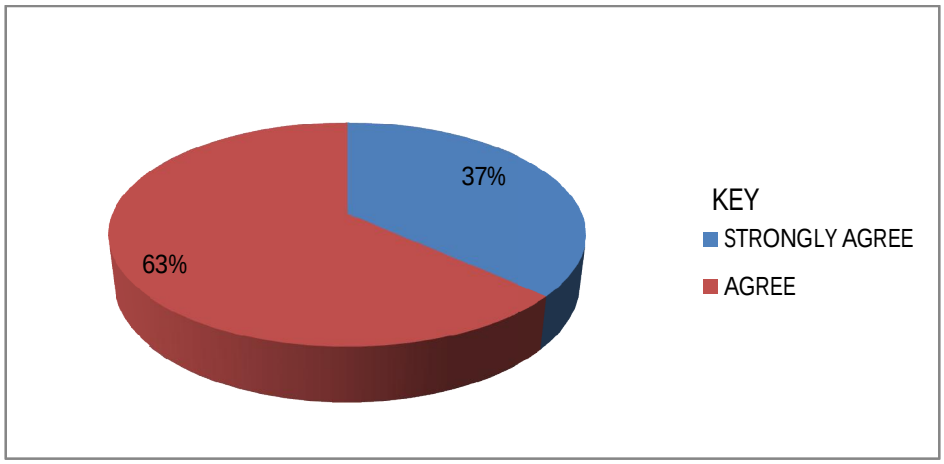


The table above shows that to the item, my performance in Economics has been on the increase thanks to my use of teaching aids, 11(36.7%) of the teachers sampled strongly agreed, 11(36.7%) of the teachers sampled agreed, 1(3.3%) of the teachers sampled strongly disagreed and 7(23.3%) of the teachers sampled disagreed.

The chart above also indicates that of the teachers sampled 11(37%) indicated by the blue part strongly agreed, 11(37%) indicated by the red part agreed, 1(3%) indicated by the green part strongly disagreed and 7(23%) indicated by the purple part were neutral about the fact that their performances in teaching economics had been on an increase thanks to their use of teaching aids in teaching Economics.

Table 79: Didactic aids and materials are not available in my school to facilitate the teaching and learning process

		frequency	Percentage
Modalities	STRONGLY AGREE	11	36.7
	AGREE	19	63.3
	TOTAL	30	100.0



The table above shows that to the item didactic aids and materials are not available in my school to facilitate the teaching and learning process, 11 (36.7%) of the teachers sampled strongly agreed and 19(63.3%) of the teachers agreed. while none of the teachers disagreed nor strongly disagreed. This statement coroborates the fact that there is an extensive lack of didactic materials and aid that could help facilitate teaching and learning in secondary schools in the centre region of Cameroon.

The chart above also indicates that a larger percentage of the sample 11(37%) indicated by the blue part strongly agreed and 19(63%) indicated by the red part agreed to the fact that didactic aids and materials are not available in their teaching schools to facilitate the teaching and learning process of both teachers and students in Economics.

Table 80: CONTINGENCY: Summary of Sections B, C AND D

df	48	Since $\chi^2_{cal}(116.969) > \chi^2_{crit}(65.171)$, H_o is rejected and H_a is accepted.
χ^2_{crit}	65.171 (s.l. = 0.05)	
χ^2_{cal}	116.969	
Decisions	(a) Reject H_o if $\chi^2_{cal} > \chi^2_{crit}$ (b) Accept H_o if $\chi^2_{cal} < \chi^2_{crit}$	

General Hypotheses

Null hypothesis (Ho): There is no significant relationship between the use of didactic materials and their influence on the academic performances of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Alternative hypothesis (Ha): There is a significant relationship between the use of didactic materials and its influence on the academic performances of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Decision: Reject Ho hypothesis and accept Ha.

Conclusively, the decision rule for this final table implies the rejection of Ho and the acceptance of Ha which states that there is indeed a significant relationship between the use of didactic materials and its influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

CHAPTER FIVE

INTERPRETATION OF RESULTS AND DISCUSSION OF FINDINGS

5.0. Introduction

This chapter concludes this research by discussing the practical and theoretical implications of the findings relative to the previously stated research questions and objectives with reference to the reviewed literature. A conclusion for the project as well as suggestions for further research and recommendations for the improvement of teaching methods and strategies in general and the use of didactic materials in Economics have also been made from the discussions.

5.1. SUMMARY OF FINDINGS

This study examines the relationships that exist between the use of didactic materials and students' academic performance in Economics. The different didactic materials concerned were analysed and a questionnaire given to both teachers and students in secondary schools in the Centre Region of Cameroon, Yaoundé to ascertain to what extent these materials are being used and how effective their use is in shaping the performance of both teachers and students in teaching and learning Economics.

The findings reveal that:

The appropriate use of visual display devices has a significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

The organized use of print materials has a significant impact on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon.

The use of graphic materials has an extensive influence on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Therefore, there is a significant relationship between the use of didactic aids or materials and its influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

5.2. VERIFICATION OF HYPOTHESES

This study was aimed at determining if the use of didactic aids or materials influences the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon. In this light, three groups of didactic materials commonly used in economics were considered, visual display devices, print materials and graphic materials. Based on this study, three research hypotheses formulated are verified**.**

5.2.1. Specific Research Hypothesis I

Ho: The appropriate use of visual display devices has no significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Ha: The appropriate use of visual display devices has a significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

The chi square statistic for contingency table B in section B of both part I and II of data analysis indicates that the calculated value for the chi square is greater than the critical value (232,871 > 231.994 and 134.112 > 65.171 respectively). This implies the null hypothesis is rejected and the alternative hypothesis which retains the point that the appropriate use of visual display devices has a significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon is accepted. These ties with the fact that about 80% of all the students and teachers sampled generally agree to the importance of using the chalkboard and other visual display devices within and without their classrooms for an effective instruction.

5.2.2. Specific Research Hypotheses II

Ho2: The organized use of print materials has no significant importance on the academic performance of students in the teaching/learning process of economics at the secondary level of education in the Centre Region of Cameroon.

Ha2: The organized use of print materials has a significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon.

The chi square statistic for contingency table C in section C of both part I and II of data analysis indicates that the calculated value for the chi square for the teachers, (116.969) is greater than the critical value (65.171) and for the students(349.351)calculated is greater than the critical value (341.395). This implies the null hypothesis is rejected and the alternative hypothesis which retains that the organized use of print materials has a significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon. These ties with the fact that about 65% of all the students and teachers sampled generally agree to the importance of using print materials such as textbooks, dictionaries and encyclopaedias for an effective and efficient teaching–learning process in Economics.

5.2.3. Specific Research Hypotheses III

Ho3: The use of graphic materials has no influences on the academic performance and improvement of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Ha3: The use of graphic materials has an extensive influence on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon.

According to the chi square statistic for contingency table D in section D of both part I and II of data analysis, this indicates that the calculated value for the chi square for the teachers, (73.440) is greater than the critical value (50.998) and for the students (235.519) calculated is greater than the critical value (228.580). This implies the null hypothesis is rejected and the alternative hypothesis which retains that the use of graphic materials has an extensive

influence on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon. These tie with the fact that almost all of the students and teachers sampled generally agree to the importance of and the use of graphic materials such as charts, globes and graphs for an effective and efficient teaching–learning process in Economics.

5.2.4. GENERAL HYPOTHESES:

Null hypothesis (Ho): There is no significant relationship between the use of didactic aids or materials and their influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

Alternative hypothesis (Ha): There is a significant relationship between the use of didactic aids or materials and its influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon.

