UNIVERSITY OF CAPE COAST

TEACHING AND LEARNING MATERIALS, TEACHER-FACTORS,

STUDENT CHARACTERISTICS AND PERFORMANCE OF HOME

ECONOMICS STUDENTS IN CORE SUBJECTS: A CASE OF

ABURAMAN SENIOR HIGH SCHOOL.

BERTHA AMA BINEY

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BY

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Thesis submitted to the Department of Vocational and Technical Education of the Faculty of Science and Technology Education, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for award of Master of Philosophy Degree in Home Economics.

MAY 2018

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in the university or elsewhere.

Candidate's Signature:………………………….. Date…………………….

Name: Bertha Ama Biney

Supervisor's Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisors' Signature…………………… Date……………………

Name: Prof. Eric Nyarko Sampson

Co-Supervisor's Signature……………………… Date: ……………………

Name: Dr. Augusta Adjei Frimpong

ABSTRACT

A number of arguments have been made concerning factors affecting academic performance of home economics students in core subjects. The available studies suggest that student-characteristics, teacher-factors and Teaching Learning Materials have a positive relationship with academic performance and achievement. The purpose of this study was to determine how teaching and learning materials, teacher- factors and students-characteristics relate to home economics students, performance in core subjects. The research design used was descriptive survey to determine the relationship of the three variables. Using the purposive sampling technique 180 students and 19 tutors and 1 headmistress were selected for the study. Results revealed that, lack of interest, inadequacy of time, difficulties in understanding concepts, and inability of teachers to use TLMs, inadequacy of relevant TLMs for core subjects, the teachers' difficulties in explaining abstract concepts to students and students' difficulties in understanding lessons were the causes of poor performance of home economics students in the core subjects. From the findings, it was recommended that teachers should be motivated in order to motivate the students to learn, teachers should be engaged in more in-service training to use more practical approach and the Ghana Education Service should timely provide adequate teaching and learning materials for the students and teachers to use. This will enable the teachers to have adequate time for each student.

KEY WORDS

Education

School

Effective Teaching

Learning

Teaching and Learning Materials (TLMs)

Academic Achievement

DEDICATION

To my lovely and caring husband Mr. Ebenezer Kojo Appiah and my entire

family.

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CHAPTER ONE

INTRODUCTION

Background to the Study

In any organization or institution, the combination of human effort and material resources makes such an organization or institution realize the objectives. Such organization or institution could be a factory, a school or a church. Jackson and McConnell (1988) stated that the production of goods and services involves the combination of land, labour, capital and entrepreneur. Labour and entrepreneur are the human aspects of production while capital and land could be described as the material aspects. The skilled worker is the one who has undergone some reasonable period of training, which is usually undertaken through formal education. The role that education plays in any society cannot, therefore, be overemphasized. Education is believed to be a vehicle for social and economic transformation. It brings about social progress and economic development. On the social side, education modifies people's beliefs, customs and practices. It reduces poverty, diseases and ignorance, paving the way for modernity, civilization and good governance (Busia, 1968).

From the economic point of view, writers in economics and education indicate that there is a high correlation between the investment people and nations make in education and the level of economic development and the standard of living, which the people enjoy (Harbison & Myers, 1964). This is because education equips people with idea, knowledge, attitudes competence, skills, and technical know-how to enable them contribute to the economic

development and welfare of the society and Carnoy, Haddad, Regel and Rinaldi (1990) have supported this observation.

Empirical studies conducted by Harbison and Myers (1964) indicate that the standard of living of a people can be measured in terms of the level of education the people have attained. They further stated that nations with abundant natural resources but low literacy rate like African and Latin American countries are usually less developed than those with little or no natural resources but have high literacy rate like Denmark and Switzerland . This statement can be supported by the fact that people with high literacy rate can use their skills, knowledge and technical know-how to marshal the resources in the community to their advantage.

Melville (1965) observed that the growth of pure science and intervention depends upon the existence of a reasonably large number of adequately educated individuals. Melville further said that higher education helps people to develop critical thinking, which in turn brings about innovation. Londono (1996) and Rosovsky (2000) supporting the importance of education to the socio-economic development of nations stated that the provision of universal basic and higher education to the developing countries should be given serious attention. This is because education has been observed to lie at the centre of planning and the key to personal and national development. Realizing the immense role of education in national development therefore, nations, both developed and developing, undertake reforms in order to get the best or near best type of education, which could impact positively on their socio-economic growth,

The educational system of any nation is a mirror through which the image of the nation can be seen and also likely to be shaped. Education is also meant to develop manpower for different levels of the economy which is an ultimate guarantee of national self-reliance. Hence, the formulation and clarification of purposeful education must reflect the realities of life, taking into account the entire scope of human life and at the same time, considering specific needs of the individual (Von Glasersfeld, 1995; Singh & Rana, 2004). Education in its general sense is a form of learning in which knowledge, skills, and habits of group of people are transferred from one generation to the next through teaching, training, research, or simply through auto didacticism. Communities around the world place a high value on educating people of all ages, whether formally or informally. Constant exposure to new ideas and skills makes people better workers, thinkers, and societal contributors.

Teachers are subjective insiders involved in classroom instruction as they go about their routines of instructing students, grading papers, taking attendance, evaluating the performance as well as looking at the curriculum (Marion, MacLean & Mohr, 1999). Of the measurable characteristics isolated for study, teaching experience has consistently been linked to student scores. On average, beginning teachers produce smaller learning gains in their students compared with more seasoned teachers. A good teacher is one who knows the capabilities of his learners and has understanding of what his or her students need to learn. This implies that the skill of teaching lies in knowing who, what and how to teach and above all be able to judge when (Farrant, 1996). Good teaching demands great skill irrespective of the level of teaching. It does not depend on the learner any more as Amissah, Sam, Amoah and

Mereku (2002) indicated. Thus, teaching has become complicated due to the increasingly intricate phase of human personality and society. The idea is that a teacher must bear in mind certain principles of good teaching whiles dealing with the child. As indicated by Kyriacou (1995), five qualities characterise a good teacher: personality and will, intelligence, sympathy and tact, open mindedness, and sense of humour. Adding to these principles, Kochhar (2004) asserts that the teacher must:

Recognise individual differences among people: The teacher must know and appreciate why a learner behaves the way he does at a particular time during the developmental stage. It is only in this way that quality opportunity can be provided to enhance learning.

Create the learning situation: the teacher must keep the learner alive by making him or her participate in a purposeful activity. The teacher must see to it that learners have activity and good humour in each day's activity. Challenge the child to learn: learning occurs when there is overlapping (Kochhar, 2005). The good teacher helps students to think critically and independently so that the learner is even more eager to find out and to be creative (Amissah et al. 2002).

Encourage general development: a teacher who sets the pupils' eyes on a peak and helps them select a path that gets them there is always appreciated (Kochhar, 2004). This means that the good teacher knows how to appraise the individual, make an educational diagnosis and help the child to develop in a desirable fashion.

Cause, facilitate and promote learning: good teaching, according to Kochhar (2004), is stimulating. As the teacher makes teaching exciting, it

prepares the learner's mind to desire to know. Amissah et al. (2002) also assert that the good teacher knows the nature of the human organism, how learning takes place and what motivates the learner.

According to the authors, the great teacher helps people to become conscious of their own values, to examine themselves and to build up for themselves values that are more satisfying to them and the society. The good teacher is therefore the one who has the willingness and passion to teach; respects and understands the individual learner, and creates learning situations that build up values in the individual learner for personal and societal satisfaction. It is vital therefore for the teachers to teach what they can teach better in order to facilitate effective learning for the students.

A student is a learner or someone who attends an educational institution. Students who get good grades and acquire knowledge during school often share core characteristics. They are self-motivated, organized, good communicators and curious. These qualities give them the motivation to attend class, take good notes and complete high-quality work. The traits that make a student successful often translate into better jobs, as well. In the field of Education, TLM is a commonly used acronym that stands for 'Teaching and Learning Materials.' Broadly, the term refers to a spectrum of educational materials that teachers use in the classroom to support specific learning objectives, as set out in lesson plans (K6 educators.about.com/od/educationglossary/g/gtlm.htm).

Besides teacher qualifications and school facilities; another important determinant of quality education is the teaching learning material. It is essential for quality materials to be made available to the teachers and students

in adequate quantities to support the teaching and learning processes. Teachers use teaching aids such as maps, wall charts, flip charts, flashcards, scientific models, kits and toys to support teaching learning activities at school. Allwright (1990) argues that TLMs should teach students to learn, that they should be resource books for ideas and activities for instructions or learning, and should give teachers rationales for what they do. O'Neil (1990) in contrast, argues that TLMs may be suitable for students' needs, even if they are not designed specifically for them, that textbooks make it possible for students to review and prepare their lessons, and are efficient in terms of time and money.

Loxley (1984) revealed that inadequate supply of textbooks in schools is having a toll on teaching and learning activities in many of the countries in the world. According to him, the World Bank data recorded the number of students to a textbook as ratio 20: 1. Sodimu (1998) in his findings, reported that based on the high cost of textbooks, many students have been unable to buy books that will help to promote the quality of education they receive in Lagos state public secondary schools. He even stressed that parents believed so much in government funding the education in public schools to the extent that they become reluctant towards equipping their wards with textbooks.

Textbooks as indicated by Oni (1995) are indispensable to the quality education and students' academic performance in all the schools in the world. Nkuuhe (1995) highlighted some of the bad influences as, teachers' abdication of teaching responsibility to textbooks at the expense of original teaching method; textbooks do not give room for flexibility, instead there are mechanical divisions of the curriculum and no provision made for individual

differences among students. Giwa and Illo (2000) expressed the problems militating against schools' inspection as shortage of manpower and quality of the personnel available for the work. According to them, in most African countries the roles of inspectors tend to be ineffective due to severe resources constraints.

In the findings, they realized a number of inspectors and monitoring officers, who were newly employed with no practical experience on the job, were being posted to the inspectorate unit of the Ministry of Education. They stated that to inspect and supervise schools effectively requires regular school visits of well experienced officers with adequate provision of resources to forestall ineffectiveness in performing their duties. Otoo (2007) says that academic performance is the capacity to achieve when one is tested on what one has been taught. Academic performance is related to content and intellect, meaning that academic performance depends on the learner's competence.

The very concept of academic failure varies in its definition. Rodriguez (1986) considers academic failure as the situation in which the subject does not attain the expected achievement according to his or her abilities, resulting in an altered personality which affects all other aspects of life. Similarly, Tapia (2002) notes that, while the current Educational System perceives that the student fails if he or she does not pass, more appropriate for determining academic failure is whether the student performs below his or her potential.

Poor academic performance according to Aremu (2000) "is a performance that is adjudged by the examinee /testee as falling below an expected standard." The interpretation of this expected or desired standard is better appreciated from the perpetual cognitive ability of the evaluator of the

performance. The evaluator or assessor can therefore give different interpretations depending on some factors. Bakare (1994) described poor academic performance as any performance that falls below a desired standard. Poor academic performance has been observed in school subjects especially Mathematics and English language among secondary school students (Adesemowo, 2005). Aremu (2000) stresses that academic failure is not only frustrating to the students and the parents, its effects are equally grave on the society in terms of depth of manpower in all spheres of the economy and politics.

Education at the secondary school level is supposed to be the bedrock and the foundation for higher knowledge in the tertiary level. It is an investment as well as an instrument that can be used to achieve a more rapid economic, social, political, technological, scientific and cultural development in the country. Ghana, like many other African nations, has adopted an education system that is designed to guarantee all children a minimum of nine years of basic education, i.e. six years of primary or elementary education and three years of Junior High School (JHS) or middle school with a compulsory age range of 6-15 years (UNESCO, 2005). Ghana has consistently implemented policies to improve the quality, quantity, and accessibility of education. Examples of such policies are the Education Reform of 1987, which promised increased access to education at the basic level, the Free-Compulsory Universal Basic Education introduced in 1995, which promised to provide quality Education in teaching and learning, and the Capitation Grant of 2005/2006, which was implemented to cushion the burden of parents in meeting the cost of sending their children to school and to encourage parents

especially in economically deprived areas to send their children to school. Despite all these initiatives, many children in Ghana fail to continue and complete their basic education program. For example, in 2008, about a third (32.3%) of children who enrolled in JHS did not complete JHS final year (Multi Emulator Super System (MESS), 2008).

Different people at different times have passed on the blame of poor performance in secondary school to students because of their low retention, parental factors, association with wrong peers, low achievement, low retention, motivation and the likes (Aremu & Sokan, 2003; Aremu & Oluwole, 2001; Aremu, 2000). Morakinyo (2003) believes that the poor academic achievement is attributable to teachers' non-use of verbal reinforcement strategy. The actual schooling process is not the only contributing factor leading to a child's learning and achievement. Although the academic environment is key, each child's individual home situation greatly impacts on educational goals and progress. From family funds to parental support, home factors can make the difference between a child's success and failure.

Newton (1997) professed that the magnitude of instruction is more scientific base; makes instruction more powerful; makes learning more immediate and finally makes access to education more equal. Adeogun (2001) discovered a very strong positive significant relationship between instructional resources and academic performance. According to him, schools endowed with more resources performed better than schools that are less endowed. This corroborated the study of Babayomi (1999) that private schools because of the availability and adequacy of teaching and learning resources performed better than public schools. Adeogun (2001) discovered a low level of instructional

resources available in public schools and stated that our public schools are starved of both teaching and learning resources. He expresses that effective teaching cannot take place within the classroom if basic instructional resources are not present.

The criteria of excellence can be from 40 to 100 percent depending on the subjective yardstick of the evaluator or assessor. With the academic performance of the Home Economics students in the core subjects the researcher will focus on the students' performance in school (class exercises, class test, end of term examination and end of year examination). Anderson (1999), Oni (1995), Adensina (1980), and Bajah, (1979) found out that the attitude of some teachers to their job is reflected on their poor attendance at lessons, lateness to school, unsavoury comments about students' performance that could damage their ego and poor methods of teaching and the likes affect pupils' academic performance.

The question therefore is: What is the cause of the poor academic performance of students? Is the fault entirely that of teachers or students or both of them? Is it that students of today are non-achievers because they have low Intelligent Quotient and a good neutral mechanism to be able to act purposefully, think rationally and deal effectively with academic tasks? Or is it because teachers are no longer putting in much commitment as before? Or is it in teachers' methods of teaching and interaction with learners? Or is the poor performance of students caused by parents' neglect, separation and poverty?

Statement of the Problem

The poor academic performance of Home Economics students in the core subjects in Aburaman Senior High School has been a concern for quite

some time. The problem is that most learners do not perform at a level that would allow them university entrance. From the West African Senior School Certificate Examination results released by the West African Examinations Council in 2010, 2011 and 2012, it was realised that Home Economics students in Aburaman Senior High School performed poorly in the core subjects but passed well in the elective subjects as shown below. The final results of Home Economics students in Aburaman Senior High School between 2010-2012 in core subjects and elective subjects are presented in Tables 1 and 2, respectively.

Table 1: *Performance of Home Economics Students in Core Subjects from 2010-2012 in WASSCE*

Core Subjects	2010 (% Pass)	2010 (% Fail)	2011 (% Pass)	2011 (% Fail)	2012 (%Pass)	2012 (% Fail)
Mathematics	21.4	78.6	1.6	98.4	11.2	88.8
English Language.	39.3	60.7	35.5	64.5	26.5	73.5
Int. Science	27.4	72.6	6.5	93.5	17.3	82.7

Source: Field study, Biney (2013)

Table 1 shows that in Mathematics 21.4 percent passed while 78.6 percent failed in 2010; 1.6 percent passed and 98.4 percent failed in 2011, and 11.2 percent passed, 88.8 percent failed in 2012. English Language 39.3 percent passed, 60.7 percent failed in 2010; 35.5 percent passed, 64.5 percent failed in 2011 and in 2012, 26.5 percent passed while 73.5 failed. With Integrated Science 27.4 passed, 72.6 failed in 2010; 6.5 passed, 93.5 failed in 2011 and 17.3 passed, 82.7 failed in 2012.

Table 2: *Performance of Home Economics Students in the Elective Subject from 2010-2012 in WASSCE*

Elective Subjects	2010 (% Pass)	2010 (% Fail)	2011 (% Pass)	2011 (% Fail)	2012 (% Pass)	2012 (% Fail)
Food & Nutrition	97.6	2.4	95.2	4.8	97.0	3.0
Management In Living	94.0	6.0	90.3	9.7	9.8	8.2
G.K.A	73.8	26.2	82.3	7.7	95.9	4. 1

Source: Field study, Biney (2013)

As shown in Table 2, in Food and Nutrition 97.6 percent passed, 2.4 percent failed in 2010; 95.2 percent passed, 4.8 percent failed in 2011 and 97.0 percent passed, 3.0 percent failed. Management-in-Living 94.0 percent passed, 6.0 percent failed in 2010; 90.3 percent passed, 9.7 failed in 2011; 91.8 percent passed and 8.2 percent failed in 2012. G.K.A 73.8 percent passed, 26.6percent failed in 2010; 82.3 passed, 26.2 failed in 2011 and 95.5 percent passed, 4.0 failed in 2012.

From Tables 1 and 2, it can be concluded that home economics students performed better in elective subjects during the WASSCE than in the core subjects. This study was therefore conducted to find out why Home Economics students in Aburaman Senior High School perform poorly in the core subjects. The study was to determine the extent to which variables such as teaching and learning materials (TLMs), teacher factors, and students' characteristics contribute to Home Economics students' performance in the core subjects.

Purpose of the Study

The purpose of this study, was to determine how teaching learning materials, teacher factors and students' characteristics relate to Aburaman senior high Home Economics students' performance specifically the core subjects' results in West African Senior School Certificate Examination.

Objectives of the study

1. Examine students' characteristics responsible for academic performance of Home Economics students of Aburaman Senior High School in the core subjects

2. Examine the level of teacher-factors contribution to the academic performance of Home Economics students of Aburaman Senior High School in the core subjects.

3. Assess the contribution of teaching and learning materials (TLMs) to academic performance of Home Economics students of Aburaman Senior High School in the core subjects.

4. Examine methods to improve performance of Home Economics students of Aburaman Senior High School in core subjects.

Research Questions

1. What student-characteristics are responsible for the academic performance of Home Economics students of Aburaman Senior High School in the core subjects?

2. What teacher-factors contribute to the academic performance of Home Economics students of Aburaman Senior High School in the core subjects?

3. How does the use of teaching and learning materials (TLMs) in teaching contribute to the academic performance of Home Economics students of Aburaman Senior High School in the core subjects?

4. In what ways can the performance of Home Economics students of Aburaman Senior High School be improved upon in core subjects?

Significance of the Study

The findings of this study could shed light on how to achieve quality education in the teaching and learning of core subjects at the Department of Home Economics. The study would provide insight into the problems whose solution might help inform specific actions to be taken to efficiently and effectively address the poor performance in core subject. It could help educational administrators to guide teachers in planning the curricula for their classes, align their lesson plans and also provide counsel and guidance to students regarding personal, academic, vocational or students' activity programme.

