UNIVERSITY OF EDUCATION, WINNEBA

COLLEGE OF TECHNOLOGY, KUMASI

EVALUATION OF THE TEACHING AND LEARNING OF SEWING IN JUNIOR HIGH SCHOOLS: A CASE STUDY OF AMANSIE WEST DISTRICT

BY

CHARITY SENA AMENYA

A Thesis in the Department of Fashion Design and Textiles Technology Education, Faculty of Technology submitted to the School of Graduate Studies, University of Education, Winneba in partial fulfillment of the requirements for award of the Master of Technology

JULY 2014

UNIVERSITY COLLEGE OF EDUCATION, WINNEBA (KUMASI CAMPUS)

CENTRE FOR EDUCATIONAL POLICY STUDIES

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DECLARATION

STUDENT'S DECLARATION

I hereby declare that this submission is my own work and that to the best of my knowledge, there is no material previously published by another person or has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text for references.

Student's Name & ID: Charity Sena Amenya

Signature: **……**

Date: **……..…….**

SUPERVISOR'S DECLARATION

The project work was supervised in accordance with the guidelines on supervision of project work laid down by the University of Education, Winneba.

Supervisor's Name: ……...

Signature: ……..

Date:…….……

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It is only fair to say a word of thanks to all those who in diverse ways have helped me to come this far. But it becomes more or less a duty in certain cases. First and foremost, it is my heartfelt desire to give glory and praises to the Almighty God for his bountiful blessings and mercies on my life which strengthened me throughout the preparation of this study. Secondly, I express my unforgettable appreciation to my supervisor, Dr. B.K. Dogbe who spent a lot of time guiding me on matters of detail and substance. My honorable thanks are due to the Head of Department for Technology Education and lectures for their care and guidance during my difficult times.

To all headteachers, teachers, pupils from selected schools and all who in one way or the other helped to make this dream a reality, I say thank you and God bless you for the timely pieces of advice

DEDICATION

This work is dedicated to my mother, Monica Klu Amenya, Emmanuel K. Amenya my Dad, my brother Prince Mawunya Amenya To the memory of my late, my sisters Gladys Emefa Amenya and Sitsofe Amenya, my dear children and Rev. David Peprah for their support and encouragement.

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ABSTRACT

This Dissertation is aimed at evaluating the teaching and learning of sewing in the Junior High Schools in the Amansie West District. The aim was to find out whether the programme is being taught and learned in the selected schools and to check the courses taught whether there are adequate qualified teachers, teaching and learning materials. Using observation as a tool for this, the researcher visited the sewing departments of selected schools, to assess the quality of teaching and learning being done in Basic Design and Technology. The researcher investigated the problems associated with the gap among Pre-Technical skills, Pre-Vocational skills and Home Economics (sewing and catering) courses under the programme in selected Private and Public Junior High Schools in the Amansie West District. She also assessed pupils, and their sewing teachers as they taught, as well as the qualifications of heads and the sewing teachers. Infrastructure and general performance of the pupils were also evaluated. It was found out that some of the schools were not doing all the courses in the programme except one. Therefore, it is recommended that the teaching and learning of Basic Design and Technology (sewing) be given much more attention. The government should introduce compulsory BDT in the first year senior high school curriculum so that the teaching and learning of it at the basic levels would be taken seriously. Teaching and learning aids in BDT (sewing) should also be made available to teachers and learners. It is hoped that if these recommendations are given a second thought, teachers at both the private and the public schools would be more serious about the teaching and learning of the sewing subjects. This would make the pupils learn better and acquire the needed skills in order to establish themselves even after completion at this level. The accessible population for the study was 363 pupils/students from 6 selected public and private JHS, using data collection through school visits to observe teaching and learning process in Basic Design and Technology.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

School education in Ghana has undergone many transformations and one of them is the Educational Reform of 1987. The 1987 system of education with regard to its structure was previously seventeen years pre-university education which was made up of six years primary education, four years middle school, five years secondary school and two years sixth form. This structure was however changed to six years free and compulsory primary school, three years junior secondary school, three years senior secondary school and three or four years tertiary education. During this time a great deal of work was done to correct the anomalies or the setbacks of the previous system. Firstly, one of the main aims of these reforms was to develop the need to recognize Technical and Vocational Education. Secondly, to improve upon the teaching and learning of Sewing programmes in general to create the awareness prior to the interrelationship among Home Economics, Visual Arts and Pre-Technical Skills.

The objective of this research is to evaluate how the selected schools select their subjects in the Basic Design and Technology, compare the public and private junior high schools about how each is handling the teaching and learning of Art and also to identify the schools in which no basic skills in art is taught. Finally, the research is also to find out the qualification of Art teachers in the various schools.

1.2 Statement of the Problem

The Basic Design and Technology Programme was introduced into the Junior High School (JHS) in the 2006 Curriculum, though it was in existence for decades in a different form. This programme was purposely drawn to train pupils at the JHS level

to equip them with some basic skills before they enter the Senior High Schools in the country. This training especially was also to help the dropouts from school to be able to think critically as to how best they could establish themselves in with handicraft. It would also help those who may have the chance to enter the various Senior High Schools (SHS) to become very conversant with the arts. Upon all efforts by the Ministry of Education (MOE) in collaboration with the Ghana Education Service (GES), this structure is not being followed by some Schools as expected. Due to this problem the researcher suspected that these manipulations may be hindering the effectiveness of teaching and learning of causes under the Basic Design and Technology (BDT programme) in both public and private schools.

In view of this problem, the researcher came out that due to lack of interest in both teachers and pupils/students in the BTD subjects is as a result of inadequate teaching and learning materials and unsupportive influence of the society. The researcher also thought that due to unavailability of BTD teachers at the JHS level can also cause inefficient teaching and learning of sowing as embodied in Basic Design and Technology programme.

1.3 Objectives of the Research

i. To evaluate the teaching of sewing in the Basic Design and Technology Programme in selected Junior High schools in the Amansie West District Assembly.

ii. To evaluate the learning of Sewing in the Basic Design and Technology Programme in selected Junior High Schools in Amansie West District Assembly.

iii. To recommend solutions to problems that may be identified by the researcher among selected JHS.

1.4 Research Questions

i. What is the effectiveness of teaching sewing as an option embodied in Basic Design and Technology (BDT) at the Junior High Schools in the Amansie West District?

ii. What is the effectiveness of learning sewing as an option embodied in the Basic Design and Technology Programme at the Junior High Schools in the Amansie West District?

iii. How can the problems of the teaching and learning sewing as an option embodied in the Basic Design and Technology Programme, if any, be curbed in the Junior High Schools in the Amansie West District?

1.5 Limitations

Some of the headmasters and the teachers in the schools were not prepared to assist in administering the questionnaires to the respondents. The study was conducted in only a few schools due to the bad nature of the roads linking to other schools, also there were few vehicles that lived to Kumasi in early in the morning and returns late in the evening, which could not permit the researcher to run all schools in time.

1.6 Delimitations

The researcher dealt with selected schools in the Amansie West District for his primary data collection. The following were his selected schools:

i. Manso Model Junior High School

ii. Manso Nkwanta D/A Junior High School

iii. Antoakrom D/A Junior High School

iv. Abore D/A Junior High School

v. True Faith Junior High School

vi. Universal Manso Junior High School

1.7 Importance of the Study

The thesis will enable stakeholders to appreciate how the teaching and learning of Basic Design and Technology (sewing) Programme goes on in the Junior High Schools in the Amansie West District Assembly. It will inform them about problems associated in teaching and learning Basic Design and Technology (sewing) Programme. It will also serve as a source of reference material for further studies to future researchers in sewing Education.

1.8 Definitions of Terms

i. *Basic Design*: To make or draw plans for something.

ii. *Evaluate*: This is to find out how something performs

iii. *Home Economics:*It is an option in BDT subject that is studied at the Junior High School.

iv. *Sewing:*It is an option in Home Economics subject that is studied at the Junior High School. *Basic Design*: To make or draw plans for something.

1.9. Abbreviations

BDT- Basic Design and Technology

CI- Cottage Industries

CRDD- Curriculum Research Development Division

CS- Comparative study

CTE- Career and Technical Education

GES- Ghana Education Service

GNAPS- Ghana National Association of Private Schools

HE- Higher Education

IT- Institute of Technology

JHS- Junior High School

KNUST- Kwame Nkrumah University of Science and Technology

MOE- Ministry Of Education

NEC- National Executive Committee

PVS- Pre-Vocational Skills

SHS- Senior High School

TE - Tertiary Education

UEW- University of Education, Winneba *UNESCO*- United Nations Education, Science and Cultural Organization

VA- Visual Arts

VE- Vocational Education

VEG- Vocational Education in Ghana

VET- Vocational Education and Training

1.10 Organization of the Rest of the Text

The study is organized in five chapters:

Chapter Two deals with the Review of Related Literature on the research topic. *Chapter Three* focuses on the Research Methodology which comprises Research Design, Population for the Study, Primary and Secondary data collection Strategies. *Chapter Four* focuses on the presentation of data collected, its discussion, analysis

and interpretation. *Chapter Five* basically provides the summary of the main findings of the study, its conclusions, recommendations and proposed innovations to upgrade the teaching and learning of Basic Design and Technology in Junior High Schools.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The chapter reviews literature from different sources related to the topic. It examines definitions and basic concepts of Design. Literature related to Junior High School teaching and learning of sewing in Basic Design and Technology Programme is also reviewed. The current structure of education consists of a 11-year basic education system of two years of Kindergarten, six years of primary and three years of Junior High School (JHS). Junior High School is the entry stage for an evaluative system of Senior High School training in the vocational, technical, agricultural science and a structured scheme of apprenticeship.

In his overview of formal education in Ghana, Farrant (1999) described formal education as learning that is carried out in specially built institutions such as Schools and Colleges. He further stated that: programmes taught in these institutions are carefully structured by means of syllabuses and time tables and the teachings are strictly supervised by external administrative bodies. The achievements of those who learn in formal education are often recognized by the award of certificates.

2.2 Historical Background of Education and Some of its Principles

According to Bame (1991), the Portuguese, who were the first Europeans to visit Gold coast landed in 1471 in a small coastal town called Elmina, in the Central Region of the then Gold Coast. He cited that McWilliam (1999) had indicated that upon the instruction of Portuguese King John III, they established the first Western-type of School in Elmina Castle in 1529. As part of a programme to convert the

natives of Elmina to the Catholic faith. A Portuguese teacher was sent to Elmina in the same year to teach the boys and girls living in the towns near the Castle reading and writing in Portuguese. The Portuguese started what was known in the history of the Gold Coast as the Castle schools which in general were originally meant for mulatto children, that is, the children of European traders by African wives and not fully for African pupils. Bame reveals further that, after the Dutch had seized the Elmina Castle and driven out the Portuguese in 1637, they established a similar school in the castle. According to him, other castle schools were those established by the Danes in the Christiansburg Castle in Accra in 1722 and one opened in Cape Coast Castle by the English in 1694. By this, Bame, (1991) thus gave a clue on how formal education began in Ghana.

The principles of the formal education consisted of:

i. Providing opportunities for the students and staff to feel united. Thus, the feeling "weism" as opposed to"themism" can be translated into reality through activities, which bring the members together for common goals.
ii. Highlighting the conditions, problems and needs of the society and the individuals within it.
iii. Reflecting on the accepted, tried and cultured practices and values within the community.
iv. Sensitizing the learners to activities that will enable them to take active roles in the society and be responsible members of the community, and
v. Being flexible, adaptable or changeable to meet changing conditions within the society.