In sum, from a complete review of all the other hypothesis, the value of the calculated chi square statistics for contingency table 4, summary of contingency tables A, B and C is116.969 which is greater than the critical value of 65.171 implying that, from our decision rule the null (Ho) hypothesis is rejected and the alternative hypothesis (Ha) which states that there is a significant relationship between the use of didactic aids or materials and its influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon is retained or accepted since 116.969 is greater than 65.171 and the decision rule holds that:

a) Reject H_o if $\chi^2_{cal} > \chi^2_{crit}$

(b) Accept H_o if $\chi^2_{cal} < \chi^2_{crit}$

It is now clear from the analysis made via information collected that there is a significant relationship between the use of didactic aids or materials and its influence on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon since in effect it boost their understanding, motivates them to learn and significantly shapes their Academic performance. In effect, this implies that the teaching and learning process of Economics being of great importance to our society at large is bound to be handled with care and taught/learned much more effectively by the use of essential didactic

materials that orientate the study like the use of charts, graphs and globes to teach a topic like demand and supply for example for easy understanding and incorporation.

For better results and outcomes, the teaching and learning of Economics in Cameroon secondary schools has to be re-analysed and re-defined; the challenges reduced or removed and prospects for its growth rather encouraged (Belinga, 2013). Problems such as the high student-teachers ratio, the short duration of class hours in form four, the lack of adequate information by students and teachers via the medias and other mediums, the inefficacy of the teaching because of little or no use of essential didactic materials, the continuous absence of Economics teachers in most public schools, the nonchalant attitude of form four and other Economics students towards economics, , just to name a few are factors that will have to be looked into for a better an improved performance of students to be achieved in Economics , be it during their end of term and promotion exams or during general certificate entrances like the G.C.E Ordinary Level commonly Written in Cameroon.

5.3. DISCUSSION OF FINDINGS

The Findings have been discussed according to the research questions.

Research Question 1

Does the appropriate use of visual display devices influence the academic performance of students in Economics at the secondary level of education in the central region of Cameroon?

The findings show that the appropriate use of visual display devices influence the academic performance of students in Economics at the secondary level of education in Yaoundé. The major barrier existing is the fact that these visual display devices are not commonly used in these secondary schools. This could be as a result of many challenges that negatively affect the academic performance of Economic students in these schools. Amongst the challenges cited by the student and teachers are class size, student-teacher ratio, limited teaching and learning hours which constitutes a problem to them and directly as well as indirectly imped their use of visual display devices during Economics classes.

This is in line with the view of Mzeke, (1981) who stipulates that, “a class where pupils-teacher ratio is 1:18 is seen as a join interaction between teachers and pupils. He further says that, when pupil/teachers ratio is too high, the teacher finds it very difficult to administer

his/her functions and the students find it more than difficult to be at ease in a particular subject.

To compound this, in relation to the problem of little or unavailable infrastructures and materials provided by the school or other authorities, Mzeke (1981) says that, "the maintenance of a clean and well ventilated classroom will enhance attractive and effective teaching and learning" as well as boost the morale of students and teachers in their didactic endeavour.

Also, Aderonnmu (1984) insinuates that some teachers refuse to cooperate with students and refuse reiterating concepts for better understanding of the learners through the use of visual display. However, their refusal is attributed to the disruption of their programmes, the fear of not being able to complete their syllabus on time and the lack of proper motivation for their efforts.

All in all it is worth nothing that the teachers themselves attests the importance of these visual display devices in the teaching learning process but most of them generally agree to the fact that they lack skills in using them appropriately for better results from the learners.

Research Question 2

Does the use of print materials influence the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon?

From the findings on this research question, about 71% of students in Economics and 55% of the teachers accepted the fact that the use of print materials influence their academic performance in the teaching/learning process of Economics as against about a quarter (26.1%) respondents who attest the fact that they are not quite use to these print materials since they do not know what an encyclopaedia is, they rarely use dictionaries and do not read their textbooks back at home before lessons in Economics because they do not have one. Other students also attest the fact that they are not comfortable with the methods and procedures used in carrying out the teaching process of Economics by their teachers since they consider them void of necessary didactic materials. This is backed up with the theory of the zone of

proximal development developed by Vygotsky as seen in the review of literature for this study.

Time (2001) states that "the purpose of teaching for students is to give them the opportunity of expressing themselves and acquiring knowledge, skills and abilities from teachers who have been trained in psychology, methods of teaching, principles of teaching/learning and the use of teaching/learning aids. This is because learning is no more teacher centred or objective oriented. Teaching and learning in the current days continuously centres around the students or the learners and the use of appropriate techniques, methods and strategies including priority to didactic materials for the students' intellectual and societal growth to be a priority for every Economics teacher. Therefore, it has been established that the use of essential print materials should be encouraged for the development of more viable and reliable students and for an improvement of students' academic performance in Economics.

Research Question 3

Does the use of graphic materials influence the academic performance and improvement of students in Economics at the secondary level of education in the Centre Region of Cameroon?

In testing the use of graphic materials and their influence on the academic performance and improvement of students in Economics at the secondary level of education, the researcher tries to find out how much the students know about graphic materials, how often their teachers use them to teach them during Economics lessons and to what extent their use impact or influence their academic performance. To this research question, respondents generally agreed by 74.5% that the use of graphic materials by their teachers has been on the decrease since they started classes. They attest the fact that their teachers rarely use didactic aids and print materials like charts, globes and graphs for more understanding. It is worth noting that the use of these aids positively influences students and teachers way of thinking and acting towards teaching/learning, thereby positively influencing their mastery and professional competence by leading them in to the various appropriate processes and procedures of teaching.

Also, about a quarter (87.4%) of the teachers agreed that teaching Economics with the use of graphic materials during economic lessons enables students to easily understand and incorporate the lesson. This difference can be attributed to the variation in schools, or the passive nature of some students and the disturbances encountered teaching or the nonchalant nature of certain teachers. It is therefore very important for students and teachers to master the use of these materials both at home and at school for an improved performance in Economics.

5.4.Conclusions Based on Findings

The findings confirm that:

The appropriate use of visual display devices has a significant impact on the academic performance of students in Economics at the secondary level of education in the Centre Region of Cameroon in Yaoundé precisely. Using these visual display devices are important because they appeal directly to the senses of the learner and enable them easily acquaint themselves with skills, acquire knowledge, realize their strengths, weaknesses and successes in Economics.

The organized use of print materials has a significant importance on the academic performance of students in the teaching/learning process of Economics at the secondary level of education in the Centre Region of Cameroon. It is also recognized that learners' environment, head of Economics departments, as well as other school authorities are of great importance during teaching and help oversee the provision and functioning of necessary and essential print materials like textbooks, encyclopaedias, dictionaries, newspapers and journals.

The use of graphic materials has an extensive influence on the academic performance and improvements of students in Economics at the secondary level of education in the Centre Region of Cameroon. Graphic materials like charts and graphs can never be under emphasized in the teaching and learning of Economics. A topic like demand and supply in Economics for example has a lot of graphs and charts that the students will need to comprehend for an improved performance in Economics.

Although it is indicated that students and teachers face problems during the teaching and learning of Economics such as pedagogic and financial problems, late coming to school and disobedience by pupils, overcrowded classrooms (high student-teacher ratio), lack of basic

school needs by pupils etc., leading to ineffectiveness in teaching on the part of the teachers and learning for the students, or the entire teaching/learning process, it can be seen that all these disturbances or difficulties help to rather strengthen students' and teachers' capability in teaching and learning Economics in all circumstances once they are properly channelled via the use of appropriate didactic materials in teaching Economics.

Conclusively, using didactic materials to teach Economics needs to be emphasized because of the following important reasons:

Evoke learner interest in the subject matter which is Economics.

Promote the process of establishing links between prior knowledge and new subject matter in ways that are efficient and effective.

Encourage a critical attitude among learners towards the subject matter.

Promote a process of expanding learners' understanding of their social environment and their active engagement therein.

Develop and promote thoroughness, tidiness, and precision within the economic environment in which the leaner evolves.

5.5. RECOMMENDATIONS

From the results obtained in this study, there are some important recommendations to be made to students, to teachers, and other school authorities to make the teaching and learning of Economics more effective.

5.5.1. To Students

From the results obtained in the analysis, it is noticed that Economics students capitalize on the problems they face during teaching and on the fact that their teachers do not use didactic materials in teaching them, thereby portraying a 'laissez-faire' attitude towards learning Economics. Students should be o able plan and make their lessons more interesting by searching for the necessary materials that will help them in studying Economics and getting constantly updated about the things happening in their society. If any problem is beyond their control, they should channel these problems to the hierarchy and seek the face of their instructors for Guidance.