It would also provide strategies to guide the tutors of the school on how to improve the performance of learners to a level that would allow them entrance to the university. Teachers could form aptitudes to teach the subjects through different methods based on the needs of the students and vary instruction and offering all students an opportunity to learn. It could also guide students' way of learning the core subjects and to seek sources of information which will assist them in their core subjects.

Delimitation

The study could have been conducted in all schools offering Home Economics who are not performing well in the core subjects in West African

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Senior School Certificate Examination. The study is rather delimited to only Aburaman Senior High Schools in Abura-Asebu-Kwamankese District, Central Region of Ghana because the schools where students are not performing well are many which makes it difficult to cover them.

Limitations

Limitations of the study cannot be overlooked since participation in this study is not compulsory and those who do not want to participate might be the ones who could give crucial information. It is likely that some students and teachers will give false information and this could make the data misleading.

Organisation of the Study

Chapter One presents the background of the study, statement of the problem, purpose of the study and significance of the study. Research questions, delimitation, limitations and organisation of the study are included in the chapter. Chapter Two presents a review of the related literature. In Chapter Three, a detailed description of the methodology employed in the study is provided. In Chapter Four, data collected for the study is analysed, followed by discussions of the findings. Chapter Five covers the summary, conclusions and recommendations of the study. Suggestions for further study are also presented in the chapter.

CHAPTER TWO

LITERATURE REVIEW

Overview

The literature review focuses on education, teaching and learning; the concept of academic performance and the factors that influence academic performance. The areas of review include the following:

1. Education

2. School;

3. Effective Teaching;

4. Learning;

5. Teaching and Learning Materials (TLMs);

6. Academic Achievement

7. Concept of Academic Performance;

8. Factors Influencing Academic Performance;

9. Teaching Methods; and

10. Summary.

Education

Education in Ghana is arguably one of the best in Africa. It is mostly financed by the government. The government of Ghana in the pursuance of the millennium development goals continues to formulate educational policies, provide educational infrastructure and material. The Ghana Education Service and the Ministry of Education are the two constitutionally mandated bodies that cater for Ghana Education. Among government policies that seek to promote education in Ghana is the establishment of the GETFUND (Ghana

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Education Trust Fund) by an act of parliament in 2000, and the FCUBE programme. Education in its broad sense is the means through which the aims and habits of a group of people sustain from one generation to the next. It occurs through any experience that has a formative effect on the way one thinks, is feels or acts (Wikipedia, the free encyclopedia).

Education in its general sense is a form of learning in which knowledge and skills are transferred from one generation to the next through teaching, training, research, or simply through auto didacticism. Generally, it occurs through any experience that has a formative effect on the way one thinks, feels, or acts. It is the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment, and of preparing oneself or others intellectually for mature life. The process of education consists of teaching and learning. Teachers teach, while students learn what is being taught. It is expected of schools to provide an atmosphere and environment conducive enough for effective teaching and effective learning so that both the teachers and the students would be productive during school hours. It is widely accepted that the quality of education depends on the quality of the teacher because the teacher does not depend on the learner any more than the learner depending on the teacher (Amissah et al., 2002). Ministry of Education (2002) stated that teachers are central to every educational reform because they are the ones who accomplish the agenda that has been laid down in a reform. This means an effective curriculum and an effective reform depend on the teacher. Teachers are professionals who possess specialized knowledge and skills about education.

School

A school is first and foremost a social institution, that is, an established organisation having an identifiable structure and a set of functions meant to preserve and extend social order. Schools are structured to operate as relatively self-contained units loosely coupled to other schools within a system. A school is an institution designed for the teaching of students (or "pupils") under the direction of teachers. Most countries have systems of formal education, which is commonly compulsory. In these systems, students' progress through a series of schools. The names for these schools vary by country but generally include primary school for young children and secondary school for teenagers who have completed primary education. An institution where higher education is taught is commonly called a university college or university.

Ankomah (2002) classifies schools into three types: the conventional, congenial and the collegial school. According to this source, the conventional school is characterized by dependency, hierarchy and professional isolation. There are strict rules and regulations which must be followed by both teachers and students and failure to do this call for drastic action whiles the congenial school is characterized by friendliness and lack of commitment which leads to the neglect of institutional goals. Glickman et al. (cited in Ankomah, 2002) speak against the first and the second type of schools due to their typical ineffectiveness. The collegial school on the other hand, is characterized by purposeful adult interactions about improving school-wide teaching and learning.

School-wide culture, according to Osher and Fleischman (2005), is the underlying goal for creating a positive culture to enable students to achieve academically. The collegial schools are also characterised as schools where authorities accept disagreement, and opinions are seen as integral to change. They respect the wisdom of all and care for all to arrive at educational decisions for students and issues are discussed with candour. As the congenial school neglects institutional goals, the collegial schools establish learning goals for all students. Secondly, common priorities are set with decisions about internal change and resource allocations (Ankomah, 2002).

An Effective School System

An organisation such as educational institution must be effective to gear towards high performance and goals. It is very difficult to define an effective school. This is because no single set of qualities characterise an effective school. To Clark and Cutler (1990), effective schools are those that produce in students such outcomes higher achievements, deeper knowledge of subject matter, less truancy, and better jobs upon graduation. In addition, there is usually no significant difference in achievement of students from different socio-economic or ethnic groups within or across schools in reading, language, arts and mathematics. Ankomah (2002) describes three perspectives of effectiveness. These are Individual effectiveness, Group Effectiveness and Organisational Effectiveness. Individual Effectiveness has to do with specific members of the organisation with ability, skills, knowledge, attitude, motivation and stress of the individual members being the factors.

However, Organizational Effectiveness can be looked at from three main approaches. These are the Goal Approach, the Systems Theory

Approach, and the Stakeholders Approach. The Goal Approach emphasizes that an organisation exists for the purpose of accomplishing some goals. The goal accomplishment is, therefore, used as a yardstick to measure effectiveness. With the System Theory Approach, the organisation exists as a system that is the basis for describing the internal and external behaviours of the organisation. Members of the organisation perform their individual and group tasks because externally, the transaction that exists between the organisation and other organisations and institutions is assessed. With the Stakeholder Approach, emphasis is on the satisfaction of all the individuals and groups who have a stake in the organisation, including the students, parents and the community (Ankomah, 2002). In describing the cultural elements of an effective school, four major expectations are observed-striving for excellence; teachers adopting the attitude that all students are capable of achieving irrespective of past performance; staff striving to improve themselves by helping each other; and, teachers and students being well disciplined to all students (Ankomah, 2002).

Quality education, according to Ankomah (2002), therefore, implies good teaching, adequate materials and facilities for effective teaching, and a congenial atmosphere for education. Furthermore, the effective school has a strong leadership with heads being firm and purposeful, willing to delegate tasks and involving teachers in decision-making. Effective schools are said to have attractive and orderly environments which encourage self-control and a clear focus on teaching and learning as a primary goal. Students' performance and behaviour receive a positive reinforcement with feedback and clear rules of behaviour that stimulate and improve students' outcomes. Thus in such

schools, there is continuous monitoring of students' progress and academic results are used to inform planning and teaching (Ankomah, 2002).

Atakpa and Ankomah (1998) also report that an effective school has a strong PTA system, and parents are encouraged to be involved in promoting students' learning and achievement. Communities, teachers, administrators and students continue to be learners towards improvement in an effective school (Ankomah, 2002). Also the process of education which consists of teaching and learning must be considered as a contributing factor to achieving school effectiveness. Reid, Hopkins and Holly (1987) agreed on the element of higher academic achievement as a feature of an effective school. Basic data on education (World Bank, 1995) state that an adequate definition of quality in education must include students' outcomes and also the nature of the educational experiences that help produce those outcomes. Clark and Cutler (1990) indicated that characteristics of effective schools is in its leadership, climate, teacher, curriculum, instruction, support services, building as well as parents and community support. With regard to teachers and teaching;

1. Teachers in the school tend to remain together as a cohesive group. There is a little teacher turnover.

2. Teachers focus more on their own impact in the classroom than on background factors of students.

3. There is teacher accountability of students' performance and the provision of accurate information on that performance (California State Department of Education cited in Reid, Hopkins & Holly, 1987).

4. In-service training programme concentrate on topics determine by teacher, together with frequents informal consultations among teachers.

5. Teacher provides good role models of punctuality, behavior dress and care of facilities.

Ankomah (2002) describes three perspectives of effectiveness. These are Individual effectiveness, Group effectiveness and Organisational effectiveness. Individual effectiveness has to do with specific members of the organisation with ability, skills, knowledge, attitude, motivation and stress of the individual members being the factors. Group effectiveness looks at the sum of the contributions with concern given to cohesiveness, structure, leadership, status, roles and norms whiles organisational effectiveness considers both the individual and the group effectiveness. Elements that contribute to school Effectiveness includes:

1. Effective shared leadership;

2. Staff professional development and professional collaboration;

3. Safe and positive school environment with adequate resources;

4. Small class size, flexible scheduling and varied student grouping;

5. Positive family and community relation and parental involvement;

6. Shared school mission and clear goals;

7. Strong core or integrated curriculum and instruction; and

8. Demanding and caring learning environment

A report by National Association of Secondary School Principals (NASSP) suggests that small school size or creating small unit within a school is on way to banish anonymity. Quality education, according to Ankomah

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(2002), therefore implies good teaching, adequate materials and facilities for effective teaching, and a congenial atmosphere for education. Furthermore, the effective school has a strong leadership with heads being firm and purposeful, willing to delegate tasks and involving teachers in decision-making.

Effective schools are said to have attractive and orderly environments which encourage self-control and a clear focus on teaching and learning as a primary goal. Students" performance and behaviour receive a positive reinforcement with feedback and clear rules of behaviour that stimulate and improve students' outcomes. Thus, in such schools, there is continuous monitoring of students" progress and academic results are used to inform planning and teaching (Ankomah, 2002).

Effective Teaching

Teaching is an attempt to help someone to acquire or change some skill, attitude or knowledge (Nancino, Oke & Brown, 1982). Teaching is explained by "World Book encyclopedia as the process by which one person helps others achieve knowledge, skills, values and attitudes. It is an exertion of psychological forces to move the individual's behaviour to a desired form. According to Tamakloe et al. (2005), teaching is directing knowledge towards the learner. To Kochhar (2004), teaching is not a mechanical process, but a rather intricate, exacting and challenging job. Though teaching is poorly paid, Kochhar explains that its riches are of a different order, less tangible but more lasting – that is satisfaction of personal fulfilment. To Farrant (1996), teaching is "a process that facilitates learning." Teaching and learning are therefore described as the two sides of a coin because teaching does not happen without

a learner (Amissah et al., 2002). Some definitions given to teaching are as follows:

1. Teaching is the means whereby an experienced member of a group guides and directs pupils in their total growth and development.

2. It is also the activity that the teachers demonstrate to reflect their philosophy of education.

3. Teaching is an interpersonal influence aimed at changing the way or behaviour in which other persons can or will behave.

4. It is a system of actions intended to induce learning.

5. It is an activity aimed at the achievement of learning and practiced in such a way as to respect the learners' intellectual integrity and capacity.

The above definitions show how teaching has been subjected to a variety of descriptions and definitions. While some authors describe teaching as an art because it gives the teacher an opportunity to do something creative like moulding personalities and the mind, others describe teaching as a science because it hinges on a specified body of knowledge - psychology. In this sense, Kochhar (2004) asserts that "teaching is a complex art of guiding pupils through a variety of selected experiences towards the attainment of a widening field of learning". Hence teaching directs growth and development. As the art involves the mind, the heart and the hand, so is teaching (Amissah et al, 2002).

The authors assert that teaching is the art of inducing students to behave in such ways that are assumed to lead to learning. This connotes that teaching is all about creativity because the personality is at play. It is out of passion that a person can teach effectively and it takes a creative teacher to

impact on the learner. Therefore, teaching can be defined as the art and a conscious act of transmitting knowledge, skills, attitude and values in a systematic and an orderly procedure to induce learning for positive growth and development.

Teaching can be defined as a type of communication. Thus, for communication to take place there must be a communicator message and an intended recipient of message. The teaching activity therefore needs a lesson, a student and intended response from the learners and of course a teacher. Effective teaching and effective students learning have been a central focus of many current education reforms. Like many concepts, there are no fixed features for what constitute effective teaching. The learner and the learning process as well as social and cultural contexts determine the strategy that will be effective. A teaching method that proves successful at one occasion might not achieve the desired objectives at another time. Rosenshine and Berliner (1978) noted that it is the teacher who is the final arbiter of instruction. As a reflective decision-maker the teacher is the bridge between research and practice. He or She should study the learning situation and adopt the best technique that will fit to the situation.

Research has, however, identified broad based principles that enhance effective teaching. It should make sure that all students are provided with the opportunity to obtain a comprehensive, balanced and equitable education. Such an education promotes the holistic development of each individual and ensures that schools are provided with opportunities to prepare them for both their present and future life roles. Effective teaching involves the use of quality instruction to achieve an educational outcome. Basically, this involves

organising the learning experience in a sound and appropriate way by considering the characteristics of the students such as ability, prior understanding and motivation. Effective teachers are known to have direct influence on enhancing student learning and an enriching effect on the child's daily life and educational aspirations. It is known that the teacher who exerts forceful control techniques sets up learning experiences which are of poor quality and would not be effective in fostering the desired educational outcomes (Kyriacou, 1995; Tucker & Stronge, 2005).

In effective teaching, instructors encourage active learning (Chickenering & Gamson, 1995). Students do not learn much just by sitting in classes listening to teachers, memorising pre-packaged assignments and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences and apply it to their daily lives. They must make what they learn part of themselves. Learning is increased when teaching is presented in a manner that assists students in organising, storing and retrieving knowledge (Ellis, Worthington & Larkin, 2002). In addition, reciprocity and cooperation should be developed among student. Learning is enhanced when it is more like a team effort than a solo race. Ellis et al. (2002) believe that for teaching to be effective, students should be engaged actively during the instructional task. In addition to that students achieve more in classes where they spend much of their time being directly taught or supervised by the teacher. Again, the teacher must give feedback in effective teaching. Knowing what you know and do not know focuses learning. Students need appropriate feedback on performance to benefit from courses.

When getting started, students need help in assessing existing knowledge and competence. In classes, students need frequent opportunities to perform and receive suggestions for improvement. At various points in school, students need chances to reflect on what they have learned, what they still need to know.

In sum, effective teaching should be based on the premise that to learn is to make meaning of experience. Impact of factors such as attitudes perception, expectations, abilities, gender, socio-cultural background and maturity, on every learning experience should be acknowledged. Furthermore, the learners' capacity to continually extend and refine knowledge must be recognised.

Characteristics of Good Teaching

"The aim of teaching is simple: it is to make student learning possible...To teach is to make an option about what and how the student learns; therefore, to teach well implies learning about students' learning" (Ramsden, 1992, p. 23). At the university level, it is expected we hope that students will provide their own motivation and their own discipline, and bring their own, already developed cognitive abilities to bear on the subject matter. Nevertheless, the teacher still has a crucial and demanding role to play in the process of student learning, by creating a context in which the students' desire and ability to learn can work most effectively.

The task of the teacher in higher education has many dimensions: it involves the provision of a broad context of knowledge within which students can locate and understand the content of their more specific studies; it involves the creation of a learning environment in which students are encouraged to

think carefully and critically and express their thoughts, and in which they wish to confront and resolve difficulties rather than gloss over them; it involves constantly monitoring and reflecting on the processes of teaching and student understanding and seeking to improve them. Most difficult of all perhaps, it involves helping students to achieve their own aims, and adopt the notion that underlies higher education: that students' learning requires from them commitment, work, responsibility for their own learning, and a willingness to take risks, and that this process has its rewards, not the least of which is that learning can be fun.   One set of characteristics of good teaching, extracted from research studies and summarised from the individual lecturer's point of view (Ramsden, 2003) includes:

1. A desire to share your love of the subject with students.

2. An ability to make the material being taught stimulating and interesting.

3. A facility for engaging students at their level of understanding

4. A capacity to explain the material plainly.

5. A commitment to making it absolutely clear what has to be understood at what level and why?

6. Showing concern and respect for students.

7. A commitment to encouraging independence.

8. An ability to improvise and adapt to new demands.

9. Using teaching methods and academic tasks that require students to learn actively, responsibly and co-operatively.

10. Using valid assessment methods.

11. A focus on key concepts, and students' misunderstandings of them, rather than covering the ground.

12. Giving the highest quality feedback on student work

13. A desire to learn from students and other sources about the effects of teaching and how it can be improved.

The Professional Teacher

Teaching in Ghana has been regarded as a profession. Arends (1991) has noted that a profession could be regarded as an occupation, which exhibit certain characteristics, some of which are:

i. Emphasis on intellectual techniques in performing the services; and

ii. The requirement of a long period of specialised training.

Farrant (1964) also defined a profession as a body that provides specialised services to the community based on accumulated knowledge, skills and wisdom. Farrant noted that it is normal for a professional body to control the entry qualification and work standards of its members. He cited medicine and law as professions that are better recognised than teaching because they have greater autonomy and control over their services in the form of recruitment and entry qualifications of new members.

The teaching profession in Ghana unlike other professions has some members who are non-professionals. The unattractive nature of the profession results in high rate of teacher attrition leading to the recruitment of non-professional for replacement. This situation has implication for the quality of products in terms of student's performance. Some people have the notion that teaching work is free from hard work, pain, anxiety and trouble.

At school the instruction-centred activities like direct instruction, organising, testing and monitoring are some of the teachers' work. The activities performed both in school and after school by the teacher help students to perform better in their academic work. On teacher preparation, Ashton and Crocker (1987) found significant positive relationship between the professional preparation and teacher performance. Antwi (1992) and noted that teacher education programme includes academic work, pedagogical and normative content of the teaching work. Antwi, however, added that the teacher has to acquire a relatively high level of intelligence. To Antwi, the practical orientation makes the teacher become efficient. This efficiency, all things being equal, makes the teacher perform his/her tasks with ease and precision which could impact positively on students' performance. Darling-Hammond (2002) also stated that the quality of teacher's training has some relationship with his students' performance.

On the qualities of a teacher, the good teacher and the best teacher could be identified and differentiated as follows:

1. A good teacher can tell his students a lot of answers to a lot of questions whiles the best teacher encourages heuristic learning.

2. A good teacher strives to keep his class under control but the best teacher knows that he must first be able to control himself.

3. The students of a good teacher pass their courses, graduate and settle down with good jobs. But the students of the best teacher go on receiving rewards everyday of their lives for they have discovered that the life of the inquiring mind exists.

These qualities of the best teacher when possessed and demonstrated by teachers could impact positively on the students they teach. Teacher characteristics have also been observed to have an association with a teacher quality. Owolabi and Okebukola (2009) observed that teacher characteristics like gender, experience, academic and professional qualifications, age, job satisfaction, commitment, retention and others can be used as indicators to measure the quality of knowledge disseminated. Rebore (1982) and Windham (1988) supporting this view stated that the academic and professional qualification of the teacher indicate the teacher's quality. Windham, however, stated that experience of teachers as an indicator is controversial since it varies from teacher to teacher and among countries. Whatever way this argument is looked at, heads of institution wishing to recruit teachers usually, place emphasis on the above stated variables since they are known to have association with teachers' performance.