Therefore, upon every school whether private or public is expected to perform functions which are in consonance with the needs and aspirations of the society of which it is a part. The school, be it public or private is a place wherever educators and learners meet for purpose of given and receiving education based on formally laid down rules and regulations.

2.3.1: Historical Precedence

According to Abosi and Brookman-Amissah (1992), Western education was introduced in the country in the sixteenth century as the handmaid of Christianity to serve the primary needs of evangelisms. Initially, the provision of such form of education was a subsidiary function of merchant copies whose educational enterprise preceded the advent of real missionary work by over a century. According to Annor (1997), the Portuguese traders set up a school in the Elmina Castle where they taught their children and some African boys reading, writing and arithmetic.

In the view of Abosi and Amissah (1992), the first systematic effort by the colonial administration to regulate education in the then Gold Coast took place in 1882 with the enactment of an educational ordinance patterned on the English Educational Act of 1870. Under the ordinance, the curriculum was enlarged to include history, geography, nature study and some vocational subjects. Another feature of the Act, according to Annor (1997) was that, the central government was to be responsible for the payment of teachers' salaries and the authorities were to be responsible for the maintenance of public primary and middle schools. During these times, private participation in education featured prominently in most areas of the country. There was therefore a keen competition between the private and the public schools.

However, the private schools used the syllabus of the public schools. The country's educational system was patterned along the British lines as they were the colonial masters.

2.3.2 The Need for Art Education

Problems arise because the art teacher is the only mediator of the child's experience in art. The dominant values in our culture are still reflected in the quest for wealth, success, and upward social mobility. Within this scheme of values, art has often not received relevance and has been treated as less than a leisure-time pursuit, a decorative to life, or a symbol of wealth and social sophistication. The deeper satisfactions of art are poorly understood and largely unrealized. Values operating in the larger society influence children. From the earliest years of their lives, they are educated through visual forms at home, in stores and in the neighbourhood (Chapman, 1995). It is only quite recently that comparative education has been admitted as a subject of academic studies. It is generally recognized now that intending teachers and educational administrators should have some knowledge of foreign education systems and their comparative merits.

In some Universities, comparative education is a requirement for Teacher's Diploma. However, there is no general agreement as to what comparative study of educational systems should comprise and Cordon, (1993) stated quite clearly and formulated the purposes and methods of comparative study of education in all countries with a view to perfecting national systems with modifications and changes which the circumstances and lower conditions would demand. Marc-Antoine (1992) said:

> Education, as other Sciences, is based on facts and observations, which would be ranged in analytical tables, easily compared, in order to

> deduce principles and definite rules. Education should become positive by whims and arbitrary decisions of administrators, to be turned away from the direct line which it should follow, either by the prejudice of a blind routine or by the spirit of some system and innovation.

2.3.3 Overview of Evaluating the Private School and Public Education in Ghana

Jeffrey (1994, p. 123) contends that:

> It will not have escaped the reader's notice that there has so far been no reference to private (independent) schools; an omission that might seem odd in a book devoted to the unity of education. In these days on, one would doubt the wisdom of making education compulsory. Education is too necessary to be left to chance. It is reasonable that independent or private schools should have to be registered as efficient, and for that reason be open to inspection. But it is very different matter to force them into the state (public) system.

According to Cordon (1993), in Britain, private schools prefer to be known as independent schools. These independent schools have been obliged to register with the Department for Education. After a school has been given provisional registration by Her Majesty's Inspectors, visit is made to the School where inspection is carried out on the suitability of the premises, staffing and the medium of instruction. Having satisfied itself, the inspection team recommends for the final registration of the School. Bernard (1998) wrote that the Education Act of 1870 compelled every English citizen in Ghana to send his or her children to school. Another feature of the Act was that all independent (private) schools should be registered. The independent

school joint council has a system of accreditation of schools based upon inspection. Thus fee-paying independent schools must register with the appropriate education department.

2.3.4 Ghana's System of Education

The Children's Act of 1989 of Ghana required the proprietors of boarding schools to safeguard and promote the welfare of their pupils. The Educational Act of 1870 of Britain also compelled every citizen to send the child to school. It took Ghana almost a century to enact a similar law, which made it compulsory for every Ghanaian to also send their children of school-going age to school (Annor, 1997). In November 1960, in a speech at Sunyani, Osagyefo Dr. Kwame Nkrumah, the then president of Ghana announced a fee-free and compulsory Primary and middle school education. This policy took effect from September 1961 and was given legal backing by the 1961 Education Act, Section Two (Sec. 2) of the Act as quoted by McWilliams and Kwamena-Poh (1999, p. 109) that "Every child who has attained the school-going age as determined by the Minister shall attend a course of instruction as laid down by the Minister in a school recognized for the purpose by the Minister".

As expansion was envisaged, the Act made provision for local authorities to build, equip and maintain all public primary and middle schools in their areas. Ghana's Education, however, continued to go through metamorphosis. So there were several reforms. According to Annor (1997), years after independence, Ghana's formal education systems at the basic and secondary levels continued the elitist and academic type bequeathed by the colonial master (Great Britain). To address the trend, the 1974 Dzobo Committee's New Structure and Content of Education were introduced to

diversify the structure and content of elementary and secondary education. This was to make them more cost-effective and to provide a mixture of academic and practical courses in order to maximize the impact of those levels of education. A New Educational Reform (NER) programme took off in September, 1987. Private schools proprietors had to orient themselves to the provisions of the New Educational Reforms.

2.3.5 Private Schools in Ghana

According to the Report of the President's Committee on Review of Education Reforms in Ghana (2002), the educational process in Ghana is based on a number of Acts, Legislations and Regulations. The 1992 Constitution of the Republic of Ghana, which constitutes the supreme law of the land, directs the overall thrust of education for educational development. The Report states further that Acts and Regulations promulgated by parliament from time to time, supplement the constitution. The 1992 Constitution of the Republic of Ghana states categorically that every individual has the right to establish a private school. Specifically, Article 25, Clause 2 states that: "Every person shall have the right, at his own expense, to establish and maintain a private school or schools at all levels of such categories and in accordance with such condition as might be provided by law".

It is this clause that gives constitutional backing to all the private schools that existed before 1992. The same law has led to the opening of more private schools in the country. According to Frimpong (1999), the number of private schools continues to increase with amazing rapidity. To supplement Article 25 (Clause 2) of the 1992 Constitution and Section 31 (1) (a) of the Education Act, 1961 (Act 87), the School

Education Private Institutions Regulations 1995 (Appendix E) was promulgated by Parliament. The Regulation is in three parts. Part I covers issues such as establishment, application and registration of school education of private institutions. Part II deals with enrolment, management and starting, and Part III covers miscellaneous provisions. The activities of all private schools in Ghana are therefore expected to be regulated by the provision of this document. The constitution of the Ghana National Association of Private Schools (GNAPS) (1972), gives the aims and objectives of the association as follows:-

i. To bring together all private schools in Ghana and to assist newly opened private schools to register with the Ghana Education Service (GES).
ii. To see to the welfare of member schools, protect the interest of proprietors and to give them sound support.
iii. To give financial assistance to needy schools by the National Executive Committee (NEC).
iv. To co-operate with whatever department of GES that deals with matters relating to private schools in the country.

The GNAPS organizes courses, seminars and meetings to educate members on school administration. The GNAPS has district and regional branches all over Ghana. Teaching is all about teachers and their role. In fact the most important aspects of the educational process are the students and what they learn. This leads us to consider what is meant by “learning”. Learning is about change: the change brought about by developing a new skill, understanding a scientific law and changing an attitude. The change is not merely incidental or natural in the way that our appearance changes as we get older. Learning is a relatively permanent change, usually brought about

intentionally. However, Ian and Stephen (1994) regard that learning can also take place without plan for example by experience. They often try to learn without making a learning plan to guide them to read subject after subject.

Thompson (1990) said education is a basic human right that must function to develop the talents of the individual to the fullest to enable her to participate freely within a free society. Annor (1997, pp. 103-104) stated categorically that the idea of Private/Preparatory/International Schools was not new. Some, he said, existed even during the colonial days when there was urgent need to get schools for the children of some of the foreigners who were engaged in administration, commerce, industry and construction in some cities and towns in Ghana. Permanent among the subjects were international languages such as English, French and German. Even though the cost of education in the Preparatory Schools is higher than that of the Public Schools, they are highly patronized by Ghanaians. This is because:

i. They provide good quality education.
ii. They are better equipped with textbooks and physical facilities such as chairs and tables than the public schools.
iii. Children receive better care and attention in the International or Preparatory Schools and the proprietors supervise their teachers closely to make them effective so that they don't lose their customers so as to attract more customers.
iv. Educating a child in a Preparatory School raises the image of both parents and child. Parents usually talk with some pride and satisfaction about their children being in the popular, well touted Preparatory Schools in Ghana.

The Preparatory School system poses a huge threat to the Public Schools. Its popularity is immense and this explains why more and more schools are opened day in and day out in the cities and even in the rural areas. Pupils are also being withdrawn from the Public Schools to the Private Schools by some parents. Unless positive steps are taken by the government, the Ghana Education Service and all Ghanaians to improve the conditions in the Public Schools to make them efficient and effective, more and more Private Schools will be opened and the gap between educations in the two systems will continue to widen.

2.3.6 Junior High School Curriculum

The Junior High School Curriculum in Ghana has undergone significant revisions and changes in line with the recommendations enshrined in the 1987 Educational Reform and others that have occurred in Ghana in recent times such as the Dzobo Committee Report, Educational Reforms Review Committee Report, and Vision 2020 (CRDD Trainers Manual on the use of School Syllabus, 2001). As the CRDD Manual emphasizes, rapid economic development is based on good quality Education which create thinkers and problem solvers. But the Ghana school system is such that learners are not trained to be critical thinkers. Adejumo (2002) noted that most art educators have come to agree that the art curriculum (Basic Design and Technology Curriculum) should facilitate pupils' development in art perception, appreciation, production and evaluation.

Curriculum decisions, according to Bishop (1989), are just not about content or the learning of the subject matter, neither is it about the most effective ways of systematizing the teaching methods, but then it compromises a complex network of

social, cultural, philosophical, moral, political and ideological issues. It is in this regard that this new JHS curriculum which emphasizes the acquisition of critical thinking skills involving the ability to analyse issues, make good quality judgments and generate solutions to problems in the classroom and in the world was developed (CRDD Trainers Manual on the use of school Syllabus, 2001).

Dosoo (1996) maintains that in developing the curriculum the main components which include Objectives, Contents, Method and Evaluation should be taken into consideration. But a curriculum does not develop in a vacuum, says Bishop (1989); one must therefore take into account the values, the traditions, the beliefs, the whole culture or the way of life of that society because an educational system which has no bearing on the society goes astray. Teachers of Basic Design and Technology should ensure that the critical thinking and problem solving skills have been captured in the teaching syllabus for BDT in the Junior High Schools. Teachers are to make sure that whatever they teach from the syllabus is geared towards the achievement of critical thinking and problem solving skills. The Basic Design and Technology Curriculum is therefore broken down into syllabus for the various classes in the primary schools. It expected of the teachers in the primary school to develop their schools to develop their scheme of work from these syllabuses.