5.5.2. To Teachers

The results obtained in the analysis shows that most teachers portray anundefined attitude towards teaching Economics. For example, they deliver lessons to pupils without motivation and the use of didactic or instructional materials and careless about their end results. In this wise, they are encouraged to make good use of the natural resources around them, to improvise the instructional materials they need to be able to teach Economics effectively at all times. Also, to be ready not only through the acquisition of knowledge of their subject matter but for the constant follow-up of those resources and materials that will facilitate their teaching of Economics.

Teachers should plan and make their lessons more interesting to keep the pupils more participative in other to solve the problem of distractions and overcrowding. To be exemplary, teachers should be ready to accept criticisms from head teachers and head of departments and they should endeavour to learn to practice what they learned theoretically about teaching while on the field.

5.5.3. To School Authorities

School authorities like Economics head of departments should endeavour to follow up what their teachers use as didactic aids and to providefor them if they are lacking. They should also intercede for the provision of these aids by the government for public schools or by the proprietors for private secondary schools in the central region of Cameroon, Yaoundé municipality and even beyond.

It is suggested that the following be made available:

The provision of a longer range of study in Economics. This implies that Economics should be studied from form 1 and not only from forms three in Cameroon.

A descriptive- explanatory framework of reference in Economics.

Proposition of Economics update seminars for teachers to learn current technologies and how to use necessary didactic materials for better outcomes and performance of Economic students.

In a bit to encourage the use of didactic materials, the harmonization of English and French education system and the inclusion of Economics as a subject in such a way that Economics

will also be taught in the Francophone sub-system of Cameroon at the secondary level of education.

The collections of significant documents such as graphs, statistical data, images, texts, speeches, news reports, etc. selected by a Commission and activity proposals that are independent specific materials for teaching Economics.

In order to guarantee teachers' awareness of the materials and consolidate their use, it is also recommended that distribution procedures be more efficient, regular and systematic. It is therefore deemed necessary to: (a) publish them annually in the months of September-October in order to make their inclusion in teaching programs possible, (b) maintain sustained contact with interested teachers (through mailing lists, subscription to updates, etc.), and (c) create an on-line reference site where teachers may find the required material on Economics texts in order to use it in their classrooms.

5.6. SUGGESTIONS FOR FURTHER RESEARCH

Further research can be carried out in the following areas related to this project.

The effectiveness of the use of didactic materials to pupils' performance at the primary level of education: some Policy Implications.

The production of didactic materials and students' academic achievement attitudes in secondary schools in Cameroon.

This research can also be replicated on a larger scale including a larger scope to involve more students and teachers from other schools and regions not included in this study**.**

CONCLUSION

Teachers influence education in several ways. The need to train them to be effective presupposes effective theoretical and practical training; both of which require enormous efforts because of the dynamic nature of the profession. The evidence from this research shows that if the teachers of Economics continuously and effectively use didactic materials in teaching Economics, challenges faced during the teaching and learning of Economics will be outweighed and the academic performances of students offering Economics will considerably increase positively. There is no such thing as failure, only feedback and result, success depends on how well we process the feedback we get regarding our efforts. Both teachers and learners must adopt this approach in pursuit of meaningful and valuable outcomes in Economics (Fonkeng and Tamanjong, 2009).

BIBLIOGRAPHY

Aderonnmu, W. O. (1984). "The Relative Efficacy of Pictures and Realia in the Teaching of Verbs in Junior Secondary Schools". *UNAD. Journal of Education, 2*, 50-56.

Agina Obu, T. N. (2005). "The Relevance of Instructional Materials in Teaching and Learning". In I.Robert-Okah & K.C. Uzoeshi, (ed.). *Theory and Practice of Teaching*.Port Harcourt: Harey Publication.

Agun, I. (1982). "The place of Instructional Materials in Curriculum Development", *Journal of Education and Development, vol 2(2*), 503 – 510.

Akhtar, S. H., Munshi, P. & Naseer, D. M. (2010). "Role of Educational Technology at Secondary School Level in Pakistan". *International Journal of Academic Research*.

Alchian, A. (1950). "Uncertainty, Evolution and Economic Theory", *Journal of Political Economy*, Newlands: extinct publishers.

Alt, J., Levi, M. & Ostrom E. (1999). *Competition and Cooperation: Conversations with Nobelists about Economics and Political Science*. New York: Russell Sage Foundation.

Amin, M. E. (2005). *Social Science Research: Conception Methodology and Analysis.* Makere University, Kampala: Uganda.

Amariglio, J., Cullenberg, S., & Ruccio D. (2001). *Post-Modernism, Economics and Knowledge*. London: Routledge.

Anderson, J. R. (1990). *Cognitive psychology and its implications* (3rd ed.). New York: Freeman.

Angrist P., Joshua D. &Victor L. (1999). "Using Maimonides' Rule to Estimate the Effect of Class-size on Scholastic Achievement." *The Quarterly Journal of Economics*, 114, pp. 533-575.

Angyrous, G. (1967). "Refutation or Comparison?" *British Journal for the Philosophy of Social Science.*

Apple, M. & Christian-Smith, L. (1991). *The Politics of the Textbook*, New York: Routledge.

Archer, K. (1999) & Armentano, D. (2003). "Let's Re-think Class-size Amendment." Cato

Institute, Washington D.C. Retrieved at *http://www.cato.org/cgi-bin/scripts/printtech.cgi/dailys/08-10-03.html* accessed on 17.07.15.

Arrow, K. (1968). "Economic Equilibrium."*International Encyclopedia of the Social Sciences*, pp. 376–389, New York: Macmillan.

Bandura, A. (1963). *Social learning and personality development*. New York: Holt, Rinehart, and Winston.

…….. (1963). "Social learning through imitation." In M. R. Jones (Ed.), *Nebraska symposium on motivation*. Lincoln: University of Nebraska press.

……. (1968). "From thought to action: Mechanisms of personal agency." New Zealand Journal of Psychology, 15, pg.206.

……. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice.Hall.

Barkley, P. W.et al. (1998). *Economics: The way we choose*. 2ndEd. New York, NY: Harcourt Brace.

Barkley, R. (1977). "A review of stimulant drug research with hyperactive children." *Journal of psychology and psychiatr*y 18,137-139.

Barnard, C. (1964). *The functions of the Executives*. Cambridge, Mass, Harvard University Press (Originally published in 1938).

Barrow, R. & Sadow, M. W. (1989). "Influence of Basal Programs on Fourth-Grade Reading Instruction."*Reading Research Quarterly*. 24(1):44-71.

Baumol, W. J. & Blinder, A. S. (1998). *Economics: Principles and policy*. New York, NY: Harcourt Brace Jovanovich.

Belinga, B. S. (2013). *Didactique et professionnalisation des enseignements*, Yaoundé: Edition clé.

Bhattacherjee, A. (2012).*Social Science Research: Principles, Methods, and Practices*. Textbooks Collection.

Biggs, J. B. & Collis, K. (1982). *Evaluating the Quality of Learning: the SOLO taxonomy,* New York: Academic Press.

Bisschoff, T. T., Fourie, H. M., Froneman, E.M., Paxton, P.A & Smith, H. V. (1992). *Teaching commercial subjects*. Doornfontein: Oikospaisago Publishers.

Berk, E. L. (2001). *Development through the lifespan*. Boston: Pearson Education, Inc.

Bloom B. S. (1956). *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain*. New York: David McKay Co Inc.

Boissiere, M. (2004), "Determinants of Primary Education, Outcomes in Developing Countries , Background paper for the evaluation of the World Bank's support to primary education", Washington, OED.

Briggs, L. J. (1970). *Handbook of Procedures for the Design of Instruction.* Pittsburgh: American Institutes for Research.

Brophy, J. & Good, T. (1986) "Teacher behaviour and student achievement." In M. Wittrock (ed). *Handbook of research on teaching*. New York: Macmillan.