Another characteristic of teachers observed by Middlewood and Lumby (1998) is their management of human resource. Middlewood and Lumby noted that in education, concepts of professionalism, professional autonomy and collegial approaches to decision making makes it difficult for teachers to be managed as a resource, manipulated or directed in pursuit of school or college objectives. These attributes of teachers could be some of the reasons why educational institutions find it difficult to be run on business organisation lines and also makes it difficult for teachers to come to easy conclusion during staff meetings. This attribute of teachers implies that the chief executives of schools need to be stern and firm otherwise the control of

their teachers could be out of hand and this could affect students' performance.

On teacher effectiveness, Okumbe (1998) noted that a good proportion of teachers enter the profession with low morale. Usually, such teachers see teaching merely as a dull job, respond to problems by giving up, do not assume personal responsibility for students learning, and discuss problems as if they are too serious to be solved. On the other hand, those who choose the profession for intrinsic reasons, see themselves as diagnosticians and problem solvers rather than as parent-substitutes or disciplinarian. They face problems but work hard towards solving them. This helps students to pass examination. The role teachers, as human resources play in their implementation of the curriculum and educational goals cannot be over-emphasised. The possession of higher qualifications and teachers' commitment to work are some of the necessary conditions if teachers are to perform better in their teaching. Heads of school, therefore, prefer recruiting teachers with these essential characteristics.

Learning

Senge (1990) suggested the useful and pragmatic definition of Learning as increasing knowledge to increase the capacity for effective action. Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's own ideas and responding to others' reactions sharpens thinking and deepens understanding (Chickening & Gamson, 1995). The teacher respects diverse talents and ways of learning. There are many roads to learning to

college. Students need the opportunity to show their talents and learn in ways that work for them. Thus, they can be pushed to learn in new ways that do not come so easily. Learners' individual differences must be acknowledged in effective teaching.

Argyris (1991) has identified single loop learning and double loop learning as the two types of learning. Single loop learning means learning that has occurred but has had little impact on outlook or behaviour. Double loop learning is important in Vocational and Technical Educational Training today, especially with its increased focus on learning and problem-solving skills and other generic or employability skills. Learning is the process by which we acquire and retain attitudes, knowledge, understanding, skills and capabilities that cannot be attributed to inherited behaviour patterns or physical growth (Farrant, 1996, p. 107). To Farrant, capacity for learning is innate and is based on psychological factors whiles rate of learning is based on both inherited and environmental factors. In contrasts to this assertion, Skinner (as cited in Farrant, 1996) opines that learning is seen as a series of experiences, each of which influences behaviour. Learning results should therefore be considered in terms of understanding the core processes within the content standards. The various types of learning identified by Farrant are:

1. Affective learning – learning which has to do with feelings and values and therefore has influence on our attitude and personality. For example, being disciplined and courteous.

2. Cognitive learning – is achieved through mental processes like recalling and reasoning or how one thinks.

3. Psychomotor learning – has to do with the development of skills like efficient co-ordination between the brain and the muscles as in drawing or writing what we see.

Farrant (1996) explains that as much as the teacher's job is concerned, it is his duty to help the learner go through each of the learning stages in an efficient manner. Efficient learning therefore requires readiness, motivation and involvement on the part of the learner. These factors are explained as follows:

Readiness

This is necessary in the process of learning. Readiness for learning depends on physical and mental maturation and also accumulation of experience as the basis for new learning. Readiness in a child is often shown by an eager response to learning tasks and is always accompanied by rapid progress. The lack of readiness may be due to lack of maturation or insufficient preparation in those foundations upon which new learning will be built. Though readiness to a large extent depends on the child himself, it is also the duty of the teacher to catch that aspect of the child for an efficient learning to take place.

Individual Learning

This type of learning allows the student to learn what he or she wants in his or her own ways and pace. Individual learning is advantageous to both the fast and the slow learner; it allows them to progress at the pace best suited to them; and get individual help from the teacher as and when required. To the fast learner, this type of learning allows fast acceleration while the slow learner is not pushed to catch up. It helps learners with special difficulties – be

it physical, psychological, emotional or cultural though it places a heavy task on the teacher's shoulders. Farrant (1996) indicates that individual learning requires the teacher to provide sufficient learning materials for all learners and give proper supervision to ensure their progress, as well as encourage proper analysis and synthesis for better assimilation and understanding of lesson content.

Learning by Practice or Doing

Despite the amount of activities on the part of the teacher, learning will be in vain unless students are actively involved in the learning experience (Singh & Rana, 2004). This suggests that teachers must know how their students learn and how a particular method affects them. Teachers ought therefore to involve their students in the learning activity and students must also endeavour to practice on their own for better assimilation of what is taught them.

Programmed Learning

This type of learning was introduced on the basis of a particular psychological theory of learning (Farrant, 1996). In order to achieve this, learning materials are made simple and carefully arranged in sequential manner leading from the known to the unknown. In this type of learning, the first learning experience is made easy and simple and gradually graduates to complexity, enabling the learner to progress to a more demanding standard. Despite its complexity, the learner is actively involved in the learning process and constantly tested in his knowledge and given immediate assessment of his performance. This reinforces correct learning.

Effective Learning

Effectiveness of learning is a very important factor in the learning process and it is accepted that this varies in effectiveness. Though inadequate supply of equipment creates poor learning conditions, there are other conditions that can help achieve good and effective learning. A good match between students' learning preferences and instructor's teaching style has been demonstrated to have positive effect on student's performance (Harb & El-Shaarawi, 2006). According to Reid (1995), learning preference refers to a person's "natural, habitual and preferred way" of assimilating new information. This implies that individuals differ in regard to what mode of instruction or study is most effective for them. Scholars, who promote the learning preferences approach to learning, agree that effective instruction can only be undertaken if the learner's learning preferences are diagnosed and the instruction is tailored accordingly (Pashler, McDaniel, Rohrer & Bjork, 2008).

The Conditions for Learning

According to Kochhar (2004), these conditions include Psychological Security, Experimentation, Feedback, Practice, and Belonging and Configuration.

Psychological Security

Participation of the learner in effective learning is very important and learners would not participate freely unless they feel secure. It is therefore necessary for the teacher to create a stimulating learning environment because it is the only condition under which the learner would be encouraged to try and possibly learn. The view that warm, considerate teachers generate great interest in school work whiles autocratic teachers who are strict, do not usually

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inspire confidence, too much freedom also does not ensure psychological safety but leads to frustration. This implies that students give high rating to teachers who respect their rights and wishes and encourages their growth towards independent learning (Kochhar, 2004). The orderly and systematic teacher creates a classroom climate and atmosphere that is conducive to effective learning.

Experimentation

According to Piaget (as cited in Farrant, 1996), activity learning involves the learner making it the best. Kochhar's (2004) view is that effective learning comes by exposing the learner to the learning situation. Learning cannot be given to the learner but it is about exploring, conceptualising, experimenting and interacting. The idea is that experience with concrete situations is the basis for understanding therefore learning comes about when the learner is actively participating in the learning activity. Also, only experience with the real things acquaints a person with its characteristics. Rather than emphasizing and memorizing principles, the child should be helped to discover concepts and principles for this will lead to creative learning (Kochhar, 2004; Farrant, 1996).

Feedback

Feedback can be termed as "the evaluation information on the act of learning" (Kochhar 2004, p. 28). Students learn rapidly when regular feedback is given to them on their progress. Feedback is very important because it is a form of motivational factor that influences effective learning. Results of achievements must be given to learners from time to time to let them gain interest in learning.

Practice

The factor of practice is true when it comes to skill learning especially in vocational education. It is essential for the teacher to plan the learning situation in such a way that practice is built into them to make learning more meaningful because practice makes man perfect and the more one does something, the more one knows (Kochhar, 2004).

Belonging and Configuration

The experience is re-structured, no learning takes place. Only after re-structuring that the learner can organise and integrate the experience in required relations before learning takes place. Nevertheless, the significance placed on what we learn affects how well we can recall (Kochhar, 2004; Farrant, 1996). Though the environment has an influence it comes about when the learner is actively participating in the learning activity. Also, only experience with the real things acquaints a person with its characteristics. Rather than emphasising and memorising principles, the child should be helped to discover concepts and principles for this will lead to creative learning (Kochhar, 2004; Farrant, 1996).

Motivation

This is a force that determines how much effort an individual puts into learning. There is less effort, energy and enthusiasm to learn if a child's motivation is limited. The interest and desire of the learner is his or her motivation. The basis of self-motivation involves a person's drive and goal (Curzon, 1996). This, Kochhar (2004) suggests, is necessary for a teacher to understand in order to use the natural urges of the child to assist him to acquire new and desirable motives.

Motivation to Everard and Morris (1985) is getting the results through people or getting the best out of people. According to Curzon (1996), motivation is considered by most teachers to be essential to effective communication, and cites the four effects of motivation as:

1. It arouses, sustains and energizes students;

2. It assists in the right direction of tasks;

3. It is selective, in that it helps to determine students' priorities, and

4. It assists in organising students' activities.

Some psychologists speak of motivational cycle based on the following components: need, drive, goal, and satiation (resulting in the cessation of the drive activity). Maslow (as cited in Curzon, 1996) looks at motivation in terms of the individual's striving for growth and a person's behaviour being dominated by his needs. Herzberg (as cited in Curzon, 1996) believes that persons are affected by motivators. He explains motivational factors as those that are directly associated with the content of activity. In the classroom setting, such factors include style of instruction adopted by the teacher, security of the learner and interpersonal relationship with the learner. The reward and punishment levelled at learners in the past will affect their motivation and attitude towards learning in the present. "The expectations of others and the climate which surround learners will determine their readiness to learn, which in turn will result in learners performing poorly academically" (Mullins, 2005, p. 39). Another study suggests that maintenance of high motivation influences psychological and social functioning and facilitates academic performance as well as positive school perceptions (Gilman & Anderman, 2006).

Learning Methods

The constructivist learning theory (Farrant, 1996), believes that education has two main purposes: to empower learners to think for themselves, and to promote in the next generation ways of thinking and acting that are deemed important by the present generation. Empowering the learner means that teachers should relinquish some of their power and hand it over to the learner. The teacher must always emphasize the importance of the learner being actively involved in the learning process.

Independent Learning Process among Students

Although teacher-to-student interactions are important in the teaching and learning of art, students in the company of their peers learn much from the creative art teaching process. James (1996) indicates that as students interact and look at each other's work, they learn a variety of creative strategies and techniques and also monitor their own work in relation to what other students are doing. By mentally competing with other students rather than working secretly because they are afraid others would steal their ideas, students use their peers' work as a measure for the kind of effort required by the teacher. They also teach each other by modelling kinaesthetically through the use of tools, facial expressions and energy levels; verbally through responses, questions, suggestions and opinions; and, visually through their art works (James, 1996).

The influence of peers in enhancing student learning in creative art is also shared by Rosenthal and Zimmerman (1978), who believe that students learn from each other in three ways: by inhibition where they try to avoid actions because they may not be appropriate; by disinhibiting where they discover that

a previously prohibited behaviour is safe; and by novel behaviour where they learn new actions by watching a peer and duplicating his or her behaviour.

Relationship between Teachers' Motivation and that of a Learner

Studies found that there is a positive relationship between educator's motivation and that of the learner, while educator-learner relationships are also mediated by the educator's attribution of poor performance to the learner in terms of academic performance. The socio-metric status of the learner affects performance both directly and indirectly, since it is influenced by intelligence (Georgiou, 2002). Some researchers argue that educator development is at the heart of long-term sustainable improvement in the South African context. Their proposal is that educators need development along three dimensions simultaneously: content knowledge, teaching approaches and professional attitude.

Teaching Methods

Teaching methods or instructional strategies are defined by Singh and Rana (2004) as something designed to establish interactions between the teacher, the student and the subject matter or a combination of these three to influence directly or indirectly, the learning process. For learning to take place, one must carefully plan procedures and activities that the students will undergo. This is achieved by varying behaviour, majoring the subject matter and teaching to meet the needs and interests of each individual.

Singh and Rana (2004) also suggest that the individual teacher must design and select methods in his instructions, and each design or selection should be based on his or her interpretation of what will constitute effective instruction for a particular population. Individual interpretation means lessons

should be based on empirical evidence, past experience and extensive knowledge of methods and materials. Given that the teacher is an authority figure and perceived the students as knowledgeable in the field he or she is teaching, significantly influences the learning of the arts (James, 1996).

The author asserts that the teaching procedure adopted by teachers and the technical demonstration that is done also teach students the nature of creative art. The implication is that teaching methods that employ demonstration enables students to go beyond school and learning. For example, James (1996) observes that when students see slides and actual cuts at the beginning of each assignment, they learn about the concept and values in making and thinking about art. That is to say that the teaching technique of demonstration prior to assignment better enhances the learning of art.

Some researchers see tutoring as an effective method of teaching because it is the best support a teacher can give to a student for effective learning. Tutoring can be given to individuals, the whole class and small groups. According to Cornett (2003), active engagement is a key to academic achievement. Students must therefore be actively engaged in class to enable them understand the subject matter well. Singh and Rana (2004), say that differences in teaching methodology employed by teachers do not make some better than others. Methods of teaching vary with no single strategy being the most effective with the entire students and the subject matter. Teachers also come in all shapes and sizes and exhibit a wide range of personalities, beliefs and ways of thinking and working.

Squires (2002) believes that teaching goes beyond general skills, and must be geared towards the needs of a particular situation or the type of

course, subject and level of the group or individual. Therefore, one cannot hold a teacher who uses methods and models of teaching that differ from the ones informed by research as necessarily a "bad teacher". Teachers and trainers need to be competent at employing the various methods of teaching. Tomlinson and McTighe (2006), support this by saying that teaching is an art and calls on its practitioners to work simultaneously in multiple media, with multiple elements. It is therefore necessary for one to select the best and appropriate method and strategy for a particular subject matter and student population, implying that teachers should vary their methods of teaching in order to suit the subject matter and the student at a particular stage.

Ezene (1997) defines teaching method as the broad pattern of thinking, which a teacher follows to help his/her students reach the goal for the course. Teaching method must be chosen according to needs and desired objectives. The effectiveness of the teaching method depends on the ability of the teacher to prepare and chose the best method for each topic so that the interest of students is aroused and sustained. Ukolta and Eneogwe (1996) revealed the following as a guideline to be considered in selecting or choosing teaching methods.

1. Group size – large group, small group and individualised instruction.
2. Instructional objectives based on these: cognitive, affective and psychomotor domains.
3. Individual differences among learners such as sex, intelligence, needs and desires; learning styles; educational background; socio-economic background; motivational characteristics; interest, etc.
4. Nature of subject to be taught is abstract, practical oriented or both

5. Time that is durable for the lesson.

6. Instructional facilities available

7. Teachers experience educational qualification

According to Esene (1997) some teaching methods are lecture, textbook assignment, discovery, homework, excursion, team learning and written practical. There are a variety of teaching methods that can stimulate students' interests in learning. The method chosen depends on the nature of the lesson, the objective of the lesson, age and maturity of the learner, competence of the teacher and the teaching aids and other learning materials. The review of literature, though not exhaustive, greatly influence the researcher's statement of the purpose of the study, formulation of the research questions and hypothesis. The theoretical and empirical review enabled the researcher to focus the study more effectively. They directed the designing of the research instruments as well as the analysis of the data.

Teaching and Learning Materials

Teaching and learning materials are items that ease or facilitate the impartation of knowledge from a teacher to students. Lockheed and Verspoor (1991) posits that teaching learning materials also called aids, are critical ingredients in learning and, the intended curriculum cannot be easily implemented without them. In other words, teaching learning materials are, according to Ornstein and Lasley II (2000), "…materials designed for teachers use…provided as supplements to the textbook." (p. 235). Among others, Ornstein and Lasley II (2000) outlined the following as examples of pedagogical aids necessary for enhancing teaching and learning in the classroom:

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1. Teacher's manual;

2. Skills book/exercise books;

3. Workbooks;

4. Bulletin board displays;

5. Supplementary;

6. Computer software; and

7. Audio and video.

In the absence of most of these resources, both the teacher and the student find it difficult to transmit and receive information respectively. Calhoun, Light and Keller (1994) contributing to factors that influence academic performance stated that students usually perform better when they have books or study aids to foster their learning. Sekyere (1994) states that teaching learning materials are materials the teacher uses to make learning easier. The teaching learning materials are those, which the student prepares and or to make learning easier that is would have been without them. Teaching learning materials are therefore, the materials which facilitate the learning, understanding or acquisition of knowledge, principles or skills by the students.

Farrant (1964) states that teachers are the only audio-visual aids that appear in every lesson and they are memorable because they are frequently associated with some emotional experience. In Ghana, GES has a division called the Curriculum Research Development Division (CRDD) which deals with materials. The division's task, among others, is the development and production of teaching learning materials. For a whole division to be created for the production and distribution of teaching learning materials is an evidence of the important role these materials play in the academic work of

students. Again, in teacher training colleges and Universities training teachers are taught the importance of production and use of teaching learning materials.

Blake (1981) elaborated on the importance of material resources, stated that if the number of children in the home increases without corresponding increasing the resources in the home, like library books, the quality of learning in the home will be lowered. This phenomenon could affect the performance. Students need the books. Teachers must also get the right textbooks and have adequate knowledge about their use before they could accomplish their duty of effecting the necessary change in students. Okumbe (1998) ranked the provision of teaching learning materials by teachers very high. Again, in Ghana, some category of teachers has to produce relevant teaching learning materials to support their teaching before they are promoted to the next rank. All these statements show the importance of teaching learning materials to the academic attainment of students. Nowadays for teachers to be very effective, the use of modern teaching learning materials like computers, radio, television and access to the internet is very important. In the learning process, provision of teaching learning materials has positive effects in the teacher behaviour. Okumbe (1998) observed that lack of teaching learning materials and reference books contributes negatively to students' achievement.

Teachers and students should be encouraged to make the best use of teaching learning materials and it could enhance the academic attainments of students.

Academic Achievement

Academic achievement may be viewed as referring to the consent of the cognitive component of an individual. Anastasi (1986) sees academic

achievement as being determined by intelligence and she therefore measures it in terms of intelligence quotient scores. However, other authorities differ on the issues. Bagnato, Neisworth, Paget and Kovaleski (1987) believe that academic achievement depends on gift and talents and assert further that whether "one has the talent or not, that giftedness is not something that can be taught" opposed to the stand on ice scores as index to academic achievement are those who advocate for environmental factors as being responsible for academic achievements (p.24)

Flanagan et al. (1962) quoted in Morris, Blatt, Powell, Strickland and Castellino (1981) assert that "achievement is measured in terms of how well above the norm or average and individual performs in which the society depends on for survival" (p.113). This assertion means that the factors or variables in which high performance is recognized are relative and culturally determined. The implication in the assertion of Flanagan et al is that exhibition of high skills indicates a potential for success. Whimbey's (1978) supposition that "intelligence is a skill" also puts the issue of academic achievement in another perspective. It implies academic achievement does not depend only on genetic endowment such as intelligence, but that it can be taught. This suggests that people could, through instruction, acquire more or less of a particular kind of skill for achievement. Gear heart (1985, p.13) holds that "a learner is considered as a low academic achievement when his performance is marked below average and yet cannot be fitted neatly into any of the traditional categories of exceptional children-imbecile, moron, idiot etc."