2.3.7 Academic Performance in Private and Public Schools

Adotey (2003), at a news conference in Accra, announced the release of the results of the 2002/2003 Basic Education Certificate Examination (BECE) to the authorities of the schools that presented candidates for the examination. Adotey reported that out of a total number of 268,293 JHS candidates who sat for the examination, 163,659

candidates (representing 61%) qualified to undertake various programmers at the senior secondary school level. The news item further gave the breakdown of the results as follows: 18,768 candidates (representing 7%) had between aggregates 06-10; 52,814 candidates (representing 20%) had aggregate 11-20, while 92,077 candidates (representing 34%), had aggregate 21-30.

Even though the Basic Education Certificate Examination (BECE) results were not broken down according to the performance of public and private schools, there is a general perception that private school products perform better than public schools. In the report of the President's Committee on Review of Education Reforms in Ghana (2002), the committee establishes the high academic performance in many of the private (individual) basic schools as a fact and attributed it to the good internal supervision in many private schools.

2.3.8 Basic Design and Technology

Design, like civilisation, art, education, and management, has many meanings. According to Encyclopaedia Britannica (1984, p.298), "design is from the Latin word "designare" which means to "mark out." It is the process of development plans and schemes of action whether kept in mind or set forth as a drawing model". Carr and Pomeroy (1992) assert that the word design has many meanings, and that only philosophical method will strip off all the appended meanings to provide a coherent and comprehensive view. They also see design as an arm of marketing. For a business to make a profit, design must be market-driven and market-justified. All that human beings do almost all the time according to Papanek (1972), is design. In his point of view, design is basic to all human activity and what constitutes the design process is

the planning and patterning of any act towards a defined foreseeable end. Again from his assertion it could be ascertained that all human beings are designers. This is because when human beings walk, we see repetition of movement of limbs, there is rhythm in the swinging of the arms, and there is a space and repetition in footsteps.

According to Amenuke et al. (1991, p.32) design is a "plan within a work of art". In general, certain qualities tend to be inevitable, for without them design could not have been possible. These qualities are known as elements of design such as dots, shapes, texture, lines, etc. Most good work of art must have design as the basis, sometimes consciously made and sometimes spontaneous. The Cambridge International Dictionary of English (1995) also attests to the fact that design is a plan, to make or draw plans for something or the art of making plans or drawing for something. Design could be a pattern used to decorate something. Often one draws or plans his work of art on a sheet of paper surface before starting the actual work with a chosen material.

Oxford Dictionary (2000, p.315) states clearly that when the systematic terminology of art is being worked out the word "disego" has a wider connotation as "design". Today the emphasis has shifted from the primary sense drawing to the wider meaning of "disego" to imply the creative idea in the mind of the artist (as this was often thought to be embodied in preliminary drawing). In this context of idea of "design" which was held to distinguish the artist from the craftsman, design is now a concept very close to the principle of construction in any work of art.

According to Appiah (1993), the making of patterns or detail planning and arrangement of lines, shapes for the creation of ornaments, or the creation of shapes is

design. To him, design could be helpful in the field of engineering and architecture. When a designer plans a work he puts together certain qualities called elements of design and principle of organization. Dots, lines, shapes, forms, textures, colour and space, are elements of design, which a designer employs to enhance what he designs. In a visual art, the structure of any design whether two-dimensional or three-dimensional is based on the planning and arrangement of these elements of design according to certain principles. These are called principles of organization or organization of design. The effective use and presence of these principles namely: variety, unity, harmony, rhythm, balance, contrast, repetition, opposition in a finished product.

Brian (1997), states that "there are no rules for design, as such any attempt to make rules will limit the range of the designer". This means that if a designer or an artist to take into consideration the elements and qualities of design, he would be restricted and limited. Brian contends that it is far more important or useful to make a careful and exhaustive study of the materials with the idea of discovery rather than the objects of producing a definite result. Naylor (1999) stipulated that the craft's aesthetics always concerns with fitness and propriety. It demands that materials and function should determine the design solution and because nature expresses itself in a multitude of exquisite shapes and forms. The assumptions concerning the nature of the design process were fundamental to the 19th century design philosophy as it developed in England and they have been formulated long before the arts and crafts movement appropriated them and associated with them especially in virtue of handwork.

Design is the principal mark that distinguishes the professions from the sciences. Schools of engineering, as well as schools of art, architecture, business, education, law, and medicine, are all centrally concerned with the process of design (Simon, 1996, p.111). There also exists a designedly way of thinking and communicating that is both different from the scientific and scholarly ways of thinking and communicating, and is as powerful as the scientific and scholarly methods of enquiry, when applied to its own kinds of problems (Archer, 1984, p. 348). Simon (1996) argues that science develops knowledge about what already is, whereas design involves human beings using knowledge to create what should be, things that do not yet exist. Design, as the activity of changing existing situations into desired ones, therefore appears to be the core competence of all professional activities.

In Role Model historically and traditionally, says Simon (1996) the sciences research and teach about natural things, and the engineering disciplines deal with artificial things, including how to design for a specified purpose and how to create artefacts that have the desired properties. The social sciences have traditionally viewed the natural sciences as their main reference point. However, Simon argues that engineers are not the only professional designers because:

> Everyone designs who devises courses of action aimed at changing existing situations into preferred ones. The intellectual activity that produces material artefacts is no different fundamentally from the one that prescribes remedies for a sick patient or the one that devises a new sales plan for a company or a social welfare policy for a state Simon 1996, p. 111.

Simon also describes how the natural sciences almost drove the sciences of the artificial from professional school curriculaparticularly engineering, business and medicinein the first 20 to30 years after World War II. An important factor driving this process was thatprofessional schools in business and other fields craved academic respectability, when design approaches were still largely intuitive, informal and Cookbooky. (Simon 1996, p. 112).

In addition, the enormous growth of the higher education industry after World War II created large populations of scientists and engineers who dispersed through the economy and took over jobs formerly held by technicians and others without academic degrees (Gibbons et al., 1994). This meant that the number of sites where competent work in the areas of design and engineering was being performed increased enormously, which in turn undermined the exclusive position of universities as knowledge producers in these areas. Another force that contributed to design being almost removed from professional school curricula was the development of capital markets offering large, direct rewards to value-creating enterprises (Baldwin & Clark, 2000).

In other words, design in the technical as well as managerial and social domains moved from professional schools to a growing number of sites in the economy where it was viewed as more respectable and where it could expect larger direct economic rewards. The View of Knowledge Design is based on pragmatism as the underlying epistemological notion. That is, design research develops knowledge in the service of action; the nature of design thinking is thus normative and synthetic in nature, directed toward desired situations and systems and ward synthesis in the form of

actual actions. The pragmatism of design research can be expressed in more detail by exploring the normative ideas and values characterizing good practice in professions such as architecture, organization development, and community development.

Several ideas described by Nadler and Hibino (1990) have been adapted and extended on the basis of the work of others; three additional values and ideas-regarding participation, discourse, and experimentation-have been defined on the basis of other sources, including my own work. The idea of design involves inquiry into systems that do not yet exist either as complete new systems or new states of existing systems. The main question thus becomes "Will it work?" rather than "Is it valid or true?" Design is based on pragmatism as the underlying epistemological notion. Moreover, design research draws on "design causality" to produce knowledge that is both actionable and open to validation. An important characteristic of design is the use of ideal target systems when defining the initial situation.

2.3.9 Availability of Professional Sewing Teachers

The training and supply of teachers must be on top of the education agenda of every country. In the view of Farrant (1999), the key of the quality of the formal system of education does not lie in curriculum development or in school reform; it rests squarely on the quality of the teachers who operate the system. That is why teacher education is vital. He also says the need for training grows more essential as teachers undertake increasingly complex roles and find that natural gifts are insufficient to cope with all the tasks expected to them. Antwi (1992) observes that teachers with varying qualifications operate within the educational system in Ghana currently.

The two broad categories of teachers are the trained and untrained or pupil teachers. It could be suggested that the solution to problems of quality in school education lies in educating and retaining qualified dedicated teachers rather than in maintaining inefficient teacher/students ratio. More efficient teacher/student or teacher/class ratio still achieve desirable results only if there is a large degree of continuity in high staffing. Antwi (1992) hints that between August 1977 and September 1978, 4000 teachers left the teaching service to seek employment in other countries purposely in search of greener pastures. He argues further that it is also generally known that about 70 percent of new graduates from our universities undertake their National Service as teachers in the secondary schools. Of this proportion, over 90% opt out of the teaching field after the completion of their one year National Service. The staffing position in the 1978/79 academic year was such that quite a number of secondary schools did not have their full complements of art and science teachers.

The situation persists in most secondary schools and has even become worse since then. The major cause of the exodus, according to Antwi (1992), is attributed to the frustration encountered by teachers in the economic, academic, political and social spheres. In the Report of the President's Committee on Review of Education Reforms in Ghana (2002), the committee observes that there is still a large number of untrained teachers in both the public and the private schools. However, the report went further to state that their services would still be needed for some time. This emphasizes the inadequacy of qualified trained teacher in the formal education system of Ghana and the need for private schools.

2.3.10 Vocational Education in Ghana

Vocational Education and Training (VET), also called Career and Technical Education (CTE), prepares learners for jobs that are based in manual or practical activities, traditionally non-academic and totally related to a specific trade, occupation or *vocation*, hence the term, in which the learner participates. It is sometimes referred to as technical education, as the learner directly develops expertise in a particular group of techniques or technology. UNESCO (1984) generally says, "Vocation" and "career" are used interchangeably. Vocational education might be classified as teaching procedural knowledge. This may be contrasted with declarative knowledge, as used in education in a usually broader scientific field, which might concentrate on theory and abstract conceptual knowledge, characteristic of tertiary education.

Vocational education can be at the junior, secondary or post-secondary level and can interact with the apprenticeship system. Increasingly, vocational education can be recognized in terms of recognition of prior learning and partial academic credit towards tertiary education (such as, at a university) however, it is rarely considered in its own form to fall under the traditional definition of education. Up until the end of the twentieth century, vocational education focused on specific trades such as for example, an automobile mechanic or welder, and was therefore associated with the activities of lower social classes. As a consequence, it attracted a level of stigma. Vocational education is related to the age-old apprenticeship system of learning. www.teachpe.com/sports psychology/teaching.php (retrieved on 16th March, 2011).

In the history of Ghana, vocational education concentrates more on basic skills such as fabric work, leatherwork, metalwork, woodwork and catering. Governments and

businesses are increasingly investing in the future of vocational education through publicly-funded training organizations and subsidized apprenticeship or traineeship initiatives for businesses. At the post-secondary level vocational education is typically provided by an institute of technology or by a local college. Vocational education has diversified over the 20th century and now exists in industries such as retail, tourism, information technology, funeral services and cosmetics, as well as in the traditional crafts and cottage industries.