Bronfenbrenner, M., (1971). "The Structure of Revolutions in Economic Thought", *History of Political Economy*, 3.

Brooks, J. G.& Brooks, M. G. (1993). *In search of understanding: The case for constructivist classrooms.* Alexandria, VA: Association of Supervision and Curriculum Development.

Brunner, K. (1986). "Assumptions and the Cognitive Quality of Theories", *Synthese*, 20: 501–525.

Bruner, J. S. (1983). "In Search of Mind: Essays in Autobiography." In the *Gale Encyclopedia of Psychology*, 2nd ed. Gale Group, 2001. Retrieved September 9, 2014.

……. (1957). *Going beyond the information given.* New York: Norton.

……. (1960). *The Process of education.* Cambridge, Mass: Harvard University Press.

……. (1961). "The act of discovery."*Harvard Educational Review*, 31, 21-32.

……. (1966). *Toward a theory of instruction*, Cambridge, Mass: Belkapp Press.

……. (1973). *The relevance of education*. New York: Norton.

Campbell, R. L. & McLeod, S. A. (2011). "Bandura - Social Learning Theory." Retrieved from www.simplypsychology.org/bandura.html.

Caples, S.E. (1996). "Some guidelines for preschool design."*Young Children, 51*, 14-21.

Case, C. S. (1998). *The Process of Education and educating.* Cambridge: Harvard University Press.

Cazden, C. B. (1996). "Selective traditions: Readings of Vygotsky in writing pedagogy." In

Child discourse and social learning: An interdisciplinary perspective, edited by D. Hicks, 165-186. New York: Cambridge University Press.

Chaiklin, S. (1990).“The Zone of Proximal Development in Vygotsky’s Analysis of Learning and Instruction.” Aarhus: Aarhus University Press,p. 238-259.

Chaudhury et al. (2000). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.

Cheung, Y. & Taylor M. P. (1991). “An empirical examination of long run purchasing power parity using co-integration techniques”, *Applied Economics, October 1991:20*

Cohen et al. (2000). *Research Methods in education*. 5th edition, Rutledge Falmer 11 New Fetter Cane; London.

Collins, A., Brown, J. S. & Holum, A. (1991). “Cognitive apprenticeship: Making thinking visible.”*American Educator, 15*(3), 6-11, 38-46.

Copley, P. A. (1992). “An Assessment of the potential effects of big eight firm mergers on competition in the market for audit services”. *Advances In accounting, 6,*22-24.

Cooper, S.T. & Cohn, E. (1997). “Estimation of a Frontier Production Function for the South Carolina Educational Process”, Economics of Education Review, 16(3):313-327.

Cooper, D.R. (1995). *Business Research Methods* (5th Edition), Irwin, Chicago.

Coombs, P.H. (1970). *The World Educational Crisis*: *A system Analysis.* New York. Oxford University Press.

Craig, J.W. (1940). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage

Croft, A. (2000). “Reading can make you smarter.”*Principal, 83*(2), 34-39.

Cronbach, L. J. (1960). *Essentials of psychological testing,* (2nd edition), New York: Harper.

Csomai, A. & Mihalcea, R. (2007). “Linking Educational Materials to Encyclopedic Knowledge.” In: R. Luckin, K. R. Koedinger, & J. Greer (Eds.), *Artificial Intelligence in Education: Building Technology Rich Learning Contexts that Work*. (pp. 557–559). Amsterdam: IOS Press.

Darling-Hammond, L. (2000). “Teacher Quality and Student Achievement: A Review of State Policy Evidence.”*Educational Policy Analysis Archives*.

Davydov, K. (1988). “Implementing individualized learning.” London: Council for

Educational Technology.

Dearden, L., Ferri, J. & Meghir, C. (1997). "The Effect of School Quality on Educational Attainment and Wages", *Institute for Fiscal Studies* , Working Paper W98/3.

De Klerk, W. J., Duvenhage, B. & Van Wyk J. H., (1972) "Cooperative learning: Figuring averages."*Learning and Studying,* 20: 22.

Dowling, L. J. & Harland, D. J. (2001). *Critical Factors in the Effective Use of Technology*. Minneapolis: Walden University.

Dublin, B. E. & Biddle, M. (1985). *Hampshire's and Origins; Problems in economics and Anglo-saxon studies*. ASE Gabbach prints.

Dudeck, M. (2000). "Architecture of Schools: The New Learning Environments."*Architecture Press,6*,8-23.

Duminy, P. A., Dreyer, H. J & Steyn, P.D. (1990). *Education for the student teacher*. Pretoria: Maskew Miller Longman.

Edith-Esch, K. D. (2012) "English and French pedagogical cultures: convergence and divergence in Cameroonian primary school teachers' discourse in Comparative Education", Vol. 1, No. 3, August 2012, p. 305.

Elkind, H. (1989). *Producing teaching materials: A handbook for teachers and trainers*. London: Kogan Press.

Emmet J. H. (1965). *Education in World Perspectives: The International Conference on World Educational Problems,* Lancer book; Harper and Row Publisher, New-York.

Ensor, P. (1997) "School Mathematics, Everyday Life And The NQF: A case of non-equivalence" *Puresciences*,41,36-44.

Esiobu, G. O. (2005). "Gender issues in science and technology education development." In Iwowi, U.M.O. (Ed.).

Ertmer, P. A., Ottenbreit-Leftwich, A. & York, C. S. (2007). "Exemplary technology-using teachers: Perceptions of factors influencing success." Journal of Computing in Teacher Education, 23(2), 55–61.

Eyole, I. O. & Ogunleye, Y. A. (2006). "Perception of private secondary school teachers to the provision of teaching facilities in schools as a result of wage increase."*Journal of Professional Teacher Trainers (JPTET), 3* (1&2), 156-163.

Famiye, T. A. ((1977). “The effects of Instructional Resources on the Learning of History in Selected Secondary Schools in Ogbomoso Local Government.” An Unpublished B.Ed Thesis.

Farrant, S. (1986). “Outcome-based education: A success story.” Educational Leadership, 46(2): 12, October.

Figlio, D. N. (1999). “Functional Form and the Estimated Effects of School Resources”, *Economics of Education Review* , 18(2), 241-252.

Flavell J. H (1963). *The developmental Psychology of Jean Piaget.* New York: Van Nostrand.

…….. (1977). *Cognitive development.* Engllewood cliffs, NJ: Prentice – Hall.

Fleischman, S. (2004). “The Role of Educational Technology in Meeting the Promise of Supplemental Educational Services”, (pp. 1–17). Washington: U.S. Department of Education.

Fonkeng, E. G.& Tamajong E.V. (2009). *Secondary School Administration and Principalship*(2nd ed): Presses universitaires d'Afrique ; Yaoundé.

Franzer, W. D., Loubser, C. P., Van Rooy, M. D.& Duminy K. et al.. (1992). *Didactics for the undergraduate student.* Durban: Butterworths.

Fraser, L. & Van R. (2004). *Economic Thought and Language. A Critique of Some Fundamental Concepts*, London: A & C Black.

Freeman, C. F. et al. (1983), C*hicago Fundamentalism: Ideology and Methodology in Economics*, Hackensack, NJ: World Scientific.

Garner, B. K. (2008). “When students seem stalked: The missing link for too many kids who don’t get it?” cognitive structures. *Educational Leadership* 65(6), 32-38.

Glewwe, P. (1999). “The Economics of School Quality Investments in Developing Countries: An Empirical Study of Africa”, New York: *St. Martin’s Press.*

Glewwe, P., Holla A. & Kremer M. (2008), “Teacher Incentives in the Developing World, September 11, 2008” New York: *St. Martin’s Press*.

Goldstein, H. (1987).*Multilevel Models in Educational and Social Research*, Oxford: Clarendon Press.

Good, T. & Brophy, J. (2000). *Looking into classrooms.*(8th Ed). New York: Longman.

Greenwald, R. H. & Szendrei, R. (1996). "The effect of school resources on student achievement". *Review of Educational Research, 66(3*), 361-396. (EJ 596 389).