A number of factors have been identified as contributing to low academic performance. Gearheart (1985) identifies the following:

1. Identifiable intrinsic condition-mental retardation, sensory handicap, serious emotional disturbance

2. Intrinsic development learning disabilities- that is, memory, attention, thinking and language

3. Extrinsic environmental conditions- that is, lack of opportunity to learn, failure to attend school, inadequate instruction and adverse home conditions.

Other earlier observations made from some investigations into the causes of under achievement are as follows:

1. Kagan (1964) observed that underachievement is linked to sex differentiation and sex inequality. he further contended that males' underachievement is linked to students' perceptions of the school as feminine

2. Fagot and Patterson (1964) noted that teachers' reinforcement of feminine role behaviours in students of both sexes are a factor.

Stockyard and Wood (1984) asserted that females' underachievement is usually to their anticipation of adult life and economic dependence on men. High academic achieves are defined in the American Educational Research Journal. Winter 1984, as "children and youth who are identified at the pre-school, elementary and secondary levels as possessing demonstrated or potential abilities that give evidence of high performance capabilities in area such as intelligence, creative, specific academic, or leadership ability or in performing and visual arts and who by reason there of require services or activities not ordinary provided by the school." This definition indicates that higher achievers show great adversity in every trait and also tends to show

these traits more frequently, and at a much tender age than other children, High Academic achievers have many characteristics.

Bagnato, Neisworth, Paget and Kovaleski (1987) in their studies on giftedness identify the following as the characteristics of potential high achievers.

1. Talent in music, drawing, rhythm of other art forms
2. Ability to attend or concentrate on complex tasks
3. Ask many questions about topics which young children usually are not interested
4. Keen observation and retention of information about things observed.
5. An early interest in clocks and calendars and ability to understand their functions.
6. The early accurate use of a large vocabulary
7. The ability to tell or duplicate stories and events with details
8. Carry on conversation with older children and adults
9. Learned to read early with little or no formal teaching.
10. Can write short stories, poems or letters

He further states that the characteristics given by other investigations shows that this group of children is different in every trait and therefore does not conform to other children of their age.

Concept of Academic Performance

Academic performance by Cambridge dictionary of English (1995) is defined as how well a school, college, university, an individual or a group is able to perform when given a learning task or activity or one's achievement in standardised tests in academic pursuit. Otoo (2007) says that academic

performance is the capacity to achieve when one is tested on what one has been taught. Academic achievement or academic performance is the outcome of education- the extent to which a student, teacher or institution has achieved their educational goals (Ward, Stoker and Murray-Ward, 1996).

Academic performance is related to content and intellect, meaning that academic performance depends on the learner's competence. No single theory of learning currently exists. Rather, a multitude of different theoretical positions emphasize different aspects of the individual or situation context. Furthermore, this situation has characterised the literature on learning and performance for a number of years. As Underwood (1964) wrote there are many approaches which might be used to express the relationships among research findings for all forms of human learning. Undoubtedly, the most elegant way would be in terms of theory. A general theory of human learning is clearly an ideal solution. No such system is available.

Although no such comprehensive system or theory currently exists, there are many connections among the different learning theories. As Senge (1990) stated, a systems model is "a framework for seeing interrelationships …" (pp. 68-69). One aspect of this interrelationship is the lack of distinction between learning and performance. Discussions concerning human learning began with the early Greek philosophers. Indeed, Reynolds, Sinatra, and Jetton (1996) provide an overview of the theories of the Greek philosophers, as well as current-day learning theories. They suggest that these approaches be positioned along a continuum from environment-centred (where all learning comes from stimulation outside the organism) to mind-centred (where all

learning comes from manipulations within the mind of the organism). Such a classification helps to identify similarities and differences among the theories.

Greek philosophers, Alcmaeon, Democritus, and Protagorus had a view that can be labelled the "environment-centred". They suggested knowledge or learning comes only from the senses and what is observed. In contrast, Socrates rejected the notion that knowledge comes only from perception. He argued that knowledge comes from ideas, concepts, and reasoning. This can be labelled "mind-centred". Aristotle presented a compromise view in which sensations and perceptions combined with the organization of the mind to create higher-order concepts and processes. Thus, Aristotle provided what might be called an "integrationist" view. Similar distinctions can be made of more current theories of learning.

Theoretical Review

Behaviourism

The behaviourist approach, derived from the British Empiricists (Locke, 1690, 1995; Mill, 1929) and popular from about 1910 until about 1960, held that all learning comes from behavioural responses to external stimuli. Thus, it provides an example of an environment-centred approach. Watson's seminal article (1913) stated, "Psychology as the behaviourist views it is a purely objective experimental branch of natural science. Its theoretical goal is the prediction and control of behaviour." Both Pavlov (1927, 1941) and Watson (1913) focused on classical or respondent conditioning. Pavlov introduced the principle of "frequency" according to which the more frequently an unconditioned stimulus (e.g., meat powder) is paired with a conditioned stimulus (e.g., salivation) the greater is the likelihood that the

conditioned stimulus (e.g., bell) will elicit a conditioned response (e.g., salivation). Watson added the principle of "recency" indicating that the more recently a response has been made to a particular stimulus the more likely it is to be made again. The idea of reinforcement was added by Thorndike (1932). Specifically, the law of effect states that a connection becomes stronger or weaker depending on its consequences.

Furthermore, the law of exercises states that, with practice, a connection can be strengthened, and, with no practice, the connection will be weakened. In addition, the concept of identical elements introduced the notion that transfer of training could be enhanced with greater similarity between the learning situation and the environment in which transfer of that learning is to take place. These ideas were further elaborated and codified through various mathematical equations by Hull (1929, 1943, and 1951) and Spence (1956, 1960). Skinner (1938, 1953, and 1968) refined these ideas to include various stimulus-response-reinforcement paradigms. According to this view, the learner is the passive recipient of knowledge. Information must be broken down into small units in order to maximize success (and provide reinforcement).

Gestalt / Cognitive Theory

Gestalt theory, with a focus on organization provided by the mind, posed certain dilemmas to the strict behaviourists (Koffka, 1935; Kohler, 1929; Wertheimer, 1912). These dilemmas, such as response sets (Lashley, 1929), were easily solved by the behaviourists. However, Chomsky's work (Chomsky & Miller, 1958; Chomsky, 1959) represented a severe threat to the behaviourist approach – more specifically, his critique of Skinner's book

(1957) on verbal learning. According to Chomsky, higher-order functions, such as language acquisition and problem solving, could not be accounted for by stimulus-response-reinforcement. For example, people would have to learn sentences at a rate faster than one per second for even small vocabularies. The cognitive revolution led to the notion that humans are active processors of information.

Furthermore, cognitive psychologists introduced the concept of mental representations and suggested a computational metaphor (with the computer). In this case, encoding specificity was introduced as the means by which transfer of learning took place (Thompson & Tulving, 1970; Baddeley, 1998). But, it should be noted that the metaphor of the computer still implied an external focus, given that data and instructions must be provided from outside the organism.

Schema Theory

Schema theory emerged in reaction to the machine metaphor of early cognitive theorists. It falls close to the interactionist view but leaning toward mind-centeredness. Following the philosophical notions of Kant (1900) and Wittgenstein (1958), the mind frames perceptions and experiences, actively interacting with sensory information from the environment. Rumelhart and Ortony (1977) and Rumelhart (1980) suggested certain characteristics of schemas: (1) They have variables; (2) They can be embedded in each other; (3) They represent knowledge at various levels of abstraction; (4) They represent knowledge rather than definition; (5) They are active processors; and (6) They are recognition devices, determining the goodness of fit of the incoming information. Such schemas help to organize disparate bits of

information into a meaningful system or network (Anderson, 1990). According to schema theory, the individual's background knowledge influences the processing of incoming information. Thus, trainee-centred approaches, such as strategy instruction, metacognition, and selective attention, are recommended.

Connectionist Theory

Connectionism, unlike traditional cognitive models, focuses on nodes and networks. (Bechtel & Abramson, 1991; McClelland & Rumelhart, 1988; Quinlan, 1991; Rumelhart & McClelland, 1986). In this case, cognition is the process of changing activation levels of interconnected nodes or neurons within the network. Knowledge is distributed among the nodes and connections. As with behaviourist notions, knowledge is acquired through contiguity and frequency. Back propagation allows for errors to be fed back through the system. Thus, this approach appears at the environment-centred end of the continuum. It emphasizes the importance of proceduralised knowledge, the automaticity of lower level skills, and parallel distributed processing. Rather than teaching isolated facts, network models suggest the importance of chunking information and proceduralising and automating processes. Such proceduralisation and automaticity reduce the cognitive demands or the cognitive load (Paas, Renkl, & Sweller, 2003). Recently, however, Kalyuga, Ayres, Chandler, and Sweller (2003) found an "expertise reversal" such that techniques that reduce the cognitive load for novices may increase the cognitive load for experts.

Social Learning or Behaviour Modelling

Initial work on behaviour modelling (also called social learning) began when behaviourism was pre-eminent. Bandura (1965a, 1965b) proposed, in contrast to the importance placed on frequency, that most human learning involves no-trial learning. New responses are simply acquired by observing the behaviour of other people (i.e., models). The person can, thus, learn new responses without ever having performed the task and without having received any reinforcement. Nevertheless, since observation of a model is critical to learning, this approach can be considered environment-centred. Sorcher and Goldstein (1972) reported on the first research on behaviour modelling undertaken in an industrial setting. Goldstein and Sorcher (1973, 1974) reported on the use of such programs to reduce the turnover among "hard-core unemployed" employees. Since then, over 50 published studies have examined various aspects of behaviour modelling. Elaboration of Bandura's original notions of "no trial learning" tend to include the following steps as part of the learning or training process:

(1) A description of the behaviours to be learned.

(2) A model or models displaying those behaviours.

(3) Opportunities for learners or trainees to practice the behaviours.

(4) Feedback and social reinforcement following practice (Decker & Nathan, 1985; Robinson, 1982; Taylor, Russ-Eft, & Chen, 2003).

Andragogy and Self-Directed Learning

Merriam (2001) claimed that these two theoretical approaches formed the pillars of adult learning theory. Andragogy, introduced by Knowles (1968), characterized the adult learner as directing his/her own learning, using

life experiences in learning, seeing changing roles as learning opportunities, focusing on the practical and immediate application of knowledge, and being internally motivated to learn. Houle (1961), Tough (1967, 1971), and Knowles (1975) explored self-directed learning. Such learning can lead to an increased capacity for self-directed learning, critical reflection and transformational learning (Brookfield, 1986; Mezirow, 1985), and social action (Brookfield, 1993). These theories seem aligned with mind-centred approaches, while recognizing the influence of the context.

Social Perspective Theory

In reaction to the cognitive approaches, a variety of theorists have begun to emphasize the importance of the social and cultural contexts. Given this emphasis on the social, cultural, and historical contexts, such theories fall near the environment-centred end of the continuum. These approaches have been labelled socio-cultural perspective (Wertsch, 1991), social constructivism (Palinscar, 1998; Turner, 1995; Turner & Meyer, 2000), socio-historical theory (Wertsch, del Rio, & Alvarez, 1995), and socio-cultural-historical psychology (Cole, 1995).

The development of cognition comes from an internalization of social interactions, and knowledge is constructed by and distributed among individuals and groups as they interact with one another. Thus, experiences are shared, and learning and knowledge emerges from participation in social interaction. Vygotsky (1979) suggested that learning occurs when a person internalizes the social experiences of interacting with another person; such internalization results in inner speech and thought processes. These theories point toward the importance of considering the training environment, the

organizational context, and the broader social and cultural context. At the very least, such theories contribute to the notions of cooperative learning environments and contextualized activities.

Situated Cognitive Theory

Situated cognition arose from artificial intelligence and cognitive psychology (Brown, Collins, & Duguid, 1989; Clancey, 1993; Greeno, 1991, 1998; Winograd & Flores, 1986). Similar to Vygotsky, situated cognition results from reasoning that occurs when the individual interacts with the social and physical situation. In contrast to Vygotsky, this approach places greater emphasis on internal processes. Thus, knowledge is acquired through the internal processing of the individual as that person interacts with the situation. This theory seems close to an interactionist approach in that emphasis is placed on the mind, in the form of mental models, and on the affordances of the environment. This theory suggests that training should facilitate the development of trainee's mental models through problem-solving activities, particularly by using ill-defined problems. Anchored instruction means that the instructors or the medium must anchor or situate trainees in simulated contexts, situations representing life experiences, or apprenticeships in real life situations. Thus, not all learning involves the retrieval of stored propositions; rather the emphasis is upon providing rich contexts or situations in which learning can occur.

How the various theories apply to this study

The behaviourism theory as applied in this tend to explain students' academic performance as a behavioural response from external stimuli that may include the teacher factor and students' characteristics. The theory

further expatiates the role of consistent practice in behaviour formation. The schema approach hinges on the role of the environment in mental formation and problem solving. In this study operationalising the schema approach will explain the effect of teaching methods and delivery on students' academic performance. It holds that, the individual's background knowledge influences the processing of incoming information. Thus, trainee-centred approaches, such as strategy instruction, metacognition, and selective attention, are recommended. Bandura's social learning theory, another environment- centred approach to learning points out that people learn by observing. It lays emphasis on the use of behavioural modelling approach in student teacher relationship. In this study the theory holds that students' characteristics and academic performance can be modelled by showing them a description of the behaviour to be learned.

The social perspective theory holds that, the development of cognition comes from an internalization of social interactions, and knowledge is constructed by and distributed among individuals and groups as they interact with one another. This theory in the context of the present study highlights the importance of social interactions and friendship among students and teachers to improve academic performance. The theory point toward the importance of considering the school environment, the organizational context of the school, and the broader social and cultural context to influence students' behaviour.

In contrast to the social perspective theory, the situated cognitive theory lays much emphasis on the students' ability to think through situations to improve performance. It points out that knowledge is acquired through the internal processing of the individual as that person interacts with the situation.

As such students' must be made to develop thinking abilities and develop mental models through problem-solving activities, particularly by using ill-defined problems.

All the theories are fit to determine the role of teachers, students and learning material in relation to the academic performance of the students.

Factors Influencing Academic Performance

Time/Period Allocation

Though total time and basic time allocation are not under the control of the teacher, several important elements of time are subject to teacher manipulation. For instance, the proportion of time spent on academic tasks, pacing or speed of progress through the subject matter, student time on tasks and to a certain degree, time allocated to subject is under the control of the teacher. Short et al. (1991) explain that because the teacher controls seatwork, drill and practice exercise, and several other variables, the teacher's time is clearly related to students' performance though abilities and background of students contribute more than any variables associated with teaching. To Crocker (1991), achievement is maximised when teachers emphasise on academic instruction as their main goal and expect same of the student, inferring that teachers should be specific in their teaching in order to make good use of their contact hours with their students.

Similarly, Tomlinson and McTighe (2006) agree that it is vital to be clear about what is essential in content since clarity about what really matters enables the teacher to teach for understanding. This view is shared by Wiggins and McTighe (2005) who say that the more specific facts, concepts and skills that are taught in the context of exploring and applying, the larger the ideas and

processes gained. As much as learning has more to do with one's ability to organise and use ideas and skills to address a problem, clarity also indicates the awareness of learning. Thus, the central purpose of teaching is that we ought to teach what we want our students to know, understand, and be able to do.

Teacher Competency

According to Squires (2002), "teaching" covers all forms like lecturing, tutoring, training, instructing and facilitating but one has to relate it to the particular situation. Good teaching, to Squires, involves skills in lecturing, running classes, managing discussions, handling questions and answers, and organising practical works. This substantiates Wragg's (1984) explanation of class management in terms of mixed-ability teaching, questioning and explaining, which require skills, intelligence and sensitivity from the teacher. Brunner (1966), therefore, postulates that the best mind in any particular discipline must be put to work on the task because only the use of our best minds in devising curricula will help students understand a subject better.

Classroom Management

Class management constitutes an effective climate for learning. Issues surrounding classroom management is seen as complex (Dooley & Wragg, 1984). The issue of class management goes beyond discipline and includes things like routine, rules, time and material use (Short *et al*, 1991). Whatever be the case, it is equally true that different teachers will have widely different degrees of success in reducing disruptive behaviour in the classroom. A teacher's action to free the classroom of disruptive behaviour and its

consequences (Kounin, 1984) enhances the success of learning and achievement.

Class management is explained by Crocker (1991) in terms of emotional and boundary controls. By emotional control, the author explains that it is seen with teachers who are outgoing, supportive, use 'praise' effusively and attend to the emotional needs of their students. The author finds this effective during teaching because the class is effectively neutral which produces high achievers. Thus achievement is high in an affectively neutral class. Looking at this in a positive way, the negative sides must also be considered. The author suggests that the type of class of the students must be considered whether the emotional or boundary control kind of environment will be effective. For instance, praise can be effective depending on the kind of classroom. For example, praise can be used among low socio-economic status (the "have-not") students and students who show a high degree of dependency.

Nevertheless, harshness critically affects the learning environment negatively. On the other hand, boundary control involves setting limitations on movement, talk, task choice, time allocation and similar features in the classroom. There are two types of boundary control. They are the 'open classroom' (talk and task choice) and 'close classroom' (teacher-controlled task, time, and movement). In many ways boundary control may be seen as the essence of class management. This may be effective with maximized achievement when a classroom is characterized by a high degree of teacher-controlled task, time, and movement. Nevertheless, an open classroom may be

more appropriate to achieve effective goals while a closed classroom is better for cognitive outcomes (Short et al, 1991).

Human Resource

Development aims at ensuring improvement in quality teaching and learning and as well as improving access to quality basic education facilities. As alluded to by Addae-Mensah (2000), educational achievements are normally attributed to ability, aspiration, and opportunities which are interrelated. Linking this with the general stratification theory in social and educational psychology, which says that: in any given complex society, persons of similar backgrounds, position or socio-economic status, tend to interact with one another thereby encouraging status-related variations in lifestyle, values and cognitive patterns. These variations also result in status-related difference both in opportunities to compete for success and also in the development of linguistic and academic skills, and even in the capacities to recognise and desire those opportunities that are offered (p.2).

Addae-Mensah (2000), explains that opportunity without ability is useless while aspiration can be nurtured where opportunity exists. He adds that adequate ability is innate and can be fully exploited only where equal opportunities exist in a given society. The author has observed that a country's economic development is based on several factors including availability of natural resources, with the greatest being the quality of manpower. In the school situation, manpower development heavily depends on getting the right type of subject teacher for the full duration of a course or programme. A country's manpower is not limited to only a small minority of its population. It is, therefore, pertinent for the country to create conditions that will enable all

its citizens to develop to the highest potentials. Creating this enabling environment lies with both the individual and the society as a whole.