The President John Atta Mills administration in Ghana has instituted measures to ensure that Technical and Vocational Education and Training (TVET) takes centre stage in ameliorating the current difficulties facing the education sector. As part of the measures to address the challenges, the government is reviewing the TVET policy to ensure that interest in technical and vocational training is whipped up in pupils at the primary school level to the highest level, provide opportunities for students pursuing TVET to rise to the highest educational level and also change the prejudice people have about technical and vocational training.

www.ModernGhana.com Ayriga, (2011) disclosed these when he addressed stakeholders of TVET at the presentation of a research report on vocational and technical training in Ghana. He also noted that, out of about 3.8 million pupils who start primary school in the country every year, only 200,000 gain admissions to the various public and private tertiary institutions. This research which was commissioned by the City and Guilds Centre for Skills Development of the United Kingdom (UK), in collaboration with the Council for Technical and Vocational Education and Training (COTVET-Ghana), was conducted by the Centre for Policy

Studies of the University of Ghana, Legon. The shortfall in the provision of training for the remaining youth is therefore a major socio-economic crisis in the making which could explode in the future. Ayriga (2011) notes that Ghana has 18,599 primary schools, but only 10,768 junior high schools provide enrolment for 1.3 million students, and there were 129 public technical and vocational training schools while the private technical and vocational institutions number 151, with both public and private institutions providing enrolment for only 64,155 students.

Ayriga observed that the Government of Ghana had started to overhaul the TVET, particularly looking at the policy option that would expand the base of the TVET to erase the wrong impression that TVET was for the "not too brilliant" students and drop outs. With the new system, particularly with academic progression, a mechanic from the Agblogloshie market could walk into any of the assessment centers to be established and be guided to progress in his field of endeavour to the level of masters degree and above because as the country takes steps to attain a high middle income status, the TVET hold the key in realising such a vision. According to the report,

> there is a widely held perception in Ghana that only people who are academically weak undertake technical education. A significant proportion of current TVET trainees, particularly in the informal sector (primarily apprenticeships), are therefore labelled as school dropouts, which impacts on the self-esteem and external perception of trainees abilities.

The report further indicates that, within the informal sector, master crafts persons did not indicate any significant difference in the ability to take up new technical skills between trainees from different educational backgrounds. In addition the report states:

> There was, however, consensus that some level of formal education (literacy and numeracy) were essential for trainees to learn effectively and take up new skills. The required levels of support for developing basic literacy and numeracy for those that are unable to complete formal education are currently not in place.

The Principal of the Methodist University College, Ghana (MUCG), Agyepong (2011) has stressed the need to link technical and vocational education training (TVET) to the job market in order to enhance the relevance of such training to the socio-economic development. He said that as employment opportunities in the formal sector shrink, the acquisition of business management and entrepreneurial skills for self-employment would become a major imperative in the design of vocational training programmes. He said technical and vocational education training programmes in Africa should help develop indigenous skills associated with the manufacture of traditional artefacts and crafts and also promote the culture of life-long learning.

Agyepong (2011) said in its Plan of Action for the second decade of education (2006-2015), the African Union (AU) recognised the importance of technical and vocational education and training as a means of empowering individuals to take control of their lives, and therefore, recommended the integration of vocational training into the general education system. He said, the union also recognized the fact that vast numbers of young people were outside the formal school system and consequently

recommended the integration of non-formal learning methodologies and literacy programmers into national TVET programmers.

Agyepong said before the new educational reform in Ghana in 2007, TVET provided undulating years of training, was underdeveloped and wrongly perceived, but indicated that the framework of training under the TVET in the new educational reform sought to provide employable skills through formal and informal apprenticeship training. He said, the awareness among policy makers in many African countries of the role TVET could play in national development had increased the importance the Government of Ghana attached to TVET. He said, TVET delivery systems were well placed to train the skilled and entrepreneurial workforce needed to create wealth and help the country come out of poverty, adding that the informal sector absorbed more than 90 per cent of all those who acquired skills training in the country. He said the incorporation of basic vocational skills into the junior high school curriculum was an attempt to expose young people to pre-employment skills.

2.3.11 Objectives of Vocational Education in Ghana

According to the Dzobo Committee, the Educational Reform Review Committee and Vision 2020 (CRDD Trainers Manual on the Use of School Syllabus, 2001), the main objective for vocational education as in recent information points out that technology is now the dominant factor in the developing countries. The use of information technology has revolutionized the nature of industries giving rise to a new type of education and training. The emphasis, however, is more on developing people with creative minds and multiple skills. Vocational education also seeks to give persons the ability to acquire basic skills; acquire problem solving skills through the use of the

design process, to develop a creative mind capable of identifying a variety of problems within his/her environment;and to use imagination to create solutions to existing problems. The introduction of Basic Design and Technology in the Junior High school curriculum is intended to provide persons with basic skills in technology education. The subject therefore offers the pupils the chance to acquire valuable skills that will open up a wide range of opportunities for productive work.

2.4 Teaching

Farrant (1999) stated that teaching and learning are opposite sides of the same coin, for a lesson is not taught until it has been learned. Teaching therefore can be thought of as a process that facilitates learning. As stated in Microsoft Encarta 2009, teaching is a systematic presentation of facts, ideas, skills, and techniques to students. It is therefore fundamental for the researcher to delve into teaching technicalities and which appropriate on use to execute the project. Teaching can also be viewed as the way in which a teacher transmits or imparts accumulated knowledge, skills, attitudes and values to learners. Farrant (1996) asserts that teaching is a process that facilitates learning. This involves creating an environment to facilitate learning and motivating learners to have interest in what is being transmitted to them (Tamakloe et al, 2005), implying that what the pupil see, hear and do in the classroom is what the teacher provides for them as well as what the pupils are ready and able to learn (Farrant, 1996). This implies that the teacher should make sure the content of the lesson is within the reach of the pupils.

Thring (as cited in Tamakloe et al, 2005) in his bid to isolate the qualities of teaching has this to say: “Teaching is not pouring out knowledge neither is it hearing lesson….

Teaching is getting at the heart and mind so that the learners begin to value learning and to believe that learning is possible in their own case".

In other words, Thring is saying that through teaching, learners must not only be made to love learning and appreciate its importance, but should also be equipped with the skills of learning on their own when the teacher ceases to be in the scene. It also means that after teaching, the pupil should be able to learn on their own without further instructions from the teacher. One of the most fundamental principles of teaching is that the student is guided to do things on his own, thereby helping him to establish his own relationship with the subject areas and his environments (Tamakloe et al, 2005). However, a lesson that is considered to have been taught is one that has been learned (Farrant, 1996).

In support of this assertion, Tomlinson and McTighe (2006) opined that teaching is judged by successful learning and that learners will inevitably and appropriately influence the effectiveness of the art we practice. In the same vein, a well-informed teacher commands respect of his students because he is able to recognise the appropriate learning material for the understanding of the pupils (Tamakloe el al. 2005). Teaching in the Basic Schools therefore demands that the teachers have a good mastery of the subject matter so that they can effectively deliver the contents in a comprehensive manner to the learners.

2.4.1 Good Teaching

Good teaching is the type of teaching that is specific to the needs and the abilities of pupils. It is enjoyable and at the same time sustains the interest of pupils in the teaching and learning process. According to Dewar (2002), all good teaching starts with specific, clear and measurable goals and objectives. Goals are those general statements of outcomes whiles objectives are how the goals are to be reached. Good teaching is now understood to involve a process of facilitating learning rather than being the simple transmission of knowledge from the teacher to the learner (Smith & Blake, 2005). This means teachers can facilitate learning by creating situations that allow pupils to pursue their interest actively, observing pupils as they learn and expanding opportunity for pupils to learn. It also means that BDT (sewing) teachers at the JHS should teach to address the specific needs of the pupils in their classroom and in commensuration with their abilities.

2.4.2 Characteristics of Good Teaching

In describing the characteristics of good teaching, Farrant (1996) states that the teacher structures teaching in relation to the pupils, the curriculum, resources and teaching methods. Farrant adds that teachers require a good knowledge of child development to structure the teaching well. Leblanc (1998) identifies the following as good teaching:

i. Good teaching is as much about passion as is about reason. It is about not only motivating pupils to learn, but teaching them how to learn, and doing so in a manner that is relevant, meaningful, and memorable. It is about caring for the BDT, having a passion for it, and conveying that passion to everyone, most importantly to the pupils.

ii. Good teaching is about substance and treating pupils as consumers of knowledge. It is about doing one's best to keep on top of the field, reading sources inside and outside of the areas of expertise, and being at the leading edge as often as possible. Good teaching is also about bridging the gap between theory and practice.

iii. Good teaching is about listening, questioning, being responsive, and remembering that each pupil in the classroom is different. It is about eliciting responses and developing the oral communication skills of the quiet pupils. It is about teaching pupils to excel; at the same time it is about being human, respecting others, and being professional at all times.

iv. Good teaching is about caring, nurturing, and developing minds and talents. It is about devoting time, often invisible, to every student. It is also about the thankless hours of grading, designing or redesigning courses, and preparing materials to still further enhance instruction.

2.4.3 A Good Teacher

A good teacher is through whom the pupils in his class learn what is outlined in the structural goals and objectives contained in the syllabus and the lesson plan and do so without superhuman effort on either the teachers "or pupils" parts (Dewar, 2002). He maintains that a good teacher is one who provides the environment where learning can be effective and enjoyable for both the pupils and the teacher. What this means is that teachers in the basic schools should also make sure that a good learning classroom condition is provided for pupils so as to sustain their interest in the subjects they teach. This will intrinsically motivate pupils in the basic schools to learn.

2.4.4 Characteristics of a Good Teacher

The question of what makes a good teacher has resulted in an endless plethora of ideas, opinions, and theories. In discussing what makes a good teacher, many authors have produced lists of what they consider to be important variables. What makes a good teacher, according to Taylor and Wash (2003), Dewar (2002) and Tate (1993) are the following:-

i. A good teacher is an effective communicator: The general rule of good presentation, voice and volume, gesture, and humour are all essential communication elements. Teacher should be able to combine humour, storytelling and the content of the lesson in a way that will bring understanding, enhance learning and sustain the interest of the pupils in the subject.

ii. A good teacher should have a sound knowledge of his subject matter: the teacher should be highly knowledgeable in their area of expertise. Teachers should therefore make sure that they have their subjects matter at their fingertips before going to their various classrooms to teach. Farrant (1996) maintains that good teaching in schools demands of the teacher sound knowledge of all that the pupils must know, together with an ability to relate the content, methods, sequence and pace of the work to the individual needs. Teaching in the basic schools also demands the teachers to have a good mastery of the subject matter so that they can effectively deliver the content in a comprehensive manner to the learners. This means that teachers in basic schools should have ample and up-to-date knowledge of the subject they teach.

iii. A good teacher is accessible: Teachers must open their doors for as many hours as possible for their pupils to have access to them. This provides an opportunity for

each pupil to communicate directly to them so as to be able to address the individual needs of the pupils properly. Being approachable gives the teacher more information and feedback about the pupils and what is taught. Access involves pupils being able to go the teacher at all times and also having access to the materials the pupils are expected to learn.

A good teacher has empathy: Good teachers are those who are able to identify with and understand the needs and the feelings of their pupils to be able to relate well with them to bring about meaningful learning. It is important to remember that whatever is taught must somehow relate to the experience of the pupils. This view reflects in Mc Alpine and Weston (2002) suggested that getting to know your pupils is a key to being a good teacher. Pupils have different learning needs and for a teacher to address each pupil's needs, he or she must empathize with the learner and structure teaching methods to suit the needs of the pupils. What this means is that teachers of basic schools who want to teach effectively should exhibit the aforementioned characters and allow them to be part and parcel of their lives.