Gregory, P. A. (1996). *Essentials of economics.* New York, NY: Harper Collins College.

Gultig, J. (1998). "Understanding outcomes-based education in economics: Teaching and assessment in South Africa." Cape Town: *Oxford University Press, p. 2*-22.

Gwartney, J. D. (1976). *Economics: Private and public choice*. New York: Academics Press.

Hanson, J. L. (1979). *A dictionary of economics and commerce*. Plymouth: MacDonald Evans.

……..(1981). "A Simultaneous equation analysis of quality control review outcomes and engagement fees." *The accounting review,4,36-42*.

Hanushek, D. F. (1986). *Do Higher Salaries Buy Better Teachers?* Cambridge, MA, National Bureau of Economic Research. (NBER Working Paper 7082, April).

Harrow, A. (1972). *Taxonomy of Psychomotor Domain: A Guide for Developing Behavioural Objectives*, New York: David McKay.

Ikerionwu, J. C. (2000). "Importance of Aids and Resources in Classroom Teaching, in Perspective of Classroom Teaching," In Oyeneyin, A.M. (ed), Abuja: Martmonic investment Ltd.

Isola, O. M. (2010). "Effects of Standardized and Improvised Instructional Materials on Students' Academic Achievements in Seconadry School Physics." M. Ed Thesis, University of Ibadan; Ibadan.

Kalin, J. (2004). "The Role of Media in Modern Lessons and the Judgment of their Efficiency." In M. Media in Education (pp. 210– 215). Novo mesto: Higher Education Centre.

…….. (2012). "Didactic Competencies of Teachers from the Learner's Viewpoint."*Educational Studies, 38(1),* 51–62.

Killen, R. (1997). "Effective teaching strategies." Boston: *Journal of social sciences, 4,* 14-16.

Kingdon, G. G. & Teal, F. J. (2002). "Does Performance-Related Pay for Teachers Improve Student Performance? Some Evidence from India." Working Paper. Department of Economics, University of Oxford, November.

Kon, A. (1993). "It's hard to get left out of a pair."*Psychology Today, 21(2*): 53-57 k-Press.

Kotze, G. (1999). "Assessment for an outcomes-based approach."*African Journal of Education, 19(1):* 31-37, February.

Kozulin, A. & Presseisen, B. (1995). "Mediated learning experience and psychological tools perspectives in student learning." *The Education Psychologist, 30*, 67-75.

Ladouce, R. & Beign, C.R. (1990). *Manuel D'enquête Par Questionnaire En Science Sociale Expérimentale.*St- HYACITHE.

Lampert-Shepel, E. (1995)."Cultures of reflection and reflection in culture: cross-cultural study of teachers' reflective actions in two Russian and American Dewey schools." http://digitalcommons.libraries.columbia.edu/dissertations/AAI3225166.

Lipsey, R. G. & Steiner, P. O. (1975). *Economics*. New York: Harper & Row.

Lockheed, M. & Komenan, A. (1989), "Teaching Quality and Student Achievement in Africa: The Case of Nigeria and Swaziland." Teaching and Teacher Education 5: 93–113.

Lockheed, M. & Verspoor,A. (1991). *Improving Education in Developing Countries*. New York: Oxford University Press.

Lockheed, M. & Hannushek, E. (1988). "Improving Educational Efficiency in Developing Countries: What Do We Know?" *Compare 18 (1):* 21–37.

Lombard, F., Rocha, R. E., Bijma, J., and Gattuso, J. P. (1985): "Effect of carbonate ion concentration and irradiance on calcification in planktonic foraminifera."*Biogeosciences, 7,* 247–255, 2010, http://www.biogeosciences.net/7/247/2010/.

Manning, M. L.& Lucking, R. (1991). "The what, why and how of cooperative learning."*Social Studies, 82*: 120-124.

Matchinda, B. (1999). *Repères psychopédagogiques: moins enseigner pour plus apprendre*. Yaoundé, Cameroun: Editions CEDRES.

Maureen, E.T. (2008). *Major Theories of Learning: The Processes of Why, How and When We Learn,* A. African publications: Yaoundé.

May, D. & Kundert, D. (1997). "School Readiness Practices and children at risk: Examining the issues."*Psychology in the schools 34(2):* 73-84.

Mayston, D. J. (1996), "Educational Attainment and Resource Use: Mystery or Econometric."

Economics Education, 4(2):127-142.

Mayston, D. J. & Jesson, D. (1999), "Linking Educational Resourcing with Enhanced Educational Outcomes", Department for Education and Employment (DfEE) Research Report RR179, London.

Mbangwana A. M.& Mambeh T. C. (2006). "Instructional Use of ICT in Cameroon State Universities."In P. Fonkoua (Dir.), Intégration des Tic dans le processus enseignement-apprentissage au Cameroun (pp. 145-168). Yaoundé: Editions Terroirs; ROCARE-Cameroun.

Means, B. & Olson, K. (1995). "Technology's Role in Education Reform. Findings from a National Study of Innovating Schools." Washington: Office of Educational Research and Improvement.

Melby, A. & Terry Warner C. (1995). "The possibility of language: a discussion of the nature of language, with implications for human and machine translation." Amsterdam: John Benjamins Publishing Company.

McKenzie, R. B. (1978). *Modern political economy: An introduction to economics.* Kogakusha: McGraw-Hill.

MCconnelL, C. R. & Bruce, S .L. (2005). *Economics: Principles, problems and policies.* 6thEd. New York: McGraw-Hill Irwin.

Mohr, C. & Fourie, B. (1999). "Effects of Instructional Resources on the Academic Achievements of Secondary school Students in Ilorin Local Government of Kwara State." Unpublished M.Ed Research Thesis.

Momoh, S. (1980). "A study of the relationship between Instructional Resources and Academic Achievement of Students in Ilorin Local Government Kwara State." An Unpublished M.Ed Thesis.

Morris, D. & Maisto, E. (2006). *Toward a Feminist Philosophy of Economics*, London: Routledge.

Mzeke, S. (1981). *Educative teaching through teaching/learning aids*. Mewprints foundation publications.

Newby, L., Timothy, J., Stepich, Donald, A., Lehman, James D., Russell & James D., (1996).

"Introduction to Instructional Technology, Instructional Technology for Teaching and Learning." (pp. 48). Englewood Cliffs, New Jersey: *Educational Technology Publications*.

Obanya, P. A. I. (1989). "Potentialities of Educational Materials in Africa, in Inter-learning of Educational Innovation."Darkar: UNESCO-BREDA, 55-64 bdullahi, A. (1982). Science Teaching in Nigeria,Ilorin: *Atoto Press*.

Okereke, P. (2006). "The relative effectiveness of cooperativeness and competitive interaction techniques in strengthening students' performance in science classes."*Science Education, 69:* 501-209.

Ormrod, J. (1995). *Educational Psychology: Principles and Applications*. Englewood Cliffs, NJ: Prentice-Hall.

Oxford Dictionary of English, Oxford University Press, 2003. Ed. Catherine Soanes, Angus Stevenson. ISBN 0-19-861347-4, ISBN 978-0-19-861347-3.

Oxford Dictionary of English, Revised Edition, 2010, Oxford University Press, C. Soanes and A. Stevenson, ISBN 0-19-861057-2, ISBN 978-0-19-861057-1.

Padron, C. L., Torres, J., Dodero, J. M., Díaz, P., & Aedo, I. (2005). "The Collaborative Development of Didactic Materials". Universidad Carlos III de Madrid, Spain. *ComSIS Vol. 2*, No. 2, December 2005.

Parker, R. E., Bianchi, A. & Cheah, T. Y. (2008). "Perceptions of Instructional Technology: Factors of Influence and Anticipated Consequences."*Educational Technology & Society, 11(2)*, 274–293.

Paul, L. D. (1976). *Handbook of Academic Evaluation*, New York: McGraw-Hill.

Paxton, P.A & Smith, H. V. (1992). *Teaching commercial subjects*. Doornfontein: Oikospaisago Publishers.