Learning as a whole emphasises the interaction of other factors like the socio-economic and cultural environment and is not a matter of individual differences or individual determination but rather, one's ability to learn is determined by self-image acquired through social interaction. However, to explain disparities in teaching and learning, it is important to study the availability, quality and equity in the allocation of socio-economic factors in the society. Hayford (1998), substantiated by stating 'the public's interest in improving the qualitative outcome of Ghanaian educational system has never been greater. The public debate continues as to how best to achieve this goal in sections of the community'.

In explaining academic performance and disparities in teaching and learning, eyebrows should be raised on quality of education, commitment, passion and the professionalism with which teachers execute their duties. The very essential ingredient in the educational enterprise from the human resource perspective is the professional teacher, the head, assistant heads and the supervisors, for they form the pivot on which formal education moves. According to Boateng (2003), the success and failure of the curriculum depends on the teacher who is also seen as the kingpin of the educational situation. They can make or break educational programmes and deliver the objectives of any reforms. Therefore, qualified human resources like professional teachers, heads and supervisors on whom the effective utilization of other resources embodied in any educational framework lie are needed in

the Senior High Schools for effective teaching and learning and academic achievement of the students.

Leadership and Supervision

In educational institutions, an effective leader is a driving force for academic achievement. Helping people change themselves and their thinking is a difficult task. The leadership journey involves providing a respectful, supportive environment in which all members of the school community can strive for.

Students' Entry Grade

Students' Entry Grade cannot be downplayed. Okumbe (1998) notes the magnitude of grades in the admission of students to the next educational level that the students selected to the next level of the educational ladder are the raw materials for the institution, with the students' entry grades serving as monitoring and accountability exercises for the school heads and teachers. Ohuche and Akeju (1988) also indicate that the entry grades are a sort of a motivational factor to students. Those who start with good grades in a course tend to strive hard under intrinsic motivation whiles low grade students strive to improve their performance under extrinsic motivation in the form of instrumental, achievement or social motivation. Farrant (1996) believes that inadequate general education of students to tackle a course leads to dropping out. The implication is that the quality of entry grades has an effect on academic performance in school. Entry grades are therefore vital in students' achievement and also regarded as the foundation on which further education is built.

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Leadership/Supervision

In educational institutions, an effective leader is a driving force for academic achievement. Helping people change themselves and their thinking is a difficult task. The leadership journey involves providing a respectful, supportive environment in which all members of the school community can strive for continual improvement. Neagley and Evans (1970) were of the view that effective supervision of instruction can improve the quality of teaching and learning in the classroom. While Mankoe (2002) explains leadership as the ability to influence individuals to work toward attaining organisational objectives, Geneen (1998) defines leadership as the ability to inspire others to work as a team. The leader is seen as a guide, conductor or commander of an

organisation and it is vested in a person who can lead and manage effectively. The organisational leader's objective is to influence others to do the work of the organisation where Influence means to alter the behaviour, attitudes, feelings and so on of another individual (Mankoe, 2002). To achieve academic excellence, the leader must have the school at heart because leadership is the very heart and soul of business management (Geneen, 1998, p. 3).

In the school system as an organisation, the head is the leader. Heads of schools have various roles and responsibilities to perform in the school in general. Since the school's job mostly involves performance, the head has to make sure activities are carried out in relation to the goals and objectives of the school. To ensure effective teaching and learning in schools, it demands that the head checks punctuality and regularity of attendance by both teachers and students. According to Mankoe (2002), the head and other instructional supervisors are responsible for supervising for quality by monitoring teaching and learning through visiting classes and interacting with students.

The head must also provide assistance in all manner of life to the classroom teacher, students and the community to strengthen and establish rapport between these stakeholders for improvement in instruction by teachers and learning by students. In this regard the Head as a leader has to motivate and stimulate the enthusiasm of his or her teachers for effective work and also exhibit strong leadership qualities. For this reason, effective and successful Heads have to be proactive, know why people behave the way they do, draw knowledge from psychology, sociology, managerial and supervisory roles, and know how they are viewed by colleagues, customers and anyone else with whom they work for effective leadership role.

Teacher Motivation and Teaching

Teaching as known by most researchers aims at providing a stimulating learning environment that will encourage students to trust their own opinions while fostering confidence to realize their full potential. According to Everard and Morris (1985), people are best motivated to work towards goals that they have been involved in setting and to which they therefore feel committed. The authors cite that some people have strong internal motivation - a sense of purpose or drive and others do not. People work to satisfy their needs, others work for power or fame, whiles others work to serve people and others work simply to earn money. Everard and Morris (1985) suggest that when teachers at all levels are involved in decision making, all the kinds of motivators are brought into play. Involvement should produce the commitment to goals on which a sense of achievement depends. Involving implies a sense of recognition and increase in the sense of responsibilities.

Ornstein (1995) and Mankoe (2002) agree with Maslow's hierarchy of needs as a means of motivation which emphasizes the fact that when one is capable of achieving their full human potentials, there is a healthy interaction within the society and these motives and needs evolve from within and produces self-actualization. Hence when teachers are relieved of the problem of shelter, food and clothing, there is a possibility of them giving out their best in teaching. Highly motivated people put maximum effort in their job. Several factors produce motivation and job satisfaction. Young (1988) examined the job satisfaction of Californian public-school teachers in the USA and found that one of the overall job predictors was the salary one earned from it.

Studies by Lockheed et al. (1991) indicated that lack of motivation and professional commitment produce poor attendance and unprofessional attitudes towards students which in turn affect the performance of students academically.

The perception of an effective teacher could also be extended to that of a teacher who 'loves' his students and his subject field. 'Love' in this context means developing a personal interest in what one does. It is therefore necessary for teachers to be intrinsically motivated to be in the teaching profession. Supporting this, Hayford (1998) observes that central to the work of effective teachers who produce excellent performance of pupils in schools in Ghana is the availability of generous resources and facilities. Such qualitative pupil performances are also partly due to responsibilities on the part of teachers who have developed a special relationship with their pupils and interest in their subject. This means that commitment to work is a necessary condition for teachers to perform well in their chosen careers. Since teachers play a vital role in a meaningful educational enterprise, the issue of job satisfaction for teachers must be a priority consideration when determining the factors that contribute to performance.

Students' Motivation and Learning

It has been noted that effective learning in the classroom depends on the teacher's ability to maintain the interest that brought students to the course in the first place. Whatever level of motivation students bring to the classroom will be transformed, for better or worse, by what happens in that classroom. Unfortunately, there is no single magical formula for motivating students (Kochhar, 2004). He further explains motivation as what directs the energy of

an alert group into constructive channels and keeping it there. It means inculcating and stimulating interest in a particular topic at the moment. The author suggests that it is necessary for a teacher to understand and use the natural urges of the child to assist him in acquiring new and desirable motives (Kochhar, 2004) because student motivation is essential for school performance.

Motivation helps students to accomplish academic goals by generating interest and effort in academic work, perseverance in doing class work or homework, completion of difficult tasks, self-regulation, risk taking, and independent learning, among others. Though experienced teachers have an array of instructional methods and materials to motivate and encourage students, they still would need to apply some stimulation or encouragement for some of their students (Ornstein, 1995). Ornstein explains his view by grouping students into two categories: students who take responsibility for their own learning, and students who easily get distracted. According to the author, students who take responsibility for their own learning could buckle down on their own immediately they get to the classroom lesson or homework assignment. Rather such students stay on tasks, do their assignments on time and deal with academic problems as they arise without boredom or confusion.

On the other hand, distractive students always skip difficult tasks, daydream or stare out windows during classes and lack total concentration in class. This makes them unable to stay focused and clarify their own lessons or assignments thus making their school work become increasingly difficult. Ornstein (1995) insists that it is necessary for teachers to find ways of making their students take responsibility for their own academic performance.

Students have been seen to learn best when incentives for learning in a classroom satisfy their own motives for enrolling in the course. McMillan and Forsyth (1991) have classified some of the needs students may bring to the classroom as the need to:

1. Learn something in order to complete a particular task or activity.

2. Seek new experiences.

3. Perfect skills.

4. Overcome challenges.

5. Become competent.

5. Succeed and do well and

6. Feel involved and to interact with other people.

Satisfying such needs is deemed rewarding and such rewards sustain learning more effectively than grades do. It is, therefore, advised by McMillan and Forsyth for teachers to design assignments, in-class activities, and discussion questions to address these kinds of needs. Ornstein (1995) views motivation as a broad concept which deals with attitudes, aspirations, interests and efforts. These affect behaviour and learning in schools and outside of school, in academic and non-academic domains, and in almost all phases of the human growth and development. The need to achieve and be good at something is a driving force for some people who see themselves as "heads" not "tails" and can therefore not afford to lose in anything they apply themselves to. This is why there are "overachievers" and "underachiever." Ornstein posits that motivation can push students of low ability to achieve academic success or good grades and students of high ability to achieve minimal success or low grades.

With respect to this study, the perception is that students in urban schools are well motivated to achieve good grades than those in rural schools, but it is also possible for students in rural settings to achieve better grades when exposed to the same opportunities. Based on the behaviourist theory of teaching (Curzon, 1995), effective learning can be achieved by positive reinforcement as a means of motivation for academic excellence. This is in contrast with the cognitive theory which indicates that the capacity for learning is fluid and develops as a result of maturation, previous learning and motivational processes. This makes it necessary for the teacher to consider the effect of motivation as well as cognition (Ornstein, 1995) in handling students in the classroom, laboratory or studio.

Access to Teaching-Learning Aids and their Effect on Performance

The availability and use of teaching and learning materials affect the effectiveness of a teacher's lessons. Nwandu (1994) defines instructional materials or resources as any form of information carriers that can be used to promote and facilitate teaching and learning process. They are materials that can be used in the course of learning to make lessons more meaningful and clearer to learners. According to Broom (1973), the creative use of a variety of media increases the probability that the student would learn more, retain better what they learn and improve their performance on the skills that they are expected to develop. Ausubel (1973) also stated that young children are capable of understanding abstract ideas if they are provided with sufficient materials and concrete experiences with the phenomenon that they are to understand.

Calhoun, Light and Keller (1994) contributing to factors that influence academic performance, stated that students usually perform better when they have books or study aids to foster their learning. These study aids or materials resources could be input like textbooks, laboratories and library facilities. For the purpose of this study material resources shall be discussed and TLMs and their importance. According to MOE (1994), material resources such as textbooks, stationery, furniture, equipment and recreational facilities are essential to effective education and also positively influence academic performance. As Adedeji and Owoeye (2002) indicate, availability of physical material resources is of importance to any educational endeavour. They point out that adequate school building, classroom furniture and other instructional facilities are imperative for the attainment of any educational objectives. As Sekyere (2002) posits, teaching materials are the items the teacher uses to make lessons interesting and for students to easily understand lessons and should therefore be provided in the right quantities for effective teaching and learning. Instructional resources are very important in teaching for the following reasons:

1. They are used to secure attention and make learners ready to learn.

2. Make learning pleasant and an enjoyable exercise.

3. Aids students to assimilate or use things being taught.

4. They add zest, interest and vitality to the learners training so they learn fast.

5. Stimulate a high degree of interest in students.

6. They provide teachers and learners the opportunity of developing the ability to imagine to improvise and to relate things observed to reality.

7. They help elicit group interaction which results in healthy group interactions as well as the growth and development of knowledge, skills, and positive attitude in the learners.

8. Instructional materials help teachers minimise time, and

9. They help restore confidence to the teacher (Nwandu, 1994).

The resource situation in an educational institution is a major determinant of secondary school performance (Adedeji & Owoeye, 2002). Reporting on the extent to which the quantity and quality of educational resource contribute to academic performance in the Edo State of Nigeria between 1989 and 1994, Fabunmi and Adewale (2002) established that allocation inefficiency of teaching and learning aids (visuals, audio-visuals, print and electronic, and art studio) accounts for differences in performance. Teachers are also effective in their teaching with the use of modern resources like computers, television and access to the internet.

In Ghana, only a few schools have access to conventional teaching and learning resources while many teachers and students have no access and the training to handle sophisticated information communication gadgets. Instructional materials do not achieve any value on their own. The teacher must make good use of them to achieve results. Onwuka (cited in Nwandu, 1994) believes one of the reasons why available instructional materials are not used by teachers in schools is they lack the necessary skills to operate them. The teacher should ensure he knows how to operate tools, understand how thy work and check that all parts are working thoroughly before using them. This will help minimise errors and accidents. Anyakoha (1992) indicated that it is necessary that teachers organize the use of instructional facilities or resources

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in such a way that the learner is given equal opportunity to profit from the experiences being provided.

Although attractive facilities such as laboratories, libraries and instructional materials are a major contributing factor to high academic achievement in the school system, audio-visual resources and textbooks in the library seem to have little impact on students" academic achievement when students" background as a variable is taken into account (Adedeji & Owoeye, 2002). The United States Department of Health and Welfare (as cited in Adedeji & Owoeye) also reports that teachers represent an indispensable human resource and indeed, the single most important element in the school system. In agreement, Hallak (cited in Adedeji & Owoeye, 2002) and Kocchar (2004) emphasise that the quality of an educational system depends on the quality of teachers and that the best array of instructional media is of little avail if the teacher is "ignorant, unskilled, or indifferent."

This corroborates Adedeji and Owoeye's (2002) finding that the quantity of physical or material resources allocated to a school has no significant relationship with the academic performance of students in vocational education if the human resource is not equipped to use them. It also implies that before a student can perform well in higher education, they must have had the preparation from the elementary stages where teachers are seen as more important than equipment and materials to serve as a stepping stone for education at a higher level. This is why Squire (2002) opines that it is not enough to have the necessary resources organised in a manageable framework without a proper delivery channel.

The literature attests to academic performance being influenced by factors that include entry grades, grading of school, human resource capacity, and teacher competency, among others. A school must be effective to achieve high teaching and learning performance and goals. This demands strong parent-teacher collaboration, involvement of parents in promoting student learning and achievement, attractive and orderly environments which encourage self-control, and a clear focus on teaching and learning activities.

Ankomah and Amoako-Essien (2002) indicated that the quality of education does not lie in the quality of ideas, programmes and high qualifications but on the availability of professionally qualified teachers and their readiness to offer quality teaching, effective school leadership and management for raising student achievement. The biggest challenge to improving high schools include poor attendance, low teacher morale, inability to attract and retain strong principals, lack of teachers to teach materials outlined in the curriculum and covered in examinations.

If teachers are to alter the familiar teaching styles and adopt creative instructional strategies, they need to recognise differences in social and emotional skills such as relationship building, self-awareness, self-management and responsible decision making to prevent problem behaviour and promote academic success. To promote positive discipline, schools need to be clear about expectations, state them visibly, train students to meet these and recognise students when they do that. Teachers and parents must therefore collaborate to ensure positive school-wide culture to enable high academic achievement for their students.

Environmental Influence on Performance

The urge to do something lies in us. As much as we have the urge to do something, the environment also has an influence on our urges. Circumstances of the environment may prevent the growth of these urges into positive action or cause their power to be bad in the end. It is the duty of teachers to encourage and utilise this powerful force that lies within children and channel them so that their influence is directed towards positive outcomes rather than destructive ends as this improves not only character but aids learning (Farrant, 1996). According to Farrant (1996), the environment acts like the blacksmith's forge to temper and alter our natural characteristics according to the treatment given. The explanation is that the environment moulds and alters us, sometimes making us more like one another and at other times it exaggerates our differences.

In the art studio for instance, learning is affected by a variety of influences that include the environment and human as well as social, physical and cultural factors. According to James (1996), the art studio can be conceived of as a complex socio-cultural system where such factors as personalities, values, the physical environment, instructional methods and social relations critically determine what is communicated and how the message communicated is interpreted by students. Besides the influence of these multiple factors on the teaching and learning of art, James (1996), indicates that classroom activities are also shaped by a combination of technical and conceptual demands of the various forms of art and media presented.

Other dynamics that contribute in shaping teaching and learning in the art classroom include the cognitive, affective and social aspects of the artistic process. Not only are the environmental factors relevant in the teaching and learning of art but other intangible factors like the learners' cognitive state also plays an equally important role in the teaching and learning of art. Hence James asserts that in determining the effectiveness of the teaching and learning of art in the classroom, both tangible (physical environment) and intangible factors (cognitive and affective state) should be considered.

Interaction of Tangible and Intangible Factors

Combinations of internal and external factors which reinforce each other are at play in the classroom and their interactions determine the outcome of the teaching-learning process. According to James (1996), personal and internalized factors such as the individual's cognitive (reasoning) and affective (feelings or values) states, as well as the larger socio-cultural system (such as the orientation of the art department), and the art world at large interact to shape the teaching and learning of art. For James, all these elements contribute to learning of art and as students learn to make art, they cognitively, affectively, and physically engage with the methods, tools, aesthetic concepts as well as other people.

This systemic view of the influence of the external factors in shaping the learning of art is also shared by Amabile (1983), who agrees with James (1996), that a combination of tangible and intangible social and environmental factors, task motivation, creativity-relevant skills and domain-relevant skills are crucial aspects of the creative art process. For D'Andrade (1984), the significance of the external milieu of teaching and learning of art is such that

cultural meaning systems give a myriad of constraints and possibilities for learning of art. These cultural meaning systems, as D'Andrade explains, spell out actions and social norms, evoke feelings, represent knowledge and give the learners the impetus to construct new understanding of the world. Given the differences in the socio-cultural milieu, students of art do not come out as a uniform product as far as knowledge and orientation of art is concerned.

The varied nature of the environment ensures that students do not become the same. According to James (1996), rather than a fixed progression of learning and similar outcomes, students learn in different ways and produce varied outcomes by constructing models of reality themselves which serve to assist them in making meaning of their experience. However, instead of conceiving of students in the same art class as coming out with similar orientation after training, the subjective socio-cultural milieu that, students are exposed to, influences and shapes their personalized construction of models. Thus, although a group of students may undergo similar training by the same instructors, we should not expect all of them to have the same orientation.

Systems change within schools and classroom settings continues to be as low and evolving process as a result of the emphasis on enriching the lifestyles of individuals and promoting opportunities for choice and social inclusion within educational and community settings. According to Wheeler and Richey (2005), this explains the reluctance to change and how schools view and respond to challenging behaviour. The authors assert that learning and educational environments can positively impact on student behaviour, and learning from both the individual and group perspective. A learning environment should, therefore, be designed to be safe and supportive for both

learner and teacher and in the view of Bull and Solity (1987), stakeholders in the educational enterprise should understand what motivates teachers and students to produce a meaningful change in school settings and individuals to accept their environments.

According to Wheeler and Richey (2005), the most noticeable areas of school environment that embrace a philosophy of positive behaviour, interventions and supports are school culture and climate. They explain that schools with effective culture and climate have the best interest of every child as their primary goal and place emphasis on prevention of problem behaviour. They also put school-based teams in place to promote positive results and design proactive interventions to enhance learning and quality-of-life outcomes for all. Wheeler and Richey (2005), also state that a school environment which emphasizes team-based approaches to problem solving, active and committed administrations, district, school-wide, non-classroom, classroom, learner, family, and community encourages and produces meaningful change within the school settings and thereby enhance the performance of students.