2.4.5 Effective Teaching

Bastick (1995) defines effective teaching as maximizing pupils' academic attainment and pupils' lesson satisfaction. He states that effective lesson can be measured by using the three ability Framework which consists of technical skills, professional competence exhibited through the use of wide variety of strategy, and professional attitude such as being approachable and to learners. Butt (2008) maintains that effective teaching is dynamic, receptive, responsive and approachable, not static and over programmed; meaning that teachers' pedagogical knowledge should not be static

but must change in response to the content and the learners with whom it is being shared. According to Lockheed et al, (1994), effectively teaching is governed by the individual teachers' knowledge of the subject matter and the mastery of pedagogical skills which involves:

i. Presenting materials in a rational and orderly fashion, pacing the lesson to the pupils' level and taking into account individual differences;
ii. Allowing pupils to practice and apply what they have learned particularly in relation to their own experience;
iii. Letting pupils know what is expected of them, and,
iv. Monitoring and evaluating the performance pupils so that they learn from their mistakes (p.47).

The implication of this is that for effective teaching and learning in general and in the Basic Design and technology in particular to take place in the public basic schools, teachers must plan their lessons and teach with the aforementioned points in mind in order to make their classroom teaching effective.

2.4.6 Effective Teacher

Colker (2008) reports four characteristics of an effective teacher:

i. Having a sound knowledge of the subject matter.
ii. Taking personal interest in each pupil.
iii. Establishing a caring or loving or warm atmosphere and
iv. Showing enthusiasm with pupils.

Colker further reports 12 characters of teachers that pupils believe are integral factors to effective teaching by extension, learning. These are passion, perseverance, willingness to take risks, pragmatism, patience, flexibility, respect creativity, authenticity, love of learning, high energy and sense of humour. In addition, Ong and Smithberger (2006) indicate that effective teachers observe what their pupils do in the setting, whether in the classroom or outside, they give them time for practice repetition, communicate with pupils about their play and discoveries and then offer suggestions to help the pupils expand their exploration and experimentation. The implication is that teachers who want to teach effectively in the basic schools in general Basic Design and Technology in particular should possess or develop the aforementioned characteristics so as to help their pupil learn effectively.

2.4.7 Methods of Teaching

Annor (1997 p.126) said that "one of the symptoms of good teaching is the use of suitable and effective methods of teaching". He also said that the principles the teacher must observe with regard to methodology are:

i. He must vary methods by which ideas and skills are presented. The skilful teacher uses several methods during the same lesson to avoid monotony.
ii. Methods should be related to the stages of growth and development of learners.
iii. Selection of a particular lesson method depends on the duration of the lesson, materials and equipment available in the school and the number of teachers teaching the lesson.

2.4.8 Teaching methods include:

Expository or Lecture Method

In the expository method of instruction, Annor (1997) says the teacher presents information to the student by means of lecture, teacher-led-discussion or films. This method is also called direct instruction. For this method to be successful, the teacher must:

i. Have an outline of his talk to guide him.

ii. Not talk too fast.

iii. Adapt a language that is suited to the level of understanding of the learners.

Use illustrative materials and gestures to clarify meaning or to assist in understanding.

Advantages of Lecture Method

There are a number of advantages to lectures. For example, a lecture is a convenient way to instruct large groups. If necessary, a public address system can be used to amplify the speaker's voice. Lectures can be used to present information that would be difficult for the student to get in other ways, particularly if the students do not have the time required for research, or if they do not have access to reference material. Lectures also can usefully and successfully supplement other teaching devices and methods. A brief introductory lecture can give direction and purpose to a demonstration or prepare students for a discussion by telling them something about the subject matter to be covered.

In a lecture, the instructor can present many ideas in a relatively short time. Facts and ideas that have been logically organized can be concisely presented in rapid sequence. Lecturing is unquestionably the most economical of all teaching methods in terms of the time required to present a given amount of material. The lecture is particularly

suitable for introducing a new subject and for explaining the necessary background information. By using a lecture in this way, the instructor can offer students with varied back- grounds a common understanding of essential principles and facts.

Disadvantages of Lecture Method

Although the lecture method can help the instructor meet special challenges, it does have several drawbacks. Too often the lecture inhibits student participation and, as a consequence, many students willingly let the instructor do all the work. Learning is an active process, and the lecture method tends to foster passiveness and teacher-dependence on the part of the students. As a teaching method, the lecture does not bring about maximum attainment of certain types of learning outcomes. Motor skills, for example, can seldom be learned by listening to a lecture. The only effective way students can perfect such skills is through hands-on practice.

The lecture does not easily allow the instructor to estimate the students' understanding as the material is covered. Within a single period, the instructor may unwittingly present more information than students can absorb, and the lecture method provides no accurate means of checking student progress. Many instructors find it difficult to hold the attention of all students in a lecture throughout the class period. To achieve desired learning outcomes through the lecture method, an instructor needs considerable skill in speaking. A student's rate of retention drops significantly after the first 10-15 minutes of a lecture period and picks up at the end. In addition, the retention rate for a lecture is about five percent after 24 hours. In comparison, the rate of retention for active learning goes up dramatically. An instructor who can introduce some form of active student participation in the middle of a lecture will greatly

increase retention. One form of active learning that has been successfully used is cooperative or group learning (Annor, 1997).

2.4.9 Discovery Method of Instruction

Annor (1997) is of the view that in this method, students find things out for themselves rather than being told everything by the teacher. A distinction is made between complete and guided discovery. Complete discovery implies letting students solve problems on their own without teacher mediation. In guided discovery, the student is frequently given guidance while in the process of discovering.

2.4.10 Programme Instruction Method

Annor (1997) opines that, this is a procedure for coping with differences among learners. Programme Instruction is a device that presents instructional materials in progressive sequence (steps) without the help of a teacher. In one kind of programme, each step builds on earlier one. Typically, the programme starts with something familiar to the learner and leads him by small steps to increasingly difficult and less well-known material. The learner sequence may be contained in memory drums, disk and tape recordings or programmed books. There are two types of programmed Instruction:

i. Linear Programmers developed by Skinner.

ii. Branching Programmers developed by Crowder.

In the linear programme, the learner is presented with small steps and he must respond to each subsequent step. Moreover, the steps that must be taken are the same for all learners. In a Branching Programme, multiple-choice questions and large units

of instructions are involved. If the student makes a correct choice, he proceeds normally. If he makes an error, Castling (1996), he is corrected through the instruction media which is the main process used to teach skills. According to Castling there are two main methods of instruction teaching which is the coaching and demonstrating. Based on Castling's explanation demonstration involves an expert practitioner modelling a desired way of performing a skill. It is usually followed by an opportunity for learners to try performing the skills for themselves under close supervision. *Coaching* is usually carried out one to one during the job itself or during a period of simulated practice; it involves close attention to the learner's performance, pointing out how it can be adapted or improved.

2.4.11 Demonstration-Performance Method

According to Annor (1997), this method consists of showing the learner how Demonstration Method skill should be performed. This is performed by the teacher while the learners observe. This is accompanied by explanation of how the skill is demonstrated. This method is based on the assumption that by seeing exactly what takes place, the student will learn more effectively. For a good demonstration teaching, the teacher must:

i. Arrange the group so that all can hear and see clearly.
ii. Have all needed materials and equipment's at hand and properly arranged.
iii. State objectives to motivate students.
iv. Make tie up with previews and future lessons.
v. Explain thoroughly each step in the operation as it is being performed.
vi. Emphasize each key step.
vii. Perform operations skilfully.

viii. Use questions to good advantage.

ix. Assign students to work stations effectively.

x. Follow up and check individual performance.

xi. Keep others constructively occupied while demonstrating to part of the group.

xii. Stress safety precautions.

xiii. Speak directly to the students, not to the equipment or wall.

xiv. Summarize the demonstration.

Also, this method of teaching is based on the simple, yet sound principle that we learn by doing. Students learn physical or mental skills by actually performing those skills under supervision. An individual learns to write by writing, to weld by welding, and to fly an aircraft by actually performing flight manoeuvres. Students also learn mental skills, such as speed reading, by this method. Skills requiring the use of tools, machines, and equipment are particularly well-suited to this instructional method (Figure 1).

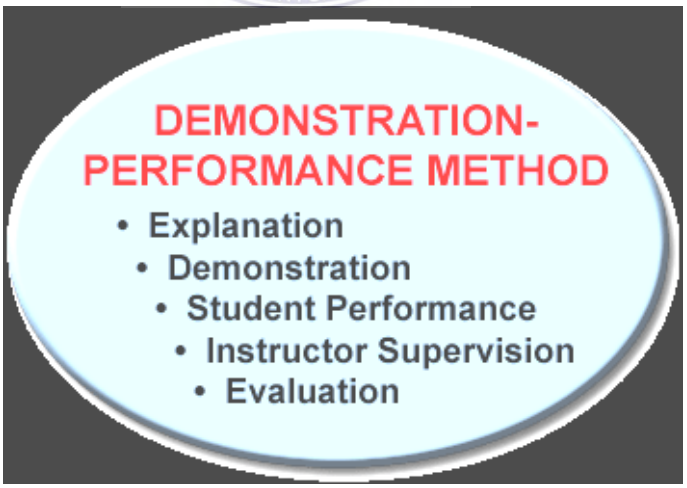

Figure 2.1: Demonstration-Performance Method of Teaching

http.//www.best-teaching.com/10292620-demonstration-performance-method (retrieved- 27th March, 2010).

Every instructor should recognize the importance of student performance in the learning process. Early in a lesson that is to include demonstration and performance, the instructor should identify the most important learning outcomes. Next, explain and demonstrate the steps involved in performing the skill being taught. Then, allow students time to practice each step, so they can increase their ability to perform the skill. The demonstration-performance method is widely used. The science teacher uses it during laboratory periods, the aircraft maintenance instructor uses it in the shop, and the flight instructor uses it in teaching piloting skills. Annor, K. (1997).

Explanation Phase:

Explanations must be clear, pertinent to the objectives of the particular lesson to be presented, and based on the known experience and knowledge of the students. In teaching a skill, the instructor must convey to the students the precise actions they are to perform. In addition to the necessary steps, the instructor should describe the end result of these efforts. Before leaving this phase, the instructor should encourage students to ask questions about any step of the procedure that they do not understand.

Demonstration Phase:

The instructor must show students the actions necessary to perform a skill. As little extraneous activity as possible should be included in the demonstration if students are to clearly understand that the instructor is accurately performing the actions previously explained. If, due to some unanticipated circumstances the demonstration does not closely conform to the explanation, this deviation should be immediately acknowledged and explained.

Student Performance and Instructor Supervision Phases:

Because these two phases, which involve separate actions, are performed concurrently, they are discussed here under a single heading. The first of these phases is the student's performance of the physical or mental skills that have been explained and demonstrated. The second activity is the instructor's supervision.

Student performance requires students to act and do. To learn skills, students must practice. The instructor must, therefore, allot enough time for meaningful student activity. Through doing, students learn to follow correct procedures and to reach established standards. It is important that students be given an opportunity to perform the skill as soon as possible after a demonstration. In flight training, the instructor may allow the student to follow along on the controls during the demonstration of a manoeuvre. Immediately thereafter, the instructor should have the student attempt to perform the manoeuvre, coaching as necessary. In another example, students have been performing a task, such as a weight and balance computation, as a group. Prior to terminating the performance phase, they should be allowed to independently complete the task at least once, with supervision and coaching as necessary.