Piaget, J. (1960/1995). "Problems of the social psychology of childhood." In J. Piaget, *Sociological studies*, New York: Routledge.

…… (1967/1971). *Biology and knowledge*. Chicago: University of Chicago Press.

…… (1968). *On the development of memory and identity.* Barre, MA: Clark University Press with Barre Publishers.

…… (1970). “The science of education and the psychology of the child.” New York: Viking.

…… (1971). “Biology and knowledge: An essay on the relation between organic regulations and cognitive processes.” Chicago: *University of Chicago Press*.

…… (1977).*The development of thought: Equilibration of cognitive structures*. New York: Viking.

Pintrich, P. R.& McKeachie, W. J. (1990). “Instructional psychology.”*Annual Review of Psychology, 37*,611-651.

Prensky, M. (2008). “The Role of Technology in Teaching and the Classroom Educational Technology.”*Journal of Educational Technology, 48(6)*, 64–66.

Pohl, M. (2000). “Learning to Think, Thinking to Learn: Models and Strategies to Develop a Classroom Culture of Thinking.” *Cheltenham, Vic.: Hawker Brownlow*.

Radovan, M. (2011). “The Relation between Distance Students' Motivation, their Use of Learning Strategies, and Academic Success.”*The Turkish Online Journal of Educational Technology, 10(1)*, 216–222.

Reinke, W. (1990). “Health Service Program Evaluation Measures on teaching and education in general.”*Annual review of psychology, 52(5*),31-36.

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.

Ryan, M. J. (1988). “Constraints and Patterns in the evolution of teaching and learning in africa.”*CK press*.

Sanders, W. (1999). “Teachers, teachers, teachers!”*Blueprint Magazine No. 4*.

Saglam, H. I. (2011). “An Investigation on Teaching Materials Used in Social Studies Lesson.”*The Turkish Online Journal of Educational Technology, 10(1*), 36–44

Samuelson, P. & Nordhaus K. (2000). *Foundations of Economic Analysis*, Cambridge, MA: Harvard University Press.

Santrock, J. W. (2004). *Adolescence*: Twelfth edition.McGraw-Hill Higher Education.

Sapon, S. M. & Schniedewind, N. (1992). “If cooperative learning is the answer, what are the questions?”*Journal of Education, 174(2)*: 11-37.

Schiller, B. R. (1991). *The economy today*. 5th Ed. New York, NY: McGraw-Hill.

Schneuwly, B. (1994) “Genres et types de discours : Considérations psychologiques et ontogénétiques.” In: REUTER, Y. (Org). *Les interactions lecture écriture*. Berna: Peter Lang, 1994. p. 282-284.

Shankar, N. (1986). *Proof-Checking Metamathematics*. PhD thesis, Computer Science Department, University of Texas at Austin.

Simon, J. (1987). “Vygotsky and the Vygotskians.”*American Journal of Education 95 (4):*609-613.

Simpson, E. J. (1972). *The Classification of Educational Objectives in the Psychomotor Domain*, Washington DC: Gryphon House.

Spectra, K. (1990). *The Psychology of Educational Technology and Educational Long Range Media*. London: Routledge

Steffe L. & J. Gale J. (eds.). “Constructivism in Education.”*Hillsdale*, NJ: Lawrence Erlbaum.

Stodolsky, S.S. (1989). “Is teaching really by the book?” In P.W. Jackson & S. Haroutunian-Gordon (eds.), *From Socrates tosoftware* (88th yearbook of the National Society for the Study of Education, Pt. 1, pp 159-184.

Szendrei, J. (1996). “Concrete material in the classroom.” In A. Bishop, K. Clements, C. Keitel, J. Killpatrick & C. Laborde (Eds.), *International Handbook of Mathematics Education*. Dordrecht: Kleiwer Academic Publishers.

Tambo, L. I. (2003). *Principles and Methods of Teaching (Application in Cameroon Schools*), (1st edition): Anucam publishers: Buea.

Tchombe, T. M. S. (2004). *Psychological Parameters in Teaching.*Yaoundé, Cameroun : Presses Universitaires d’Afrique.

Time, T. E. (2001). *School improvement through teacher development: Case studies of the Khan Foundation projects in Africa*. The Netherlands, Swets & Zeitlinger.

The journal of environmental education, volume 30, issue 3 (2010). Pages 22-27. DOI: 10,1080/00098899699096081874.

Tosta, A. L. (2001). “Laugh and Learn: Thinking over the ‘funny teacher’ myth.”English *Teaching Forum, 39(1*), 26-29.

Tsafack. G. (2001). *Comprendre les sciences de l’éducation*, l’harmattan.

Tyler, R. W. (1950). *Basic Principles of Curriculum and Instruction*. Chicago: University of

Chicago Press.

Van Loggerenberg N. T. & Jooste A. J. (1970); Van der Veer, R., & Valsiner, J. (1991). *Understanding Vygotsky. A quest for synthesis*. Oxford: Basil Blackwell.pp. 153-183.

Vygotsky, L. S. (1967). "Play and its role in the mental development of the child."*Soviet Psychology,5(3),* 6-18.

……(1978). "Interaction between learning and development" (M. Lopez-Morillas, Trans.) In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind in society: The development of higher psychological processes* (pp. 79-91). Cambridge, MA: Harvard University Press.

……..(1978). *Mind in society*. Cambridge, MA: Harvard University Press.

……..(1986). *Thought and language* (A. Kozulin, Trans.). Cambridge, MA: MIT Press.(Original work published 1934).

…… ..(1987). "Thinking and speech" (N. Minick, Trans.). In R. W. Rieber & A. S. Carton (Eds.), The collected works of L. S. Vygotsky: Vol. 1. *Problems of general psychology* (pp. 39-285). New York: Plenum Press. (Original work published 1934)

……(1998). *Infancy* (M. Hall, Trans.). In R. W. Rieber (Ed.), The collected works of L.S. Vygotsky: Vol. 5. *Child psychology* (pp. 207-241). New York: Plenum Press. (Original work written 1933-1934).

……(1998). *The problem of age* (M. Hall, Trans.). In R. W. Rieber (Ed.), The collected works of L. S. Vygotsky: Vol. 5. *Child psychology* (pp. 187-205). New York: Plenum Press. (Original work written 1933-1934).

Wang, F. & Reeves, T. C. (2003). "Why Do Teachers Need to Use Technology in Their Classrooms? Issues, Problems, and Solutions." *Computers in the Schools, 20(4),* 49–65.

Waspe, T. (1997). "A new way of teaching and learning."*Challenge, 44:* 22-23, October/November.

Webb, P. K. (1986). "Theory into Practice, Teaching Methods: Learning Applications", pp. 93-97. *Spring.*

Weikart, D. P., Ann S. E., Schweinhart L. J. & James T. B. (1984). "The Ypsidanti Preschool

Curriculum Demonstration Project: Preschool Years and Longitudinal Results.”*Ypsilanti, Mich.: High/Scope Press*, 1984.

Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*, Cambridge MA: Harvard University Press.

Wright, S.P., Horn, S.P. &Sanders, W.L. (1997). “Teacher and classroom context effects on student achievement: Implications for Teacher Evaluation”.*Journal of Personal Evaluation in Education , 11*:57-67.

Wood, D. J., Bruner, J. S. & Ross, G. (1976). “The role of tutoring in problem solving.”*Journal of Child Psychiatry and Psychology*, *17(2*), 89-100.

World Bank, (2004). *Education in Rwanda:Rebalancing Resources to Accelerate Post-Conflict Development and Poverty Reduction*. World Bank, Washington D.C

Yoloye, E. A. (1978). “Evaluation for Innovation: African Primary Science Programme Evaluation Report” Ibadan: *University Press.*

…….. (1981). “Institutional arrangement for evaluation, planning and co- ordination of science and technology”. Paper presented at the conference on national policy on science and Technology.