The authors further indicate that effective learning environments are characterised by certain qualities. These are defined and shared behaviour expectations among administrators, teachers, families and students; expectations are also published and visually apparent within all areas of the schools, thus students are aware and informed of expectations and subsequently, these expectations are taught to students, with the expected skills modelled and reinforced by teachers and administrators on a daily basis. In such environments, appropriate behaviours are exhibited and celebrated by

teachers within the classroom and at school-wide assemblies and functions to encourage others to emulate them. Schools that promote this type of learning environment, successfully and typically reflects a pattern of interaction between adults and students that generates more positive feedback than negative. This type of environment serves as a model for school improvement (Wheeler & Richey, 2005).

Wheeler and Richey recommend two major strategies to manipulate the environment to increase the probability of success and to minimize the likelihood of failure. The strategies include individualized activity scheduling and removing of predictors of failure, and activity scheduling which provides students with enhanced structure. Mesibov, Browder and Kirkland (2002), affirm that activity scheduling has been found successful in preventing the occurrence of challenging behaviour, facilitating successful transition between activities and fostering increased levels of independence in learners. Furthermore, Mesibov et al. *(2002)*, explain that activity schedule serves multiple needs like assisting students during transition, fostering independent performance of tasks and activities by learners, teaching students to follow a prescribed schedule within the school environment, and structuring leisure time. Schedules should however, be matched with literacy level such that schedules for urban schools ought to be different from rural schools which are less endowed.

Jolivette, Scott and Nelson (2000) state that the level of distractibility within the classroom, the density of class size and social interaction with specific students or staff are factors which serve as a potential barrier to performance. This is supported by Hallak (as cited in Adedeji & Owoeye,

2002) that crowded classrooms and surroundings devoid of aesthetics can contribute to poor academic attainment. To Bull and Solity (1987), it is vital to set up situations from the onset so as to help students respond to appropriate behaviour. The whole idea is to be less familiar with behaviours which are not strictly educational especially when dealing with social behaviour where it is necessary to teach students how to interact with teachers and fellow students. The authors indicate that it is usual to use student behaviour as the starting point to concentrate on ways to respond in order to encourage and correct what they do.

The literature cited shows that a teacher's expectations have a powerful effect on a student's performance. If teachers act as though they expect their students to be motivated, hardworking, and interested in the course, they are more likely to be so. Teachers should, therefore, set realistic expectations for students when giving assignments, giving presentations, conducting discussions, and grading examinations. "Realistic" in this context means setting high standards to motivate students to do their best work but not so high that students will inevitably be frustrated in trying to meet those expectations.

Class size has been also identified as a determinant of academic performance. Studies have indicated that schools with smaller class sizes perform better academically than schools with larger class size. Kraft (1994), in his study of ideal class size and its effects on effective teaching and learning in Ghana concluded that class sizes above forty have negative effects on students' achievement. Aseidu-Akrofi (1978), indicated that since children have differences in motivation, interests and abilities and that since health,

personal and social adjustment and creativity generally, good teaching is best done in classes with smaller number that allow for individual attention. Butler (1987), has also found homework to be a correlate of academic performance. He stated that homework bore a positive relationship with learning outcomes when it is relevant to learning objectives, assigned regularly in reasonable amounts, well explained, motivated and collected and reviewed during class time and used as occasion for feedback to students.

Chapter Summary

The literature review was underpinned by the following theories and models; Behaviourism, Cognitive Theory, Schema Theory, Connectionist Theory, Social Learning or Behaviour Modeling, Andragogy and Self-Directed Learning in an attempt to examine the determinants of students' academic performance. Adept conclusions can be made from the literature as well as the theoretical and empirical studies on the effect of teaching and learning materials, students' characteristics and teachers factors on academic performance of students. A critical look at the studies reveals that there has been considerable attention given to determinants of students' performance.

Another interesting point that should be noted is the fact that even though the studies reviewed here were conducted using different research methods or varied samples in terms of demographics, size and type of organizations, or even locations, similar results about the effects of the teacher factor and students' characteristics on academic performance. In addition, the literature highly suggests that Time/Period Allocation, teacher Competency, classroom management, leadership and supervision, students' entry grade and teacher motivation determine students' academic performance. The literature

attests to academic performance being influenced by factors that include entry grades, grading of school, human resource capacity, and teacher competency, among others. It was also revealed that Combinations of internal and external factors which reinforce each other are at play in the classroom and their interactions determine the outcome of the teaching-learning process.

Results from several studies and literature reviewed have suggested that the quantity of physical or material resources allocated to a school has no significant relationship with the academic performance of students. Although attractive facilities such as laboratories, libraries and instructional materials are a major contributing factor to high academic achievement in the school system, audio-visual resources and textbooks in the library seem to have little impact on students.

CHAPTER THREE

RESEARCH METHODS

Overview

This chapter spells out the research design, it describes the procedures by which data required for this study were gathered and analysed. It presents the research method chosen for this study and justifies its fitness for the objectives of this study. It also involves a discussion and comparison of the strengths, weakness, similarities and differences between the method chosen for this study and others, this helps to ensure consistency with accepted academic practices (Tabachnick & Fidell, 2007). This chapter covers approaches to; Research Design, Population, Sample and Sample Technique, Research Instruments, Validity and Reliability, Pilot-Testing of Instrument, Data Collection Procedure and Data Analysis.

Research Design

A research design expresses the mutual efforts of the major parts of the research project in the solution of research question. Creswell (2008), indicates that in conducting a research, the researcher needs to think about the philosophical worldviews, the strategy of enquiry related to the worldviews and the methods and procedures of the research. The study was based on the descriptive survey design. This survey design allows for the gathering of opinions, beliefs, or perceptions about a current issue from a large group of people (Lodico, Spaulding & Voegtle, 2006). The main thrust of survey design was to collect appropriate data which work as a base for getting results and drawing conclusion. In descriptive surveys, the events or conditions either

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exist or have occurred and the researcher merely selects the relevant variables for the analysis of the relationships and reports the way things are. As opined by Fox and Bayat (2007), descriptive research is "aimed at casting light on current issues or problems through a process of data collection that enables them to describe the situation more completely than was possible without employing this method". The research design was therefore suitable for the study because data was collected through questionnaire, to describe the variables under study; TLMs, teacher factors, students' characteristics and students' performance.

Frankel and Wallen (2000) indicated that there are some difficulties involved in the use of survey design. Which include, ensuring that the questions to be answered are clear and not misleading; getting respondent to answer questions thoughtfully and honestly and getting a sufficient number of the questionnaires completed and returned so that meaningful analysis can be made. Notwithstanding these demerits, the descriptive survey helps to observe, describe and document situations as they naturally occur. For these reasons, the descriptive survey design is considered appropriate for this study.

Population

Porter (1999) in developing a population definition model for descriptive and phenomenological study pointed out that, for descriptive, phenomenological studies, relatively few participants are needed. For these studies, the intent is to describe the participants' experience rather than to generalize from their experience to that of the whole population. Because the research goal is to describe the common features of an experience, it is important that participants share certain demographic characteristics, which

represent inclusion criteria for the sample. It cannot be assumed that enough participants can be readily recruited from the general population.

As such the population of this study comprised a general population, a target population and an accessible population. The nature of this study allows for the selection of an accessible population that meets a common demographic feature (Home Economics students, and a core subjects tutors). Chaudhury (2010) defined the general population as "… an entire group about which some information is required to be ascertained". Participants in the general population must share at least a single attribute of interest. The general population of this study is: Students =780, made up of all students in the School. Teachers= 72, comprising all teachers in the school. Creswell (2003) pointed out that, the part of the general population left after its refinement is termed target population, which is defined as the group of individuals or participants with the specific attributes of interest and relevance. The target population is more refined as compared to the general population on the basis of containing no attribute that controverts a research assumption, context or goal. The target population for this study was 290 comprising 260 Home Economics Students and 30 teachers of Aburaman Senior High School.

On a further note, the accessible population is reached after taking out all individuals of the target population who will or may not participate or who cannot be accessed at the study period (Bartlett, Kortlik & Higgins., 2001). It is the final group of participants from which data is collected by surveying either all its members or a sample drawn from it. It represents the sampling frame (Bartlett et al., 2001), if the intention is to draw a sample from it. The accessible population for this study was of 180 Form Two and Three Home

Economics students and 20 teachers (core subject teachers and heads of departments). The researcher regarded the identified population as the relevant group about whom generalisations can be drawn (Arkava & Lane, 1983).

Sampling Procedures

The sample of this study was the accessible population consisting of Home Economics Students from Aburaman senior high school, Core Subjects tutors, Home Economics tutors and the Headmistress. A sample is an element of the population considered for actual inclusion in the study or a subset of measurements drawn from a population that a researcher is interested in. A sample can also be defined as a small portion of the total set of objects, events or persons, which together comprise the subject of our study (Seaberg, 1988). The specific criteria for the accessible population of both students and teachers were:

1. The student must be a home economics student.

2. The student must a second or third year home economics student, for first year have not covered enough core subjects.

3. The teacher must be teaching students a core subject.

4. Heads of the various departments (all three core subjects, and home economics)

5. Headmistress of the school.

Based on this the sample (accessible population) of this study, participants that met the criteria was; 180 students, 15 core subject tutors (5 from each department), 4 departmental heads (Mathematics, English language, Science and Home economics) and the Headmistress. Therefore, the study had a sample size of 200 participants.

It is also possible to reach accurate conclusions by examining a portion of the total group. The definition of sampling is a technical accounting device to rationalise the collection of data, to choose in an appropriate manner the restricted set of persons, objects and events from which the actual information would be drawn. The researcher employed a non-probability sampling technique, particularly the purposive sampling method, to choose in an appropriate manner, the restricted set of participants (Bless & Higson-Smith, 2000).

The researcher used purposive sampling method in selecting the students, tutors and the headmistress in Aburaman Senior High School. The students included in the sample served as the participants of the research. Each student included in the sample was evaluated and profiled by the researcher according to the indicators of the performance through cross checking procedures based on their responses. Foods and Nutrition tutors, core subjects' tutors and headmistress from the school were given questionnaires to answer. Home economics students' academic results from first year to present were used.

Research Instruments

Data collection instruments are the tools that the researcher used to collect data. The instrument that was used in the study was the questionnaire. Questionnaires are written questions which are administered to the respondents by mail or hand to them personally by the researcher in their homes, at school or any other place and they are returned to the researcher after completion. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from

respondents. Although they are often designed for statistical analysis of the responses, this is not always the case (Wikipedia, the free encyclopaedia). A questionnaire has more advantage over interview because it is less expensive. Thy produce quick results and great assurance of anonymity.

Leedy (1985) and Amedahe (2005) typified that the questionnaire is widely used for collection of data in educational research since if developed to answer research questions; it is very effective for securing factual information about practices, enquiring into opinions and attitudes of the subject. The questions are dichotomous type, multiple-choice and the Likert type of scales. The closed type questions were used because it has added advantage over the open-ended type of questions (Leedy, 1985; Amedahe, 2000). Two questionnaires were developed for students, headmistress and teachers base on the research questions, which were derived from the related literature. The questionnaire was in four parts. Section A for biographic or demographic data of respondents (i.e., gender, age, educational qualification, and subject). Section B, C, and D were on TLMs, teacher factors and students' characteristics respectively.

Questionnaires for the teachers and students were used to cross check responses from the questionnaire responded to by the headmistress. Data was collected based on questionnaires under the following headings: personal data of tutors, students and the headmistress; teacher and students' accessibility of TLMs, release of TLMs to students and teachers and duration of use and return of TLMs; teacher factors and student characteristics. The questionnaire for the headmistress and teachers were asked for their personal information and history of their stay in the school. It also contains likert type scales meant

to measure the teachers, students and headmistress opinion regarding the performance of Home Economics students in the core subjects and availability, accessibility, usefulness and management of TLMs in the school.

Validity and Reliability

Validity, according to Fraenkel and Wallen (2000), revolves around the defensibility of the inferences researchers make from data collection through the use of the instruments. Content validity was used. The validity of the instruments used was done by the supervisors of this study. In addition, other experts in this field including the District Director of Education were given copies for their perusal. This resulted in several changes in the forms of re-constructions and in some instances, complete deletions of some items.

To establish the reliability level of the questionnaire, 20 Home Economics students and 5 teachers of Assin Manso Senior High School were selected and administered copies of the questionnaire. This school was chosen because it has similar characteristics as those involved in the main study. The Cronbach's Alpha reliability test was conducted and measured against the acceptable range of .600 or above as stated by Cohen (cited in Leech, Barrett & Morgan, 2005). Using the SPSS, the reliability coefficients were computed for both the students' and teachers' questionnaires. The test produced coefficients of .901 and .814 for the students; and teachers; questionnaires, respectively; indicating that the instruments had adequate internal consistencies and could yield reliable findings.

Pilot-Testing of Instrument

The purpose of a pilot-testing is to ensure the level of validity and reliability of the data collection instrument. One of the advantages of conducting a

pilot-testing is that it might give advance warning about where the main research project could fail, where research protocols may not be followed or whether proposed methods or instrument are inappropriate or too complicated. The researcher implemented random sampling method in selecting the students. The questionnaire was personally administered to five tutors and twenty students of Assin Manso Senior High School. The researcher explained each question to them and made sure they understood the question before allowing them to answer. The researcher collected the entire questionnaire after the tutors and students have finished answering.

Data Collection Procedure

The researcher personally administered the questionnaire in Aburaman Senior High School to Home Economics Students, Core Subjects Tutors, Home Economics Tutors and the Headmistress. The researcher obtained an introductory letter from the Head of Department of Vocational and Technical education. This introductory letter helped the researcher to get the needed assistance and co-operation from the school authorities. The researcher explained the purpose of the study, assured anonymity and confidentiality of the respondents and encourage participation. This enabled the researcher to establish the needed rapport with the prospective respondents and as well sought their cooperation.

After that, copies of the questionnaire were distributed to the respondents and the instruction to the questionnaire and the items were carefully explained to them. There was question time, during which respondents were allowed to ask question pertaining to the completion of the items in the questionnaires. Respondents were given some time to respond to

the instruments and hand them over to the Head of Department of Home Economics after which the researcher went for the completed questionnaires. Tutors, heads of department and the head of the school were also given questionnaires to answer.

Data Processing and Analysis

The data were analysed according to the research questions. Data collected were cleaned, coded and entered into the computer processed using the Statistical Product and Service Solutions (SPSS) version 20.0 and the Microsoft Excel (2010). Data were analysed using both descriptive and inferential statistical tools like frequencies, percentages and mean. Tables and graphs were used to presents the respondents' responses in order to address the various research questions.

Specifically, Research Question 1 was analysed by identifying the various student factors that were responsible for their abysmal performance in core subjects using frequencies and percentages. Similarly, frequencies and percentages were used to address Research Question 2, which sought to determine the teacher factor determinants which were causing students to perform poorly in these subjects. In addressing Research Question 3, the study employed the use of frequencies and percentages summarised in tables and diagrams. These were done to find out those TLM-related predictors of Home Economics students' poor performance in core subjects, while similarly statistical tools were used to answer the last research Question.

CHAPTER FOUR

RESULTS AND DISCUSSION

Overview

This chapter presents the results from the analysis performed on the data gathered from respondents and the discussion of same. The study examined the student characteristics, teacher and teaching and learning materials (TLMs) and the performance of Home Economics students in core subjects among Aburaman Senior High School students. Specifically, the study sought to address the following research questions:

1. What student characteristics are responsible for the performance of home economics students of Aburaman Senior High School in the core subjects?

2. What teacher factors contribute to the performance of home economics students of Aburaman Senior High School in the core subjects?

3. How does the use of teaching and learning materials (TLMs) in teaching contribute to the performance of home economics students of Aburaman Senior High School in the core subjects?

4. In what ways can the performance of home economics students of Aburaman Senior High School be improved upon in core subjects?

Out of a sample size of 200 made up of 180 students and 20 teachers, 195 including all 180 students and 15 teachers participated in the study. This means that the study attained an overall retrieval rate of 97.5%. Separately, the retrieval rates for the students and teachers were 100.0% and 75.0%, respectively. Descriptive statistical tools such as frequencies, percentages,

table and graphs were employed to analyse the data gathered in order to address the various research questions posed. The data is presented under two broad sections A and B. Section A caters for background characteristics of respondents while section B focuses on the four research questions posed for the study.

Demographic Characteristics of Respondents

The study requested respondents to indicate their background characteristics since these characteristics and attributes could influence their responses. These included gender and age of both the students and teachers. Table 3 presents the details.

Table 3: *Demographic Characteristics of Respondents*

	Students (n=180)		Teachers (n=15)		Total (N=195)	
Variables	Freq.	%	Freq.	%	Freq.	%
Gender						
Males	6	3.3	9	60.0	15	8.3
Females	174	96.7	6	40.0	180	91.7
Age (in years)						
15 – 16	45	25.0	-	-	45	23.1
17 – 18	93	51.7	-	-	93	47.7
19 – 20	42	23.3	-	-	42	21.5
21 – 25	-	-	3	20.0	3	1.5
26 – 35	-	-	6	40.0	6	3.1
36 – 45	-	-	4	26.7	4	2.1
46 – 55	-	-	2	13.3	2	1.0
Total	180	100	15	100	195	100

Source: Field Data, Biney (2013)

The results from Table 1 indicate that overwhelming majority of the students (96.7%) were females compared to only 6 (3.3%) males. This further

underscores the low patronage of home economics programmes by males at all levels of Ghana's education. Among the core subject teachers, 9 (60.0%) of them were males. Similarly, the modal age brackets were 17-18 and 26-35 years, respectively for the students and teachers.

Research Question 1: What student characteristics are responsible for the poor performance of Home Economics students of Aburaman Senior High School in the core subjects?   The aim of this research question was to identify those attributes of the students that were responsible for their poor performances in core subjects. The views of both the students and teachers were discussed in relation to their general rating in these subjects, frequency of studying compared with elective subjects, interest, and attendance of extra-classes among others. Tables and graphs were used to analyse the data gathered. The responses of the students on their performance are summarised in Table 4.

Table 4: *Students' Rating of their Performance in Core Subjects*

Rating	Frequency	Percentage
Excellent	3	1.7
Very Good	23	12.8
Good	29	16.1
Credit	71	39.4
Pass	45	25.0
Fail	9	5.0
Total	**180**	**100.0**

Source: Field Data, Biney (2013)

Table 4 revealed that only very few Home Economics students (3 representing 14.5%) had indicated that they were performing excellently in core subjects like Mathematics, English Language, Integrated Science and Social Studies. Twenty-three representing 12.8% and 29 (16.1%) of them rated their performance in these subjects as very good and good, respectively. Most students preformed averagely, while 9 (5.0%) reported of total failure in core subjects. These results further confirm the abysmal performance of home economics students in core subjects. The respondents (both students and teachers) were asked to indicate whether the students performed differently in core and elective subjects or not. Table 5 presents their views.