Evaluation Phase:

In this phase, the instructor judges student performance. The student displays whatever competence has been attained, and the instructor discovers just how well the skill has been learned. To test each student's ability to perform, the instructor requires students to work independently throughout this phase and makes some comment as to how each performed the skill relative to the way it was taught. From this

measurement of student achievement, the instructor determines the effectiveness of the instruction.

2.4.12 Class Discussion Method

This is a method which can be used with the entire class to review information, to clarify ideas and to solve problems. It is conducted as a period of oral comments, questions and answers led by the teacher in which class members actively participate. Discussion can often be used during the presentation stage of a lesson, following some other means of presenting information. It may sometimes also be effective during the application stages of a lesson in developing with the class the application to specific situations of information previously presented. For discussion to be successful, the teacher must: Give the class the topic in advance to consider. Prepare in advance the questions around which to develop the teacher leads the learners to examine a number of cases which eventually leads to establishment or rule of formula. In this, learners proceed from the particular to the general. In the Deductive phase (application step) the learners apply the rule or formula discovered or established to particular cases not used in the inductive step. And so in these learners proceed from the general to the particular.

2.4.13 Experimental Method

This method lends itself particularly well to the teaching of the sciences. It is accomplished by presenting directly some basic principles and then the learners opportunity to verify the principles by experimental means i.e. by verifying the principles using suitable equipment's and materials for the sake of emphasis and complete understanding of known principles and to impress them on the minds of the

learners. An experiment can be performed by the teacher for the benefit of the entire class or it can be performed by the learners in small groups, in pairs or individually (Annor, 1997).

2.4.14 Project Method

In this method of teaching, students learn by working out project. These consist of all educational activities, mental and manual, performed by the learners individually or in groups. Some of the projects or activities which learners can undertake are farming, weaving mats and collecting materials for the writing of the history of their locality. According to Annor (1997 p. 136) for a project method to be successful:

i. The teacher must ensure that the learners undertaking an activity understand well what they are to do.
ii. Teacher must ensure that he secures the equipment and the facilities for the project before it starts.
iii. Careful supervision and control of learners is necessary to prevent chaos and to ensure that the learners do the right thing.
iv. Where all the learners undertake a project, the teacher must see to it that all the learners take part in the work.
v. The teacher must avoid excessive intrusion on interference if the activity is not to lose it naturalness and if the learners are to have the opportunity to plan and create for themselves.

2.4.15 Dramatic Method

In this method, the learner learns by imitating or putting himself in the place of others. The method can be conveniently used in subjects like literature, history, civic and

religious knowledge. Where a learner puts himself in the place of others, he will behave accordingly by Annor (1997 p. 137):

i. Remember more of the materials learned.

ii. Form a greater understanding of the subject than the mere words could impress upon him.

iii. Thoroughly enjoyed himself.

2.4.16 Question Method

This method is also called the Socratic Dialogue. It involves students being led through questioning to discover for themselves. Socratic Dialogue is operationalized, specifying guideline such as,

i. Starting with what is known.

ii. Asking for multiple reasons.

iii. Forming general rule from specific cases.

iv. Picking counters examples when sufficient reason is given.

v. Using extreme case examples.

vi. Probing for the difference between cases and

vii. Using prediction questions.

A teacher can use this method for several purposes to inform, to make decisions, to establish truth, to review lessons and as an aid to other methods (Annor, 1997).

2.4.17 Inquiry/Problem Solving Method

Annor (1997) confirms that, learners inquire into a problem with a view to finding answers to reasons why a problem exists. Learners try to obtain their answers using accepted data comprising

a. Statement of problem.

b. Analyzing the problem.

c. Finding alternative solution to the problem.

d. Considering the merits and demerits of each solution.

e. Actual testing of selected solution.

2.4.18 Directed Study Method

This presentation of information to learners by having them read selected material. This is accomplished by supplying each learner in the class with a copy of the material to be studied and providing suitable conditions for study. This method can be applied to large or small groups or events to individuals. For the method to be successful, the teacher must:

a. Provide proper reference material.

b. Provide proper conditions for study.

c. Have study done under his direction.

d. Use reading-questioning procedure.

e. Keep study within reasonable limits if the learners are to remain alert and interested (Annor, 1997).

2.4.19 Illustrated Short Talk

According to Annor (1997), this is a short talk designed to provide learners with the key items of information or to emphasize points presented by some other method. Occasionally, it is a means of presenting information which is not readily available to the students through other sources. Economy of time is one of its chief advantages and one of its chief disadvantages is that it is not suitable for presenting skills. For this method to be successful, the teacher must:

a. Keep the talk short – between 15 and 20 minutes.

b. Make an outline of his talk. Wandering talks are bad.

c. Speak clearly and audibly.

d. Make sure learners are comfortably seated.

e. Illustrate his talk verbally and graphically.

f. Conclude his talk with a short question and answer period.

2.4.20 The Excursion/Field Trip Method

According to Annor (1997), a teacher and his students may make an excursion to a particular place for pleasure (recreation) and for sightseeing e.g. an excursion to a zoo or a factory. An excursion may also be used by a teacher as a method of review e.g. a lesson on waterfalls may be followed by a visit to a waterfall.

2.4.21: Individualized Method

Annor (1997) has the view that this method allows the teacher to secure attention for each learner and enables each learner to work at his own pace. One of the personalized systems of instructions is the Keller Plan. The principle features of this

plan are:

a. Breaking down the course material into basic individual units each with clearly defined aims.
b. Provides a study guide for each unit. This will provide a detailed objectives and instructions for the use of the materials provided. It will also refer the student to appropriate reading materials and to related practical work.
c. Students work through the unit at their own pace. When they are ready, students take a test which they must pass before they can go on to the next unit.

2.4.22 Team-Teaching Method

Nature of team teaching: Two or more teachers combine in either presenting a lesson or preparing a lesson or evaluating a lesson.

2.4.23 Micro –Teaching

This is a training method designed to divide the teaching process into parts so that the student can master each part in a simplified teaching situation.

2.4.24 Simulation Method

This is a training method in which the student teacher tries to solve some of classroom problems which he is likely to encounter in real classroom. These problems are artificially created for him through games, films, or other media. An example is the presentation of classroom discipline through a film and stopping the action just as the problems is to be solved and then asking the student to describe how he would solve it.

2.4.25 Interaction Analysis Method

This is also a performance training method which allows the student teacher to observe the number and kind of interactions that take place in the classroom. Interaction analysis may be done by someone who observes the student's performance or by the student himself on other teachers' performance or with the aid of audio or visual recording equipment on his own performance.

This method always needs an observer who has a form on which the actions of the teacher and the pupils in the classroom are recorded every few seconds. For example, the observer notes every 3 seconds the action occurring-whether the teacher is asking a question, speaking, a student is asking a question or there is a silence. The purpose of this method in to determine the amount of time the teacher talks in proportion to the amount of time the students talk. Another purpose is to determine the nature of interactions – whetherthey are teachers' questions and students' answers, students' questions and teacher's answers students questioning each other.

This system provides rapid feedback; self-evaluation, self-motivation and self-improvement are stimulated. The process also reveals discrepancies between what the teacher intends to do and what actually he does. According to www.teachpe.com/sports_psychology/teaching.php, during lessons and training sessions, the teacher or coach must provide guidance to the learner to ensure they learn effectively. To do this the demonstration and practice of the new skill will be manipulated by the teacher to best suit the learner. There are four parts to teaching a new skill: Instructing - instructions must be given for them to complete the task or skill. These may be written or verbal. The teacher must ensure that the student knows what is required of him or her.

Demonstrating - The teacher may provide a demonstration of the skill or may get a peer to perform it. It is a key that is a good demonstration to allow the student to form a model in their memory and mentally rehearse the skill to be performed.

Applying - The student then practices the skill in a planned situation to help them transfer the learning from practice to a competitive situation.

Confirming - This is all about feedback and providing information for the student about how successful they have been. Testing or assessing the skill allows the teacher and the student to evaluate performance. The researcher is going to use observation and interview methods to judge the pupils since it is the best methods for him to be able to collect and analyze data.

Castling (1996) stated that instruction is the main process used to teach skills. According to Castling there are two main methods of instruction teaching. These are coaching and demonstrating. Based on Castling's explanation demonstration involves an expert practitioner modelling a desired way of performing a skill. It is usually followed by an opportunity for learners to try performing the skills for themselves under close supervision. Coaching is usually carried out one to one during the job itself or during a period of simulated practice; it involves close attention to the learner's performance, pointing out how it can be adapted or improved.

2.5 Learning

It is very important to note that for teaching to be complete, learning must be accomplished first. Based on this information the researcher found it necessary to look at the definition of learning. It is common to think of learning as something that

takes place in school, but much of human learning occurs outside the classroom, and people continue to learn throughout their lives. Microsoft Encarta (2007) defines Learning as acquiring knowledge or developing the ability to perform new behaviours. Farrant (1999) states that 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.

In this research, the researcher employed observation which is part of learning. This type of learning practice took place between the researcher, the pupils and teachers of the selected schools. It is therefore important that the definition of learning be made open to the public. There are various instances of learning. We learn to do something, to feel something or not do, be, think or feel something. In every case, the learner learns to do something. Further, what he learns to do is in response to a particular kind of situation. Finally, we do not commonly speak of learning unless the kind of situation in question previously initiates a different form of response. Briefly, to learn is to adopt a new response to a situation.

Learning has also been defined as a change in behaviour as a result of experience or education. This definition has three elements:

a. Learning is a change in behaviour, for better or worse.
b. It is a change resulting from experience or education. Therefore, changes resulting from growth, maturation and injury are not learned.
c. The change in behaviour is relatively permanent i.e. must last for a fairly long time. Therefore, change in behaviour resulting in from fatigue, drugs, alcohol and diseases are not considered as learned.

2.5.1: Kinds of Learning

The following are some kinds of learning that some psychologists have given:

a. Motor learning: This is the learning that involves muscular coordination and physical skills e.g. learning to type, drive a car, dance, swim, write and walk.
b. Affective learning: This involves changes in attitudes or emotions as a result of experience.
c. Cognitive learning: This is learning involving information or ideas.
d. Insight learning: This is the sudden appearance of a solution to a problem.
e. Trial-and Error-Learning: This is the kind of learning based on the idea that when placed in a problem situation the individual will make a number of variable responses but will eventually learn the correct one as a result of reinforcement (Farrant, 1999).

2.5.2 Theories of Learning

Theories of learning describe and predict the condition governing the appearance or non-appearance of behaviour. They may broadly be divided into two-behaviourism and cognitivism (Farrant, 1999).

2.5.3 Factors Affecting Learning

There are many conditions which influence or affect learning. As Tamakloe et al. (2005) indicate one of such factors is Management of learning: If some pupils are not learning as effectively as the teacher would want them to, it might be due to how the teacher manages the environment. In recent years there has been growing concern that teachers do not know or understand enough about the subject they teach (Short, 1995)

and therefore find it difficult to organize the content in a comprehensible form for pupils and thereby frustrating pupils' efforts to understand.

It is pertinent for JHS teachers to manage the learning environment in a way that will bring about effective and efficient learning particularly in the Basic Design and Technology by not feeling the classroom with pupils' and teachers' art works but also the teacher having a firm knowledge and understanding of the interplay child development and learning. The fact is that development in one area affects and is influenced by development in all other areas and therefore teachers have to play close attention to every area of the child's development; the physical, mental and social dimensions, when guiding pupils' learning in the JHS. This implies adjusting teaching methods to suit the demands of various developmental stages and hence factoring individual differences in the teaching and learning process.