APPENDIX A

QUESTIONNAIRE FOR STUDENTS

I am a student from the university of Yaoundé I Ngoa-ekelé, PECHELE STEPHANI PEACHAP offering Masters II in sciences of education. This questionnaire will help collect data for my research on "THE USE OF DIDACTIC MATERIALS AND THE ACADEMIC PERFORMANCE OF STUDENTS OF ECONOMICS IN SECONDARY SCHOOLS IN CAMEROON". Please be sincere and be assured your response shall be strictly confidential. Thanks for your cooperation.

SECTION A: DEMOGRAPHIC INFORMATION:

Theme I: Identification:

1) Sex: Male ☐ Female ☐
2) Age 10-12 ☐ 13-15 ☐ 16-17 ☐ 20+ ☐
3) Religion: Christian ☐ , Muslim ☐ , Others ☐

KEY:

-SA = STRONGLY AGREE
-A= AGREE
-SD= STRONGLY DISAGREE
-D=DISAGREE
-N= NEUTRAL

SECTION B: THEME 2: VISUAL DISPLAY DEVICES

ITEM	SA	A	SD	D	N
4) The use of the chalkboard by the teacher constantly motivates me to learn.					
5) Be it a blackboard, a green board, bulletin board or white ink board learning with it effectively at all times makes no difference.					
6) Learning is a lot easier when my teacher diverse his use of the board aesthetically.					
7) More often than never I find it hard to see on the chalkboard					
8) I have never seen a cloth board					
9) There is a bulletin board at the corner of my classroom					

SECTION C: THEME 3: PRINT MATERIALS

ITEM	SA	A	SD	D	N
10) My teacher obliges me to purchase all my textbooks before attending his lessons.					
11) I hate reading textbooks since I consider them very boring and not					

colourful.					
12) For each lesson I take in class I always make sure I read a textbook the previous day.					
13) Since day one of my schooling, I had never read an electronic book.					
14) I do not know what an encyclopaedia is.					
15) Each time I do not understand a word in Economics I use a dictionary to clarify my doubts					
16) I read newspapers and journals on Economic matters each time i lay my hands on them.					
17) My teacher presents to us new information on Economics from newspapers daily.					
18) I do not know how to use an encyclopaedia and a dictionary.					
19) I always use Economics textbooks back at home to do my assignments.					

SECTION D: THEME 4; GRAPHIC MATERIALS

ITEM	SA	A	SD	D	N
20) My teacher currently uses pictures during most of his lessons as an aid to our study.					
21) The use of charts during lessons enables one to easily understand and incorporate the lesson.					
22) I am always intimidated because I don't understand drawings and notes on charts and graphs most often.					
23) To easily understand my lessons, I try as much as possible to reproduce my teachers' charts into my books during and after the lesson.					
24) My teacher uses maps and globes most often in his teachings.					

SECTION E: THEME 5: ACADEMIC PERFORMANCES

ITEM	SA	A	SD	D	N
25) All my assignments and home works are done by the use didactic aids like textbooks and research practices on the web.					
26) I consider the use of didactic materials to be a basic necessity in my educational growth.					
27) I always spend a lot of my time on social networks and other entertainments rather than studies.					
28) My performance in Economics has been on the increase thanks to my teachers' use of teaching aids.					
29) I always use learning aids at home and in school to revise the concepts taught in Economics.					

APPENDIX B

QUSTIONNAIRE FOR TEACHERS

I am a student from the university of Yaoundé I Ngoa-ekelé, PECHELE STEPHANI PEACHAP offering Masters II in sciences of education. This questionnaire will help collect data for my research on "THE USE OF DIDACTIC MATERIALS ON THE ACADEMIC PERFORMANCES OF STUDENTS OF ECONOMICS IN SECONDARY SCHOOLS IN CAMEROON". Please be sincere and be assured your response shall be strictly confidential. Thanks for your cooperation.

SECTION A: DEMOGRAPHIC INFORMATION:

Theme I: Identification:

Sex: Male ☐ emale ☐
Age 18-23 ☐ 4-30 ☐ 1-40 ☐ 40+ ☐
Religion: Christian ☐ Muslim ☐ , Others ☐

KEY:

-SA = STRONGLY AGREE
-A= AGREE
-SD= STRONGLY DISAGREE
-D=DISAGREE
-N= NEUTRAL

SECTION B: THEME 2: VISUAL DISPLAY DEVICES

ITEM	SA	A	SD	D	N
4) The use of the chalkboard during my teachings constantly motivates students to learn.					
5) Be it a blackboard, a green board, bulletin board or white ink board teaching with it effectively at all times makes no difference to me.					
6) Teaching and Learning is a lot easier when I use the board aesthetically.					
7) I always use a magnetic board in teaching for more comprehension.					
8) I have never seen a cloth board.					
9) There is a bulletin board at the corner of my classroom.					

SECTION C: THEME 3: PRINT MATERIALS

ITEM	SA	A	SD	D	N
10) I oblige My students to purchase all their Economics textbooks					

before attending any of my lessons.					
11) I hate reading textbooks since I consider textbooks very boring and not colourful.					
12) For each lesson I have to teach I make sure I read at least two or more textbooks the previous day.					
13) Since I started teaching, I have never read an electronic book.					
14) I do not know what an encyclopaedia is.					
15) Each time I do not understand a word in Economics I use a dictionary to clarify my doubts.					
16) I read Newspapers and Journals on Economic matters each time I lay my hands on them.					
17) I present to my students new information on Economics from Newspapers daily.					
18) I do not know how to use an encyclopaedia and a dictionary.					
19) I always use Economics textbooks back at home to plan my lessons for the year and to give assignments to my students.					

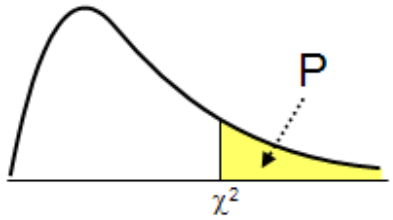
SECTION D: THEME 4; GRAPHIC MATERIALS

ITEM	SA	A	SD	D	N
20) I currently use picture, globes and graphs during most of my lessons in economics as an aid to its study.					
21) The use of charts during lessons enables one to easily understand and incorporate the lesson.					
22) I am always disturbed because my students seem not to understand drawings and notes on charts and graphs most often.					
23) To make learning easier, I ask my students to reproduce my drawings and charts in economics into their books.					
24) I use maps and globes most often in my teachings.					

SECTION E: THEME 5: ACADEMIC PERFORMANCES

ITEM	SA	A	SD	D	N
25) I ask my students to do all their assignments and home works by the use of didactic aids like textbooks and research practices on the web.					
26) I consider the use of didactic materials to be a basic necessity in my education.					
27) Teaching using didactic materials is much easier than without their use.					
28) My performance in economics has been on the increase thanks to my use of teaching aids.					
29) Didactic aids and materials are not available in my school to facilitate the teaching and learning process.					

APPENDIX C



P

DF	0.995	0.975	0.20	0.10	0.05	0.025	0.02	0.01	0.005	0.002	0.001
1	0.000393	0.00982	1.642	2.706	3.841	5.024	5.412	6.635	7.879	9.550	10.828
2	0.0100	0.0506	3.219	4.605	5.991	7.378	7.824	9.210	10.597	12.429	13.816
3	0.0717	0.216	4.642	6.251	7.815	9.348	9.837	11.345	12.838	14.796	16.266
4	0.207	0.484	5.989	7.779	9.488	11.143	11.668	13.277	14.860	16.924	18.467
5	0.412	0.831	7.289	9.236	11.070	12.833	13.388	15.086	16.750	18.907	20.515
6	0.676	1.237	8.558	10.645	12.592	14.449	15.033	16.812	18.548	20.791	22.458
7	0.989	1.690	9.803	12.017	14.067	16.013	16.622	18.475	20.278	22.601	24.322
8	1.344	2.180	11.030	13.362	15.507	17.535	18.168	20.090	21.955	24.352	26.124
9	1.735	2.700	12.242	14.684	16.919	19.023	19.679	21.666	23.589	26.056	27.877
10	2.156	3.247	13.442	15.987	18.307	20.483	21.161	23.209	25.188	27.722	29.588
187	140.943	151.024	203.052	212.173	219.906	226.761	228.828	234.907	240.561	247.532	252.499
188	141.810	151.923	204.095	213.239	220.991	227.863	229.935	236.027	241.694	248.681	253.659
189	142.678	152.822	205.139	214.305	222.076	228.964	231.040	237.147	242.827	249.829	254.818
190	143.545	153.721	206.182	215.371	223.160	230.064	232.146	238.266	243.959	250.977	255.976
191	144.413	154.621	207.225	216.437	224.245	231.165	233.251	239.386	245.091	252.124	257.135
192	145.282	155.521	208.268	217.502	225.329	232.265	234.356	240.505	246.223	253.271	258.292
193	146.150	156.421	209.311	218.568	226.413	233.365	235.461	241.623	247.354	254.418	259.450