Table 5: *Respondents' Views on Differences Existing in students' performance in core and elective subjects*

	Students (n=180)		Teachers (n=15)		Total (N=195)	
Differences	Freq.	%	Freq.	%	Freq.	%
Yes	174	96.7	15	100.0	189	91.7
No	6	3.3	0	0.0	6	8.3
Total	**180**	**100.0**	**15**	**100.0**	**195**	**100.0**

Source: Field study, Biney (2013)

It can be seen from Table 5 that a majority of the respondents (91.7%) said that there was a vast difference in home economics students' performance in core and elective subjects. In fact, all the 15 teachers attested to this phenomenon, while as much as 174 (96.7%) of the students themselves revealed same. The confirmation from the students is an indication of how widespread this situation is in the school. This result also confirms the long-held views that Home Economics students usually perform better in their

elective subjects compared to the core subjects. On the interest levels of Home Economics students in core subjects. To further understand this, table 6 presents results on the frequency at which students' study core subjects.

Table 6: *Frequency at which Students Study Core Subjects*

Response	Frequency	Percentage
Very Often	30	16.7
Often	51	28.3
Quiet Often	78	43.3
Occasionally	21	11.7
Total	**180**	**100.0**

Source: Field Data, Biney (2013)

The results in table 6 indicate that a majority of the students (45.0%) really studied their core subjects on a regular basis, this is closely followed by 43.3% who read it quite often and only 11.7% read their core subjects occasionally. Table 7 presents results on organisation of extra-classes in core subjects.

Table 7: *Organisation of Extra-classes for Students in Core Subjects*

Extra-classes	Students (n=180)		Teachers (n=15)		Total (N=195)	
	Freq.	%	Freq.	%	Freq.	%
Yes	105	58.3	5	33.3	110	56.4
No	75	41.7	10	66.7	85	43.6
Total	**180**	**100.0**	**15**	**100.0**	**195**	**100.0**

Source: Field Data, Biney (2013)

On whether there were any special/extra classes being organised for Home Economics students, there was a conflicting response among the respondents. Thus, whilst 105 (58.3%) of the students claimed that there were such classes, 10 (66.7%) of the teachers stated otherwise. It stands to reason

that the students might have been arranging for their own classes off-campus during holidays and weekends. The teachers were also asked to indicate whether they had any challenges in teaching Home Economics students core subjects. Table 8 is a summary of their responses. It was revealed that all the 15 core subject teachers reported of their difficulties in teaching this category of students.

Table 8: *Teachers' Responses on Difficulties in Teaching Core Subjects*

Response	Frequency	Percentage
Yes	15	100.0
No	0	0.0
Total	**15**	**100.0**

Source: Field Data, Biney (2013)

Based on the results in Table 8, the specific reasons adduced by the teachers on the kind of difficulties that they had teaching Home Economics students core subjects are contained in Table 9.

Table 9: *Difficulties Core Subject Teachers Encounter in Teaching Home Economic Students*

Response	Frequency	Percentage
Lack of interest in core subjects	9	60.0
Difficulties in understanding basic concepts	6	40.0
Total	**15**	**100.0**

Source: Field study, Biney (2013)

Lack of interest on the part of the students in core subjects was identified by the teachers as their major concern. Sixty per cent of them reported this situation. Similarly, 6 (40.0%) of the teacher respondents said that the students usually had difficulties in understanding basic concepts

taught them. Ornstein (1995) asserted that motivation helps students to accomplish academic goals by generating interest and effort in academic work, perseverance in doing class work or homework, completion of difficult tasks, self-regulation, risk taking, and independent learning, among others. He said that though experienced teachers have an array of instructional methods and materials to motivate and encourage students, they still would need to apply some stimulation or encouragement for some of their students. The students were also asked about their difficulties and Table 10 presents the results.

Table 10: *Difficulties Students Encounter when Learning Core Subjects*

Difficulties	Frequency	Percentage
Understanding of topics	60	33.3
Lack of TLMs	42	23.3
Lack of interest	30	16.7
Teaching methods used	27	15.0
Inability to ask questions after lessons	21	11.7
Total	**180**	**100.0**

Source: Field Data, Biney (2013)

The students subsequently confirmed the views of their teachers by saying that their main concern about core subjects was their inability to understand and appreciate topics taught them. Here, as substantial as 33.3% pointed to this situation. Other key difficulties of the students included the lack of teaching and learning materials (23.3%), and lack of interest in such subjects (16.7%). They also revealed that they had problems with the teaching

methods adopted by core subject teachers as well as their inabilities to ask question in core subject classes.

The study further requested the teachers to indicate the possible causes of the poor performance of Home Economics students in core subjects. Their responses are summarised in Table 11. The results showed that main cause of the Home Economics students' poor performance in core subjects, according to the teachers, was their attitudes. Thus, they felt more comfortable with elective subjects than the core subjects. The implication is that these students do not pay much attention to core subjects as they do for elective subjects. Another reason cited was the comparatively larger number of Home Economics students in a class. This means usually resulted in inattention by teachers to special cases of individual students in core subjects.

Table 11: *Challenges Causing Poor Performance of Students in Core Subjects.*

Challenges	Frequency	Percentage
Most students feel more comfortable with the elective subjects than the core subjects	8	53.3
Large class sizes	5	33.4
Most students cannot read fluently	2	13.3
Total	**15**	**100.0**

Source: Field study, Biney (2013)

About 13% of the teachers also revealed that most students were unable to read fluently resulting in their inability to understand examination questions leading to their failures in core subjects. This could mean that these students were admitted with weak aggregates. According to Okumbe (1998),

students selected to the next level of the educational ladder are the raw materials for the institution, with the students "entry grades serving as monitoring and accountability exercises for the school heads and teachers." Similarly, Ohuche and Akeju (1988) indicated that the entry grades are a sort of a motivational factor to students. They revealed that those who start with good grades in a course tend to strive hard under intrinsic motivation whiles low grade students strive to improve their performance under extrinsic motivation in the form of instrumental, achievement or social motivation. Farrant (1996) also believed that entry grades are therefore vital in students' achievement and also regarded as the foundation on which further education is built. From the discussions, it can be deduced that the main student characteristics affecting their performance in core subjects were their lack of interest, inadequacy of time devoted to the study of core subjects, and difficulties in understanding concepts in core subjects.

Research Question 2: What teacher factors contribute to the poor performance of Home Economics students of Aburaman Senior High School in the core subjects?

This research question attempted to determine the factors contributing to Home Economics students' poor performance in core subjects due to the activities of their teachers. We examined their academic qualifications, duration of teaching experience, professional status, areas of specialisation, contact hours, teaching methods and the use of TLMs during core subject lessons. Figure shows the academic qualification of core subject teachers in Aburaman Senior High School.
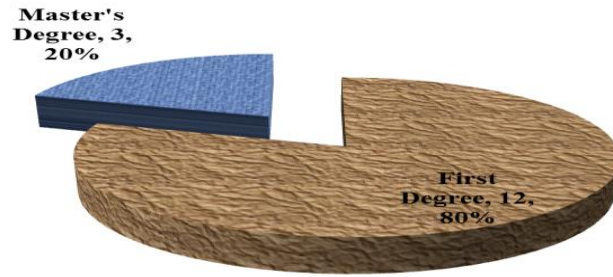
Figure 1: Qualifications of core subject teachers in the schoo*l*

Source: Field Data, Biney (2013)

The pie chart shows that majority of the core subject teachers in the school had first degree. Besides this, the remaining 20% of the teachers had master's degree. The profile of the teachers' qualifications appeared to be impressive because they seemed to be well-qualified per the requirements of the Ghana Education Service. In related development, Figure 3 has the details of the duration of teaching experience of the teachers.
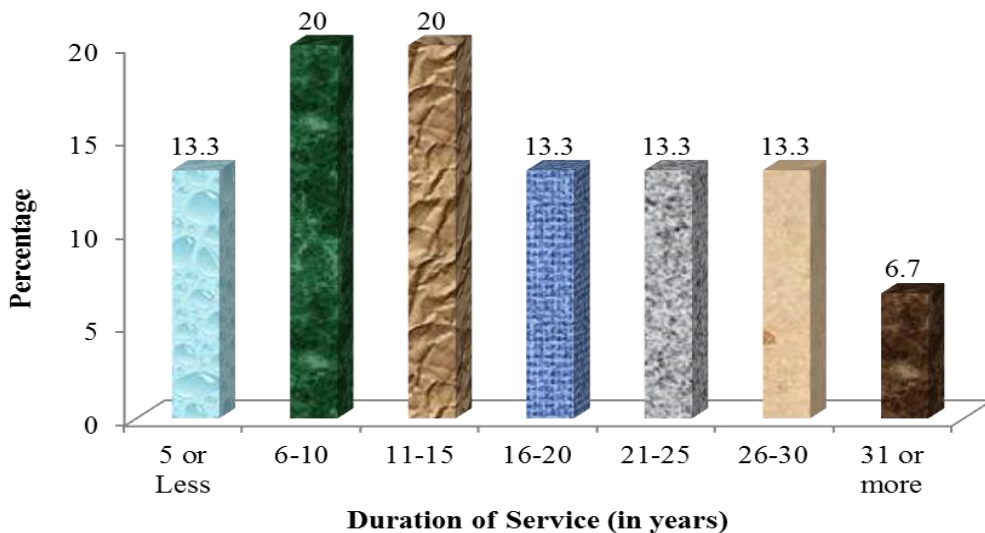
Figure 2: Duration of service of core subject teachers

Source: Field Data, Biney (2013)

Figure shows that majority of the teachers (66.6%) had more than a decade experience in teaching core subjects at the SHS level. Twenty per cent

of them had taught between 6-10 years, while the remaining 13.3% had had between 1-5 years working experience. Clearly, it can be seen that most teachers were very experienced in teaching and they might have developed more effective and friendly methods of teaching these subjects.
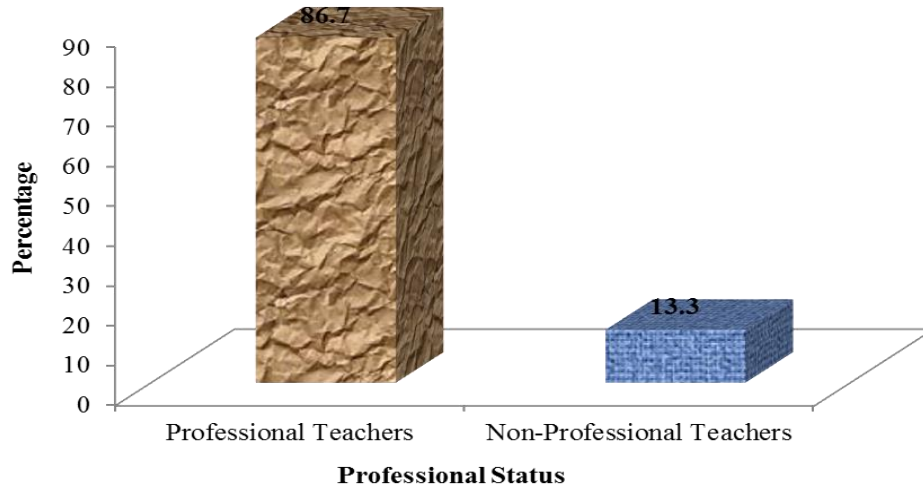
Figure 3: Professional qualification of core subject teachers.

Source: Field Data, Biney (2013)

As shown in Figure 4, a large majority of the teachers (86.7%) were professionally trained teachers, while the remaining of them were not. The large number of professional teachers handling these core subjects is an indication of their ability to use the right teaching methodologies, skills and pedagogies in their teaching activities for easy assimilation by students. The Ghana Education Service has in recent years has being encouraging non-professional teachers to obtain professional certificates in education.

This requirement is now made a critical component for appointment and promotion to positions such as headmastership, senior housemastership and others.

The teachers were asked to indicate their areas of specialisation since this has direct influence on their delivering abilities. Table 12 presents their responses.

Table 12: *Teachers' Specialisation in Core Subject being Taught*

Response	Frequency	Percentage
Yes	15	100.0
No	0	0.0
Total	15	100.0

Source: Field study, Biney (2013)

From Table 12, the results indicate that all the core subject teachers (100%) had their specialities in the respective subjects that were teaching. This means that they were trained in subjects like Mathematics, English Language, Integrated Science and Social Studies. This might not be same in some schools where teachers with inadequate knowledge in some subjects are 'forced' to teach them due to inadequacy of teachers. On the number of hours that teachers taught core subjects in a week, Table 13 presents their responses.

Table 13: *Contact Hours for Teaching Core Subjects Per Week.*

Response	Frequency	Percentage
16 – 20 hours	3	20.0
21 – 25 hours	8	53.3
26 – 30 hours	4	26.7
Total	15	100.0

Source: Field Data, Biney (2013)

More than half of the teachers (53.3%) said that they spent 21-25 hours in a week teaching their respective core subjects. Similarly, 4 (26.7%) of them used 26-30 hours, while the remaining (20.0%) said that they taught between 16-20 hours per week. On average, they spent 23.3 hours per week. On how frequently the teachers gave written exercises to Home Economics students, majority of them (73.3%) said "very frequently."

On the part of the teachers, only 87 (48.3%) said that their mathematics teachers gave them vey frequently, while remaining majority (51.7%) said "not frequently." Similarly, but shockingly, only 12 (6.7%) of the students said that their Integrated Science teachers gave them written assignments very frequently. With regard to English Language exercises, overwhelming majority (98.3%) said "very frequently." About 55% of the students also revealed that they were given Social Studies written exercises very frequently. It can be deduced that the English Language and Social Studies teachers were administering enough exercises to Home Economics students compared to Mathematics and Integrated Science teachers.

Table 14 contains teaching methods that the teachers employed in teaching Home Economic students core subjects in Aburaman Senior High School. Four main methods were identified. From the table, it can be seen that discussion and demonstration were the main teaching methods adopted by the teachers in teaching core subjects. Specifically, 7 (46.7%) and 4 (26.7%) reported of using the discussion and demonstration methods, respectively. In addition, some few of them said they used the problem posing and lecture teaching methods. All the teachers further claimed that they always varied these methods for their Home Economics students.

Table 14: *Teaching Methods Used by Core Subject Teachers*

Methods	Frequency	Percentage
Discussion	7	46.7
Demonstration	4	26.7
Problem posing	2	13.3
Lecture	2	13.3
Total	15	100.0

Source: Field Data, Biney (2013)

The student respondents were asked about their likeness for the various teaching methods used by their teachers. It was revealed that majority (61.7%) of them responded in the affirmative and 126 (70.0%) further confirmed the position of their teachers that they always varied their teaching methods.

The study also requested the students to indicate whether their teachers used TLMs in teaching core subjects. Figure 5 is a summary of their responses.
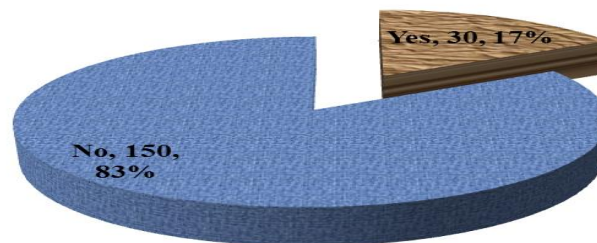
Figure 4: Students' views on teachers' use of TLMs in teaching core subjects

Source: Field study, Biney (2013)

In a rather shocking situation, a substantial proportion of the Home Economics students (83%) said their core subject teachers did not use teaching and learning materials during lessons. This could mean that the teaching of subjects such as Integrated Science and Mathematics, which demand practical demonstrations may be suffer. However, 162 (90.0%) of the student respondents claimed that they usually understood topics treated with them by their teachers. They also reported of no 'special' classes for them as Home Economics students, while a significant proportion of them also rejected the assertion of their teachers that they did not ask questions in class.

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Table 15 presents further information on students' understanding of topics treated with them using TLMs.

Table 15: *Students' Levels of Understanding of Topics when Teachers use TLMs*

Response	Frequency	Percentage
Excellent	39	21.7
Very Good	45	25.0
Good	12	6.7
Satisfactory	30	16.6
Poor	54	30.0
Total	180	100.0

Source: Field Data, Biney (2013)

Table 15 shows that 39 (21.7%) of the students said that they excellently understood topics when TLMs were used, while 57 (31.7%) indicated good and very good. Thirty representing 16.6% of them claimed that even when TLMs were used, they understood topics satisfactorily. A substantial proportion of them (30.0%) said that they assimilated topics poorly despite TLMs used by their core subject teachers.

From the discussions on the teacher-related factors, it can be seen that the qualifications, experience, and teaching methods of the teachers were not responsible for the poor performance of Home Economics students in core subjects in Aburaman Senior High School. However, the students claimed that the inability of their teachers to use TLMs and organise 'special' classes for them as the teacher-related causes for their poor performances in core subjects.

Research Question 3: How does the use of teaching and learning materials (TLMs) in teaching contribute to the poor performance of Home Economics students of Aburaman Senior High School in core subjects?

This research question sought to identify teaching and learning material (TLM)-related factors that caused the poor performance of Home Economics students in core subjects. The study examined the availability, adequacy and usage of TLMs, frequency of use, and the challenges encountered by both teachers and students in the absence of teaching and learning materials. Table 16 presents the responses of the teachers about the use of teaching and learning during core subject classes.

Table 16: *Teachers' Use of TLMs*

Response	Frequency	Percentage
Yes	10	66.7
No	5	33.3
Total	15	100.0

Source: Field study, Biney (2013)

About 67% of the teachers reported that they used teaching and learning materials. However, the remaining 5 (33%) of them said otherwise. These results tend to partly confirm the position of the students that their teachers did not use teaching and learning materials. The respondents were also asked about the state of teaching and learning materials (TLMs) for teaching core subjects in the school.

Table 17: *Respondents' Views about the State of TLMs*

	Teachers		Students		Total	
Response	Freq.	%	Freq.	%	Freq.	%
Availability						
Yes	6	40.0	153	66.7	159	81.5
No	9	60.0	27	33.3	36	18.5
Adequacy						
Yes	0	0.0	82	45.6	82	42.1
No	15	100.0	98	54.4	113	57.9
Total	15	100.0	180	100.0	195	100.0

Source: Field study, Biney (2013)

The respondents (81.5%) confirmed that teaching and learning materials were available in the school for teaching core subjects. Majority of these respondents (66.7%) were students as against only 6 (40.0%) teachers. With regard to the adequacy of the TLMs, all the 15 teachers said the materials were woefully inadequate. Among the students, more than half of them also reported of the inadequacy of teaching and learning materials for the teaching and learning of core subjects in the school. A significant number of the student respondents, 168 representing 93.3% said that they did not understand topics without TLMs. On the sources of TLMs, the teachers claimed they were generally the main suppliers of these materials. In absence of TLMs, the students said they could not do any practical works or sometimes teachers had to improvise. Some teachers, according to the students, asked them to do their own research or engaged in mere discussion.