Knowledge of child development gives a better understanding of the effect of maturation and readiness in learning so teaching has to suit the various levels maturation. It is important that teachers have knowledge of child development so that the teacher can comprehend the intellectual, emotional, social and physical growth of their pupils, this can guide basic school teachers to employ the appropriate techniques for transfer of learning and also organise teaching to maximise retention and avoid forgetting.

2.5.4 Behaviourism

The behaviourists contend that humans and animals have the same neuron-physiological structures in their brains. Consequently, their learning processes and capabilities are the same. To them, therefore, common laws explain both human and

animal learning. This belief led the behaviourists to study animals like dogs, rats and pigeons and generalized their finding to human learning (Annor, 1998).

2.5.5 Educational Applications of Behaviourism

Behaviourism has produced the following teaching principles:-

a. The teacher must make up his mind the purpose of his teaching deciding the message components of the subjects he teaches and making up his mind the behaviour he wants his students to exhibit.

b. The teacher must be aware that conflicting and competing stimuli impinge on the learner which could distract his attention. Therefore, the teacher must judge from his experience of children and the classroom situation what conditions must be eliminated and what may safely be retained to promote effective learning.

c. The teacher must give learners the opportunity to practice with the ideas, skills and concepts learned so that there will be consolidation and mastery.

d. There should be reinforcement e.g. praise and encouragement to motivate learners to learn harder and with enthusiasm.

Instructional procedure must consist of systematic presentation of material in small steps until full understanding is achieved (Annor, 1998).

2.5.6 Cognitivists

The cognitivists argue that most human learning differs qualitatively from those of animals in terms of their complexity. This is because humans have superior intelligence and symbolic processes such as language which aid learning. These processes which are absent in animals make humans qualitatively different from

animals in terms of marked increase in the complexity of what they learn. We use a variety of unobservable mental processes such as thinking, organizing, analyzing, synthesizing, storing and retrieving to take in and manipulate information about our environment. The cognitive theory explains fairly complex learning such as concept formation, problem solving, understanding and information processing. The best-known cognitive theorists are Jerome Bruner and David Ausubel.

Bruner advocates the use in schools of discovery method of instruction in which students find things out for themselves rather than being told everything by the teacher. For discovery to be effective, Bruner says that the teacher must teach so well to reveal the basic elements of the subject matter (Structure), he must relate material to the child's level of cognitive development (sequence), he must develop the learner's interest in the subject (motivation) and he must ensure that the educational experience is satisfying (reinforcement).

Learning occurs in four major ways Transmission, Acquisition, Accretion and Emergence. Transmission is the process by which information; knowledge, ideas and skills are taught to others through purposeful, conscious telling, demonstration and guidance. Over the course of a lifetime, this method accounts for only about 10% of learning. Unfortunately, this is the most traditional and, currently, the most predominate, method of instruction. However, we are finding out it is not very effective and moving toward acquisition and emergence, and examining the lessons of accretion. Acquisition is the conscious choice to learn. Material in this category is relevant to the learner. This method includes exploring, experimenting, self-instruction, inquiry, and general curiosity.

Currently, acquisition accounts for about 20% of what we learn. Accretion is the gradual, often subconscious or subliminal, process by which we learn things like language, culture, habits, prejudices, and social rules and behaviours. We are usually unaware that the processes involved in accretion are taking place, but this method accounts for about 70% of what we know. Social learning certainly plays into this type of learning, as does the hidden or covert curriculum. Emergence is the result of patterning, structuring and the construction of new ideas and meanings that have not existed before, but which emerge from the brain through thoughtful reflection, insight and creative expression or group interactions.

This form of learning accounts for the internal capacities of synthesis, creativity, intuition, wisdom, and problem-solving. This method is greatly dependent on the allocation of time, and opportunities to reflect and construct new knowledge. This method plays an important role in inspiration and originality. In the context of current educational practices, we learn only 1-2% by this method (Annor, 1997).

CHAPTER THREE

METHODOLOGY

3.1: Research Design

This chapter specifies the general strategy adopted to collect data for the study. It specifies the research design, data collection through visits to observe teaching and learning processes in the Basic Design and Technology in the selected private and the public JHS in the Amansie West District Assembly.

3.2: Population for the Study

Fraenkel and Wallen (1996) assert that a population is the group to which the research findings are intended to apply. The accessible population for the study was 363 pupils from six selected public and private JHS in the Amansie West District because it was not possible to extend the study to cover all the JHS in the District. However, data was collected from all the 6 schools to present an accurate picture of how BDT (Sewing) is taught in the schools.

3.3: Sampling Technique

The researcher used the Basic Design and Technology Programme in six Junior High Schools within the District. Of the six schools, two were private and four were public. This yielded a population consisting of 363 respondents consisting of 6 head teachers, 10 BDT teachers, and 363 pupils. The selection which took care of the two different categories of schools was also guided by factors such as convenience and accessible. The researcher also rated the six schools “information rich” and illuminative, because she found useful data required for the study during the preliminary survey she

conducted before the sample selection. The data collected by the researcher has been assembled in the form of tables, figures and discussions.

Table 3.1: Number of Questionnaires distributed to Selected Schools

School	Designation	Quantity
Manso Model JHS	A	15
MansoNkwanta D/A JHS	B	17
Antoakrom D/A JHS	C	25
Abore D/A JHS	D	22
True Faith JHS	E	36
Universal Manso JHS	F	18
Total	6	**133**

Copies of the questionnaire were distributed to selected pupils in each of the schools, their Sowing teachers and head teachers. In general, the total number of questionnaire distributed to pupils in schools under study is in Table 1.

Manso Junior High School (School A) was given fifteen (15) questionnaires. Manso Nkwanta D/A Junior High School (School B) was given seventeen (17) questionnaires. Antoakrom D/A Junior High School (School C) was given twenty-five (25) questionnaires. Abore D/A Junior High School (School D) was given twenty-two (22) questionnaires. True Faith Junior High School (School E) was given thirty-six (36) questionnaires. Universal Junior High School (School F) was given eighteen (18) questionnaires.

Head teachers and their art teachers were all served with questionnaires. Total number of questionnaires distributed out to art teachers and heads of the selected schools is in Table 2.

Table 3.2: Distribution of Questionnaires to Art Teachers and Head teachers

School	Art Teacher	Head teacher	No. of Questionnaires
A	2	1	3
B	2	1	3
C	3	1	4
D	1	1	2
E	1	1	2
F	1	1	2
Total	**10**	**6**	**16**

School A was issued with 3 questionnaire, 2 to art teachers and 1 to the head teacher. School B was issued with 3 questionnaire, 2 to art teachers and 1 to the head teacher. School C was issued with 4 questionnaire, 3 to art teachers and 1 to the head teacher. School D was issued with 2 questionnaire, 1 to the art teacher and 1 to the head teacher. School E was issued with 2 questionnaire, 1 to the art teacher and 1 to the head teacher. School F was also issued with 2 questionnaire, 1 to the art teacher and 1 to the head teacher. Total number of questionnaires distributed to pupils of the various schools is one hundred and thirty-three (133). Total number of questionnaire distributed to art teachers of the various schools were ten (10). Total numbers of questionnaire distributed to heads of the various schools is six. Total number of questionnaire eventually distributed to the six schools was one hundred and forty-nine (149).

Leedy (2005) states firmly and clearly that for quality research, at least, thirty percent (30%) of the population for study, is fair representation for an acceptable accuracy of results. The researcher used all pupils who were present in each day of his visit to the selected schools as his sample. This sampling method gave room to the researcher to conveniently select the various schools and use their pupils who are only in Basic nine, their teachers and heads.

3.4: Data Collection Procedures

Based on the researcher's topic of study, a hypothesis was proposed from which she sought for the necessary data gathering instruments. This allowed the study to be based on a geographical area of the Amansie West District.

3.5 Data Collection Instruments

The researcher used participant observation, unstructured interview and questionnaires to collect data from pupils, their teachers and head teachers.

3.5.1 Observation

Observation involves retrieving information, data or impressions on the field of research with the use of the researcher's senses. These senses may include looking, listening, smelling, feeling and any other in the quest to investigate a phenomenon, according to Leedy and Ormrod (2005). Observation is a powerful research instrument because in most cases it validates data gathered in an interview. For example, in this study, the researcher observed both the practical and theory works of pupils.

3.5.2 Types of Observation

Structured and unstructured observation: The observation is wide and unstructured in the early stage: it gets restricted and structured as the investigation proceeds. Participant and Non-participant observation. In participant observation, the observer works his way into the group he is to observe so that as a regular member, he is no longer regarded as an outsider against whom the group needs to guide itself. In non-participant observation, the observer stays out of the confines of the group. The researcher in this study employed the non-participant observation and an unstructured observation approach.

3.5.3 Interview

The researcher found out that, interviews and observations were more appropriate for this research because, most of the pupils were not very good enough to express themselves in writing more especially pupils in the selected public schools. Questionnaires and the other instruments were used for the teachers and their heads. This method gave room for a more friendly relationship with the interviewees/ respondents and it helped the researcher immensely in gathering the needed information for the research work. For the purpose of this study the researcher utilized both the “open ended” and “semi structured” type of interview.

The researcher also interviewed some of the pupils inside and outside the classroom. The art teachers and the heads were interviewed whilst they were given about a day’s notice before their interview which was held in their offices and their classrooms. Best (1998) states that an interview is, in a sense, an “oral questionnaire”. Respondents in this case gave the needed information verbally in a face-to- face,

instead of writing down responses as in the case of a questionnaire. Interview allows the interviewee to give out the best of what he or she knows since special rapport is built between the interviewer and the interviewee before the interview commences.

Nkpa (1997) also states that an interview is a face to face interaction in which questions are asked by the interviewer to obtain oral responses from the interviewee. He further said that interview is interaction within the interview situation; the interviewer and the interviewee; and the interview schedule. Therefore, for maximum success in the interview, the interview situation must be comfortable and permissive as possible; again the schedule must be flexible and acceptable to the interviewee. Some questions were just "yes or no" answers. Silverman (1993) as cited in Leedy and Ormrod (2005) makes it clearly that interviews can yield a great deal of useful information.

The researcher found out that, interviews and observations were more appropriate for this research because, most of the pupils were not very good enough to express themselves in writing more especially in the selected public schools. Questionnaire was used for the teachers and the heads. This method gave room for a more friendly relationship with the interviewees and it helped the researcher immensely in gathering the needed information for the research work. For the purpose of this study the researcher utilized both the "open ended" and "semi structured" type of interviews.

3.5.4 Interview Phase

For maximum satisfaction, preparation, rapport, questions and answers were critically designed as phase overlap and interaction.

3.5.5 Primary and Secondary Data

Primary data were gathered directly from the selected Junior High Schools in the Amansie West District through personal interviews, discussions and on-the-spot observation. The secondary data were also collected from university libraries such as KNUST-Kumasi, UEW both Kumasi and Winneba campuses, Ashanti library in Kumasi and Amansie West District library in Amansie.