194 147.020 157.321 210.354 219.633 227.496 234.465 236.566 242.742 248.485 255.564 260.607

195 147.889 158.221 211.397 220.698 228.580 235.564 237.670 243.860 249.616 256.710 261.763

196 148.759 159.122 212.439 221.763 229.663 236.664 238.774 244.977 250.746 257.855 262.920

197 149.629 160.023 213.482 222.828 230.746 237.763 239.877 246.095 251.876 259.001 264.075

198 150.499 160.925 214.524 223.892 231.829 238.861 240.981 247.212 253.006 260.145 265.231

199 151.370 161.826 215.567 224.957 232.912 239.960 242.084 248.329 254.135 261.290 266.386

200 152.241 162.728 216.609 226.021 233.994 241.058 243.187 249.445 255.264 262.434 267.541

201 153.112 163.630 217.651 227.085 235.077 242.156 244.290 250.561 256.393 263.578 268.695

202 153.984 164.532 218.693 228.149 236.159 243.254 245.392 251.677 257.521 264.721 269.849

203 154.856 165.435 219.735 229.213 237.240 244.351 246.494 252.793 258.649 265.864 271.002

204 155.728 166.338 220.777 230.276 238.322 245.448 247.596 253.908 259.777 267.007 272.155

205 156.601 167.241 221.818 231.340 239.403 246.545 248.698 255.023 260.904 268.149 273.308

206 157.474 168.144 222.860 232.403 240.485 247.642 249.799 256.138 262.031 269.291 274.460

207 158.347 169.047 223.901 233.466 241.566 248.739 250.900 257.253 263.158 270.432 275.612

208 159.221 169.951 224.943 234.529 242.647 249.835 252.001 258.367 264.285 271.574 276.764

209 160.095 170.855 225.984 235.592 243.727 250.931 253.102 259.481 265.411 272.715 277.915

210 160.969 171.759 227.025 236.655 244.808 252.027 254.202 260.595 266.537 273.855 279.066

211 161.843 172.664 228.066 237.717 245.888 253.122 255.302 261.708 267.662 274.995 280.217

212 162.718 173.568 229.107 238.780 246.968 254.218 256.402 262.821 268.788 276.135 281.367

213 163.593 174.473 230.148 239.842 248.048 255.313 257.502 263.934 269.912 277.275 282.517

214 164.469 175.378 231.189 240.904 249.128 256.408 258.601 265.047 271.037 278.414 283.666

215 165.344 176.283 232.230 241.966 250.207 257.503 259.701 266.159 272.162 279.553 284.815

216 166.220 177.189 233.270 243.028 251.286 258.597 260.800 267.271 273.286 280.692 285.964

217 167.096 178.095 234.311 244.090 252.365 259.691 261.898 268.383 274.409 281.830 287.112

218 167.973 179.001 235.351 245.151 253.444 260.785 262.997 269.495 275.533 282.968 288.261

219 168.850 179.907 236.391 246.213 254.523 261.879 264.095 270.606 276.656 284.106 289.408

220 169.727 180.813 237.432 247.274 255.602 262.973 265.193 271.717 277.779 285.243 290.556

221 170.604 181.720 238.472 248.335 256.680 264.066 266.291 272.828 278.902 286.380 291.703

222 171.482 182.627 239.512 249.396 257.758 265.159 267.389 273.939 280.024 287.517 292.850

223 172.360 183.534 240.552 250.457 258.837 266.252 268.486 275.049 281.146 288.653 293.996

224 173.238 184.441 241.592 251.517 259.914 267.345 269.584 276.159 282.268 289.789 295.142

225 174.116 185.348 242.631 252.578 260.992 268.438 270.681 277.269 283.390 290.925 296.288

226 174.995 186.256 243.671 253.638 262.070 269.530 271.777 278.379 284.511 292.061 297.433

227 175.874 187.164 244.711 254.699 263.147 270.622 272.874 279.488 285.632 293.196 298.579

228 176.753 188.072 245.750 255.759 264.224 271.714 273.970 280.597 286.753 294.331 299.723

229 177.633 188.980 246.790 256.819 265.301 272.806 275.066 281.706 287.874 295.465 300.868

230 178.512 189.889 247.829 257.879 266.378 273.898 276.162 282.814 288.994 296.600 302.012

231 179.392 190.797 248.868 258.939 267.455 274.989 277.258 283.923 290.114 297.734 303.156

232 180.273 191.706 249.908 259.998 268.531 276.080 278.354 285.031 291.234 298.867 304.299

233 181.153 192.615 250.947 261.058 269.608 277.171 279.449 286.139 292.353 300.001 305.443

234 182.034 193.524 251.986 262.117 270.684 278.262 280.544 287.247 293.472 301.134 306.586

235 182.915 194.434 253.025 263.176 271.760 279.352 281.639 288.354 294.591 302.267 307.728

236 183.796 195.343 254.063 264.235 272.836 280.443 282.734 289.461 295.710 303.400 308.871

237 184.678 196.253 255.102 265.294 273.911 281.533 283.828 290.568 296.828 304.532 310.013

238 185.560 197.163 256.141 266.353 274.987 282.623 284.922 291.675 297.947 305.664 311.154

239 186.442 198.073 257.179 267.412 276.062 283.713 286.016 292.782 299.065 306.796 312.296

240 187.324 198.984 258.218 268.471 277.138 284.802 287.110 293.888 300.182 307.927 313.437

241 188.207 199.894 259.256 269.529 278.213 285.892 288.204 294.994 301.300 309.058 314.578

242	189.090	200.805	260.295	270.588	279.288	286.981	289.298	296.100	302.417	310.189	315.718
243	189.973	201.716	261.333	271.646	280.362	288.070	290.391	297.206	303.534	311.320	316.859
244	190.856	202.627	262.371	272.704	281.437	289.159	291.484	298.311	304.651	312.450	317.999
245	191.739	203.539	263.409	273.762	282.511	290.248	292.577	299.417	305.767	313.580	319.138
246	192.623	204.450	264.447	274.820	283.586	291.336	293.670	300.522	306.883	314.710	320.278
247	193.507	205.362	265.485	275.878	284.660	292.425	294.762	301.626	307.999	315.840	321.417
248	194.391	206.274	266.523	276.935	285.734	293.513	295.855	302.731	309.115	316.969	322.556
249	195.276	207.186	267.561	277.993	286.808	294.601	296.947	303.835	310.231	318.098	323.694
250	196.161	208.098	268.599	279.050	287.882	295.689	298.039	304.940	311.346	319.227	324.832
300	240.663	253.912	320.397	331.789	341.395	349.874	352.425	359.906	366.844	375.369	381.425
350	285.608	300.064	372.051	384.306	394.626	403.723	406.457	414.474	421.900	431.017	437.488
400	330.903	346.482	423.590	436.649	447.632	457.305	460.211	468.724	476.606	486.274	493.132
450	376.483	393.118	475.035	488.849	500.456	510.670	513.736	522.717	531.026	541.212	548.432
500	422.303	439.936	526.401	540.930	553.127	563.852	567.070	576.493	585.207	595.882	603.446
550	468.328	486.910	577.701	592.909	605.667	616.878	620.241	630.084	639.183	650.324	658.215
600	514.529	534.019	628.943	644.800	658.094	669.769	673.270	683.516	692.982	704.568	712.771