Calhoun, Light and Keller (1994) contributing to factors that influence academic performance stated that students usually perform better when they have books or study aids to foster their learning. These study aids or materials resources could be inputs like textbooks, laboratories and library facilities. For the purpose of this study material resources and their importance shall be discussed. According to MOE (1994), material resources such as textbooks, stationery, furniture, equipment and recreational facilities are essential to effective education and also positively influence academic performance. As noted by Adedeji and Owoeye (2002), availability of physical material resources is of importance to any educational endeavour.
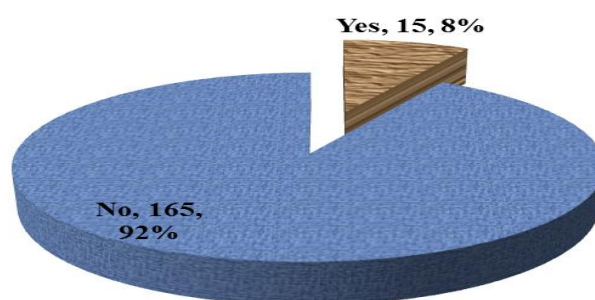
Figure 5: Adequacy of textbook for core subjects

Source: Field Data, Biney (2013)

Specifically, about the adequacy of core subject textbooks, 165 (92%) of the students said that these textbooks were not adequate at all. However, the remaining few (15) said they were adequate. In a follow-up question, the students were asked about the frequency of use of TLMs by the core subject teachers. Table 18 contains the details of their responses. It appears that the use of teaching and learning materials during core subjects in the school had been very rare. This is because as much as 65% of the students

said their teachers did not use TLMs at all. On whether the teachers varied the use of TLMs, majority of the students (86.7%) responded in the negative, while 100% of the teachers responded in the affirmative.

Table 18: *Students' Views on Frequency of TLMs use among Teachers*

Response	Frequency	Percentage
Quite often	12	6.7
Occasionally	51	28.3
No at all	117	65.0
Total	180	100.0

Source: Field study, Biney (2013)

The study also asked the teachers to indicate the problems that they encountered teaching when there were no teaching and learning materials available. Table 19 is a summary of their responses.

Table 19: *Problems Encountered by Teachers in Absence of TLMs*

Problems	Frequency	Percentage
Difficulties in understanding lessons	7	46.7
Difficulties in explanation abstract concepts	4	26.7
Lack of student participation	2	13.3
Bored classes	2	13.3
Total	15	100.0

Source: Field study, Biney (2013)

From Table 19, it can be seen that the main challenges of the teachers in absence of TLMs were students' difficulties in understanding lessons (46.7%) and teachers' difficulties in explaining abstract concepts to students (26.7%). Similarly, the teachers also reported of the lack of students'

participation and bored classes as other challenges that they encountered in absence if teaching and learning materials.

This finding is consistent with Nwandu's (1994) point that Instructional resources are very important in teaching for they are used to secure attention and make learners ready to learn, make learning pleasant and an enjoyable exercise, aid students to assimilate or use things being taught, they add zest, interest and vitality to the learners training so they learn fast, stimulate a high degree of interest in students, provide teachers and learners the opportunity of developing the ability to imagine to improvise and to relate things observed to reality, help elicit group interaction which results in healthy group interactions as well as the growth and development of knowledge, skills, and positive attitude in the learners, instructional materials help teachers minimise time, and help restore confidence to the teacher.

It can be concluded from the above results that the inadequacy of relevant teaching and learning materials including textbooks for core subjects was somewhat responsible for Home Economics students' poor academic performance in these subjects. It was also noted that this situation usually resulted in students' difficulties in understanding lessons and teachers' difficulties in explaining abstract concepts to students.

Research Question 4: In what ways can the performance of Home Economics students of Aburaman Senior High School be improved upon in core subjects?

The aim of this research question was to seek from the respondents how students' poor performance in core subjects in the school could be improved. Therefore, the suggestions gathered from both the teachers and students are detailed in Table 20.

Table 20: *Respondents' suggestions for an improved performance*

Suggestions	Frequency	Percentage
Extra classes for Home Economics students	96	49.2
Timely provision of adequate TLMs	39	20.0
Regular counseling on their importance	27	13.8
Use of appropriate teaching methods	21	10.8
Reduced class sizes for Home Economics students	12	6.2
Total	195	100.0

Source: Field study, Biney (2013)

The main suggestion from the respondents was the introduction of extra-classes for Home Economics students. This, according to the respondents (49.2%), could significantly help the students to perform better in the core subjects. About 20% of them also called for the timely provision of adequate teaching and learning materials, while 13.8% suggested the regular counselling of students on the importance of all subjects in their academic progression plans. Others also suggested that the teachers should use appropriate teaching methods. There was also the suggestion that the sizes for Home Economics classes should be reduced in order for teachers to have adequate time for each student.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview

This chapter presents an overview of the entire work. It contains the summary of the study, the key findings, the conclusions drawn based on the findings, and the recommendations made. It also presents some suggested topics that could serve as bases for further research.

Summary

The study examined the teaching and learning materials (TLMs), teacher factors and student characteristics as predictors of Home Economics students' poor performance in core subjects in Aburaman Senior High School in the Central Region of Ghana. It attempted to identify the student characteristics, teacher factors, and the teaching and learning materials (TLMs) related factors that predicted or contributed to the poor performance of Home Economics students in core subjects. The study also explored ways by which the performance of Home Economics students of Aburaman Senior High School could be improved in core subjects. Out of a sample size of 200 including 180 students and 20 teachers, 195 made up all the 180 students and 15 teachers participated in the study resulting in a retrieval rate of 97.5%. Descriptive statistical tools such as frequencies and percentages were employed to analyse the data gathered. The preliminary results showed that 96.7% of the Home Economics students were females as against only 3.3% males; with a modal age of 17-18 years. Among the teachers, the males outnumbered their female counterparts.

Key Findings

The following were the major findings that emerged from the study:

1. The main student characteristics responsible for poor performance in core subjects were students' lack of interest, inadequacy of time devoted to the study of core subjects, and difficulties in understanding concepts.

2. The only teacher-related predictors of poor academic performance of Home Economics students were their inability to use TLMs and organise 'special' core subject classes for the students.

3. The teachers were found to be, to a very large extent, well qualified, experienced and always used the most appropriate teaching methods. These characteristics were identified as their strength that could help improve students' performance.

4. Inadequacy of relevant teaching and learning materials including textbooks for core subjects was somewhat responsible for Home Economics students' poor academic performance in these subjects. It was also noted that this situation usually resulted in students' difficulties in understanding lessons and teachers' difficulties in explaining abstract concepts to students.

5. The respondents suggested that the performance of Home Economics students could be improved by organising extra-classes for them, timely provision of adequate teaching and learning materials, regular counselling of students on the importance of all subjects in their academic progression plans, appropriate use of teaching materials by teachers and a reduced class sizes for Home Economics students.

Conclusions

1. This study also identified that the poor interest of students in (core) subjects, for instant, are largely responsible for their unimpressive performance in such subjects. Indeed, motivation, interest and time devoted are critical in students' seriousness and hence performance in every subject either core or elective. Therefore, a low interest level of the student will adversely affect his/her academic performance.

2. The academic progress of students is dependent on not only the students, but also the calibre and the professional activities of their teachers. In this study, although the professional competencies (in terms of academic qualifications and experience), their inability to use teaching and learning materials to appropriately demonstrating even abstract concepts to the understanding of students.

3. It is concluded that the time allotted to lessons was not adequate and contributed to the poor performance of students. Organising extra-classes for the students will increase the number of contact periods for the students.

4. The availability and adequacy of relevant teaching and learning materials including textbooks and their utilisation will significantly help the students to improve their academic performance. Until there is a perfect blend between student, teacher and material factors, the academic performance of Home Economics students in core subjects (i.e., Mathematics, English Language, Integrated Science and Social Studies) will continue to dip.

Recommendations

Based on the above findings and conclusions, the following recommendations are made for possible consideration and implementation:

1. Teachers should be motivated in order to motivate the pupils to learn. This could be done by providing facilities or TLMs. Other forms of motivation such as awards could be instituted for performance such as teacher performance, students discipline and achievement

2. Teachers should be engaged in more in-service training to use more practical approach in teaching so that the students will apply the lessons to everyday life. Interest would, therefore, be created in students and their desire to learn core subjects would be increased. It is therefore necessary that teachers attempt to arouse the interest and the joy in each lesson they teach. They could do this by the use of humour in classroom, paying individual attention to the students using different approaches and positive reinforcement.

3. Pupils need sensitization and past students from the school who have made progress in their field need to be invited to talk to the students and thus serve as role models and motivators.

4. The school authorities especially the Guidance and Counselling Coordinator in the school should regularly counsel Home Economics students on the importance of core subject in their academic progression. They should be made to understand that with failure or weak passes in these subjects, they will not be able to gain admission into any tertiary institutions. This will enable them have the intrinsic motivation to study.

5. The students must be encouraged to devote adequate time for the studying of core subjects. This will help them to do their own research in these subjects.

6. The school authorities, core subject teachers and parents must consider organising extra-classes for Home Economics students. This will enable the teachers to have enough contact hours for the students.

7. The core subject teachers should be regularly trained on the choice of teaching methods. This will help the teachers to deliver their lessons effectively.

8. The Ghana Education Service should timely provide adequate teaching and learning materials for the students and teachers to use.

Suggestions for Further Research

This study was done in only one Senior High School; therefore, the researcher is recommending that the scope of the studies should be expanded to include several schools. This will help the Ghana Education Service and other stakeholders to determine the magnitude of this phenomenon and address it appropriately.

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QUESTIONNAIRES FOR TEACHERS
DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCAITON
TLMs, TEACHER FACTORS AND STUDENTS CHARACTERISTICS
AS PREDICTORS OF HOME ECONOMICS STUDENTS
PERFORMANCE IN CORE SUBJECTS

Dear respondent,

The objective of this study is to find out the various teacher factors and analyse their effects on academics' performance of Home Economics students in core subjects. I therefore appeal to you to answer the following questions as cordially as possible. No form of identity will be disclosed. Thank you in advance for your cooperation.

Thank you.

SECTION A: Personal data

These statements are about you. Kindly tick in the box the answer that best describes your response in each of the states.

1. Gender: Male[ ]   Female[ ]

2. Age: [ ] under 25 years   [ ] 26-35years   [ ] 36-45years

3. [ ] 46-55 years   [ ] 55-65years   [ ] 66 and above.

4. State present class/ classes taught: SHS 1 [ ]   SHS2 [ ]   SHS 3[ ]

SECTION B: Teacher characteristics

5. How many years have you been teaching? (Teaching experience).

    [ ] less than 5 years   [ ] 6-10 years [ ] 11-15years [ ] 16-20years

    [ ] 21-25years   [ ] 26-30 years   [ ] 31-35 years

    [ ] 36-40 years

6. What subjects(s) do you teach?

   Science [ ]   Social studies [ ]   Mathematics [ ]   Management-in-Living [ ]

   English [ ]   clothing & textile [ ]   Food and Nutrition [ ]

7. How long have you been teaching this subject in your present location?

   [ ] less than 5 years   [ ] 6-10 years [ ] 11-15years [ ] 16-20years

   [ ] 31-35years   [ ] 36 years and above.

8. Highest Academic qualification.

   B.Ed. /BA [ ]   HND [ ]   First Degree [ ]   Master's Degree [ ]

   PhD [ ]

9. Your rank in the Ghana Education Service.

   Teacher [ ]   Principal Superintendent [ ]   Assistant   Supt   [   ]

   Assistant Director [ ]   Supt [ ] Deputy Director [ ] Senior Supt [ ]

10. Indicate your professional qualification by ticking the appropriate one.

    [ ] Graduate professional [ ] Graduate non-professional [ ]Diplomat

11. Did you specialize or major in the subject that you are teaching?

    Yes [ ]   [ ] No

12. How frequent do you give written exercises to your students?

    Very frequent [ ]   Not frequently [ ]

13. How many periods do you teach in a week?

    [ ] 6-10 [ ] 11-15   [ ] 16-20 [ ] 21-25   [ ] 26-30 [ ] 30 and above

14. What teaching method do you use in teaching your subjects?

    ……………………………………………………………………

    ……………………………………………………………………

15. Do you vary the teaching method that you use in teaching your subjects?   Yes [ ]   No [ ]

16. State some recommendations you would make for improving teaching and learning core subjects.

    a.   ………………………………………………………………………………
         ………………………………………………………………………………
    b.   ………………………………………………………………………………
         ………………………………………………………………………………..
    c.   ………………………………………………………………………………
         ………………………………………………………………………………

SECTION C: Use of TLMs

17. Have been teaching with TLMs?

    Yes [ ]   No [ ]

18. Do you have enough teaching/learning materials to teach the students?

    Yes [ ]   No [ ]

19. How are the TLMs provided to core teachers in the school? By:

    [ ] GES   [ ] headmaster[ ] teacher   [ ] students   [ ] PTA

20. What can you say about the supply of TLMs for core subjects to teachers in your school?

    [ ] Very adequate   [ ] Adequate   [ ] Inadequate [ ] Available

    [ ] Not available

21. How do you teach, in the absence of TLMs, to ensure that practical work is done?

    ………………………………………………………………………………
    ………………………………………………………………………………

22. At what time of the academic year do you get instructional material supplied?

[ ]-By the time of the academic year do you get instructional material supplied?

[ ]-A week or two after re-opening for the 1st term

[ ]-At the beginning of the 2nd term

[ ]-Others specify.

23. State the type of resources that help the teacher to attain effective teaching and learning objectives?

[   ] Adequate textbooks and teachers manual for both teachers and students

[ ] Adequate TLMs as well as other materials for their preparation

[   ] Adequate number of classrooms and conductive atmosphere for effective teaching and learning

[ ] Better incentive package to most teachers

24. As a teacher mention the types of resource that help you attain effective instructional goals and objective?

[ ] Adequate textbooks and teachers' manuals for both teachers and students

[ ] Adequate teaching/ learning materials as well as other materials for their preparation

[ ] Adequate number of classrooms with conclusion atmosphere for effective teaching and learning

[ ] Better incentive package to motivate teachers

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25. How promptly do you receive TLMs?

Very promptly [ ] Quiet promptly [ ] promptly [ ] Not promptly [ ]

26. What do you do as a core teacher if TLMs are not promptly supplied?

……………………………………………………………………………

……………………………………………………………………………

…………………………………………………………………………..

27. Do you vary the use of TLMs as far as teaching and learning is concerned?

Yes [ ]   No [ ]

28. State any three problems that you encounter when you do not use TLMs when teaching?

1. ……………………………………………………………………

2. ……………………………………………………………………

3. ……………………………………………………………………

29. Suggest any three recommendations you would make for the use of TLMs for teaching and learning?

1. ……………………………………………………………………

2. ……………………………………………………………………

3. ……………………………………………………………………

SECTION D: Students characteristics

30. Is it interesting teaching home economics Home Economics students' core subjects?

Yes [ ]   No [ ]

31. Are there any significant differences in the performance of Home Economics students and other students who are not offering Home Economics in the core subjects you teach?

Yes [ ]   No [ ]

32. Do you have any extra classes with economics in the core subjects you teach?

Yes [ ]   No [ ]

33. Do you have any problem when teaching the Home Economics students the core subjects?

Yes [ ]   No [ ]

34. If yes, give two of the problem that you encounter when teaching Home Economics students the core subjects.

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35. What do you consider as the problems that militate against a higher academic performance of the students of your school in core subjects?

a. ………………………………………………………………….

b. …………………………………………………………………

c. …………………………………………………………………

36. Suggest three ways for improving Home Economics students' academic performance in core subjects?

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QUESTIONNAIRE FOR STUDENTS UNIVERSITY OF CAPE COAST DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATON TLMs, TEACHER FACTORS AND STUDENTS CHARACTERISTICS AS PREDICTORS OF HOME ECONOMICS STUDENTS PERFORMANCE IN CORE SUBJECTS

Dear respondent,

This questionnaire is part of a study being conducted to find out what students' characteristics can affect the performance of Home Economics students in core subjects. Your views are therefore very welcome. The success of this exercise depends largely on your personal and honest responses to the questions. Feel free to respond to the question for you are assured that whatever information you provide will be kept confidential.

Thank you.

SECTON A: Personal data

1.   Sex: Male [ ]   Female [ ]

2.   Age: [ ] under 14 years [ ] 15-16years [ ] 17-18 years   [ ]19-20years

3.   Class: SHS One [ ]   SHS Two [ ]   SHS Three[ ]

SECTION B: Sudents' characteristics

4.   What is your performance in the core subjects?

[ ] Excellent   [ ] Very good   [ ] Good   [ ] Credit

[ ] Pass   [ ] Fail

5.   Do you think there are some differences between your performance in the core subjects and that of the electives?

Yes [ ]   No [ ]

6.   Do you have interest in studying the core subjects?

Yes [ ]   No [ ]

b. Give a reason to your answer in 6a.

7.   How often do you study the core subjects?

[ ] Very often [ ] Often   [ ] Quiet often[ ] Occasionally

[ ] Not at all

8.   Do you attend any "extra classes" on core subjects?

Yes [ ]   No [ ]

9.   Suggest 3 ways for improving the Home Economics student' academic

        performance in core subjects.

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10.   What are some of the difficulties that you encounter in learning core

        subjects?

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SECTION C: Teacher characteristics

11.   How frequent does your mathematics teacher gives exercises?

[ ] Very frequent   [ ] Not frequent

12. How frequent does the science teacher gives exercises?

[ ] Very frequent   [ ] Not frequent

13. How frequent does the English Language teacher gives exercises?

[ ] Very frequent   [ ] Not frequent

14. Do your core subject teachers teach using TLMs?

[ ] Yes   [ ] No

15. Do teachers vary their teaching methods when teaching core subjects?

[ ] Yes   [ ] No

16. Do you enjoy the teaching method that your core subject teachers use in teaching?

[ ] Yes   [ ] No

17. Do the core subject teachers organize special classes for the Home Economics students?

[ ] Yes   [ ] No

18. If you do not understand any topics being taught by the core subject teachers are you allowed to ask questions?

[ ] Yes   [ ] No

19. Do the teachers explain the questions that the students normally ask if they do not understand any topic taught?

[ ] Yes   [ ] No

20. How would you rate your understand when a core subject teacher uses TLMs in a lesson?

Excellent [ ]   Very Good [ ]   Good [ ]   Satisfactory [   ]

    Poor [ ]

SECITON D: the use of TLMs

21. What can you say about the use of TLMs for core subjects in your school?

Very Adequate [ ]   Adequate [ ]   Inadequate [ ] Available [ ]

Not available [ ]

22. So you have adequate textbooks in core subjects in the school?

[ ] Yes   [ ] No

23. Do you understand the topic when the core subject teachers do n9ot use TLMs in teaching?

[ ] Yes   [ ] No

24. In the absence of TLM how does the teachers ensure that practical work is done?

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25. How often does the teacher teach with TLMs?

Very often [ ]   Quiet often [ ]   occasionally [ ]   Not at all [ ]

26. Do the teachers vary the TLMs they use to teach the core subjects?

[ ] Yes   [ ] No

27. State any two problems that you encounter when the teacher uses TLMs to teach core subjects?

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28. State any two problems that you encounter when the teacher does not use TLMs to teach core subjects?

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29. Suggest any two recommendations you would make for the use of TLMs in teaching and learning.

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