3.5.6: Reliability and Validity of Data

To a very large extent, the data collected and used in the research can be said to be reliable and valid. Best (1981) states clearly that validity is the quality of an information gathering instrument or procedure that makes it able to measure what it was intended to measure. Leedy and Ormrod (2005) agree with Best (1981) by stipulating that the validity of a measurement of an instrument is the extent to which the instrument measures what it is supposed to measure. On reliability, Best (1981) does not only agree with Leedy and Ormrod (2005), but explains further that reliability is the quality of consistency that the instrument or procedure demonstrates over a period of time. From the information provided by these two authors, the researcher is of the view that validity is the quality or fineness of the data gathering instrument and reliability is the ability of the instrument to produce determined results on a consistent basis till some time.

3.5.7 Data Analysis Plan

Data collected were carefully compiled, synthesised, analysed, interpreted and conclusions drawn from them. Based on the conclusions and findings, recommendations were made and innovations introduced by the researcher.

Part I: The data collected in this section have been analysed in a descriptive form supported by tables. Several tables have been used to illustrate the data concerning the number of pupils, art teachers and heads sampled for the study, gender and their choices among the three courses. Art teachers of the selected schools who were involved in the study had their gender and qualifications checked. The gender of head teachers and their qualifications were also checked.

Part II: This section has been categorized into parts which deal with responses from questionnaires designed for teachers in the selected schools who teach courses under Basic Design and Technology and their head teachers and selected pupils. The aims were to find the roles played by each of the categories of schools and how teaching and learning of the programme are conducted.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1: Assembly of Data

This chapter consists of assembly of findings from questionnaires, interviews and observations. The analysis and the interpretation of data were made of the results from questionnaires, interviews and observations of the respondents. The results obtained were presented with the aid of tables. The data from the respondents were assembled in three categories:

Category One is on the information collected from pupils about the relationship among Pre-Technical Skills, Home Economics (catering and sewing) and Visual Arts embodied in the Basic Design and Technology Programme as well as the teaching effectiveness in the private and the public schools.

Category Two deals with responses from BDT teachers in the selected schools who teach any of the three courses in the programme to solicit for information on how these courses are being handled in their various schools.

Category Three looks at the responses from head teachers of the selected schools concerning their attitude towards Home Economics, pre-technical skills and visual arts. Number of Pupils studying BDT

In Table 3, it is noticed that pupils in all six schools study Pre-Technical skills, with 21 pupils studying Visual Arts. Antoakrom D/A JHS which offer all the three courses embodied in the programme while the others do not study visual arts rather only Schools A, B, C offer pre-technical skills and Home Economics. Manso Model JHS offers pre-technical skills and pre-vocational skills, Manso Nkwanta D/A JHS does pre-technical skills and pre-vocational skills. According to the table, Abore D/A JHS,

True Faith JHS and Universal Manso JHS offer only pre-technical skills, thus indicating that, the government schools cover more options than the private schools.

Table 4.1: Number of Pupils Studying BDT

School/Participants	A	B	C	D	E	F	Total
Number of pupils in each class	79	75	79	30	63	37	363
Number of pupils studying Visual-Arts	0	0	21	0	0	0	21
Number of pupils studying Pre-Technical Skills	42	42	28	30	63	37	242
Number of pupils studying Home Economics	37	33	30	0	0	0	626

4.2 Number of pupils Studying Home Economics

Among the six schools, schools A, B and C study Home Economics. Upon the researcher's interview with the head teacher of True Faith Junior High School, he said since it is obligatory for JHS One pupils to learn core skills, their sewing teachers make sure they teach them perfectly well before they go to JHS Two and finally to JHS Three. The researcher asked him why only one out of the three courses is being taught in their school. He said since they are not paid from the tax-payers' money,

they try to cut their cloth according to their size. He also said, they cannot employ three teachers for art alone and more so, one teacher will find it difficult to teach three courses. He further said the sewing teacher is always given the chance to select one among the three courses.

Table 4, shows the number of art teachers and their heads. The table also indicates that there are two Home Economics teachers, each for Manso Model JHS and MansoNkwanta D/A JHS except Antoakrom JHS which has three Home Economics teachers who teach the three Home Economics courses. The researcher interviewed all the head teachers of the private schools if their Home Economics teachers were all trained or professional art teachers. The researcher was informed that they did not have any professional Home Economics teachers or professional headteachers except the head teacher of True Faith JHS, who was a retired professional teacher. Upon thorough investigation it was realised that the heateacher of Universal Manso JHS was also pursuing a distance course in education to qualify him to become a professional teacher. The government schools when interviewed had trained heads and art teachers in their schools.

Table 4.2: Number of Home Economics Teachers of the Selected Schools

School	**A**	**B**	**C**	**D**	**E**	**F**
Sewing Teachers	2	2	3	1	1	1

Table 5, shows the total number of questionnaire given out to pupils at the time of the study. It was one hundred and thirty-three, fifteen questionnaires for Manso Model JHS (A), seventeen for MansoNkwanta D/A JHS (B), twenty-five for Antoakrom D/A JHS (C), twenty-two for Abore D/A JHS (D), thirty-six for True Faith JHS (E) and

finally eighteen for Universal Manso JHS (F) representing 100% of pupils from the selected schools that were issued with questionnaires.

Table 4.3: Total Number of Questionnaires Administered to Selected Pupils

School	A	B	C	D	E	F	Total
Boys	7	10	15	10	20	8	70
Girls	8	7	10	12	16	10	63
Total	15	17	25	22	36	18	133

Table 6 represents the total number of questionnaires issued to the heads and sewing teachers of the various schools. The researcher asked both head teachers and sewing teachers of Manso Nkwanta D/A JHS and Manso Model JHS why their schools are offering only two of the courses and not the three. The head and the art teachers of Manso Nkwanta D/A JHS said, they requested for a sewing teacher several times from the GES but it always yielded a negative response. The head also made a comment that most of his pupils especially the girls often worry him to get them a sewing teacher. It was unfortunate to hear from some pupils of the two selected private schools that whenever they asked their teachers about when sewing will be introduced into their schools, their teachers often responded they were not serious that is why they wanted a cheap course like sewing to offer.

Table 4.4: Total Number of Questionnaires Issued to the Heads and Teachers

Schools	**A**	**B**	**C**	**D**	**E**	**F**
Heads	1	1	1	1	1	1
Art Teachers	2	2	3	1	1	1
Total	3	3	4	2	2	2

4.3 Results Obtained from Questionnaires and Interviews

During the study, the public schools were noticed to be more into the Basic Design and Technology programme than their counterparts in the private schools in which the research was conducted in Antoakrom JHS for instance, a public school is seriously doing visual arts, home economics as well as pre-technical skills which happen to be the three subjects embodied in the BDT programme. During researcher's interview and observation, it was realized that Antwoakrom D/A JHS showed more interest in the BDT prgramme. About 60 percent of pupils in the school said they were going to do sewing at the senior high school, and 20 percent said they were also going to do general arts and business. This really gave positive response. When they were asked why they would not like to pursue sewing, about 10 percent said why they would not like to pursue sewing, about 10 percent of them said their parents had already advised them to do science and become medical doctors and engineers in future, few number of the 10 percent were adamant of their choice at the SHS.

The pupils together with their teachers at the Manso Model JHS who were doing home economics and pre-technical skills showed keen interest in all the two subjects they were doing under the programme. The learners were asked if they had adequate text books to cater for them, their responds was yes. They were also asked if they would do sewing at the SHS level. About 55 percent of them, said yes while about 30 percent said they would like to pursue general arts, the rest, 15 percent, said they would like to read science. Those who showed interest in sewing were asked why they prefer sewing; many said they would like to be great designers like Nike and the likes in future. And those who said they would read science said they would like to become science teachers, medical doctors, etc, and those for general arts said they

would like to become lawyers, meteorologist, etc. At Manso Nkwanta D/A Junior High School, the headmistress said they were doing pre-technical skills and home economics. When she was asked why her school was not doing sewing, she said she requested for some sewing teachers from the office of the Ghana Education Service but to no avail.

The three private schools in which the research was also conducted to my surprise were only doing pre-technical skills. When the head teacher of True Faith School was asked why they were doing only one subject out of the three subjects, he responded that they could only afford to pay remuneration of only one teacher under the BDT programme and that teacher is supposed to teach from JHS one to three. He said paying more than one teacher under the BDT will be disastrous for their institution. Just about 20 percent of their pupils said they would do sewing at the SHS. At the Abore JHS about 40 percent of them said they will do home economics at the SHS whilst at Universal Manso JHS about 25 percent of them said they will be doing home economics at the SHS.

Sewing (a skilful and experience practice), plays an important role in a teacher's success (Johnson, 2002). Because of the complexity of teaching and individual variation among students, effective teaching is not like the "one-size-fits-all" sock (Diaz, 1997). Teachers must master a variety of perspectives and strategies, and must be flexible in their application. This requires two key ingredients; Professional knowledge and skills, and commitment and motivation.

In the course of the study, three out of the six head teachers who happened to be in the private schools said that their pupils who study sewing or plan to study sewing are not serious or are academically weak. The researcher asked them if that is the reason why they do not take the other art courses seriously. Their response was always the same answer "we cannot afford to pay more than one teacher under the same programme" All of them but three had good notion about Art. They also said Art teachers had the responsibility of making their students enjoy the BDT programme by using good teaching skills and that pupils should have future goals in mind, they should also know, that education is the key to success. The four head teachers of the public schools gave their personal comments about sewing which were all positive. The comments are provided below:

a. Sewing should be given an abode in the future educational reforms as it can be found in all educational programmes in the country, for instance, all JHS should be provided with furnished shop.
b. The MOE and the GES should try their possible best to encourage pupils at the basic level to take sewing seriously since they can be entrepreneurs after school.
c. Pupils should always be encouraged by their sewing teachers to study sewing since it is very lucrative, hence, art is life.
d. Pupils should always be equipped with tools and materials during their sewing lessons.
e. Pupils should also be highlighted about the usefulness of sewing in recent times.
f. They should be advised continuously that sewing needs creativity and the desire to be able to do it substantially without any blemish.
g. Importance of sewing should most of the time be emphasized to pupils since it is the basis of development.

h. Pupils should be aware that the designer does the design for the scientist to develop the plan into reality.

i. The society should be made to be aware that sewing can make other courses thrive.

j. There should be a government policy on home economics that will enforce both the private and the public institutions especially the JHS level as they have been doing to the other courses.

4.4 Interview for Head teachers at both the Private and the Public Schools

Five of the head teachers in both the private and the public schools representing (83.3%) interviewee were male while 1 representing (16.7%) was a female. This shows how male head teachers outnumber female head teachers in these two categories of schools. The researcher believes that this might have cut across all the schools in the district. Each of the heads was able to give the researcher more information prior to her study.

4.5 Interview for Sewing Teachers

Nine of the sewing teachers comparatively representing (90%) interviewed were men whilst one representing (10%) was a woman. This shows how male teachers outnumber the female teachers. In this research, preferably male teachers love teaching the three courses under the Basic Design and Technology than their female counterparts. The only female was asked why she preferred teaching a course under the BDT, she said because her mother was a sewing teacher in one of the secondary schools, and that she also developed the interest in sewing when she was a child.

4.6 Interview for Selected Pupils

Out of 363 pupils, 140 of them were selected for interview. Among the one hundred and forty pupils, seventy-eight (78) of them were boys and sixty-two (62) girls were selected for interview to find out how much they loved the various courses. It was realized that boys outnumbered the girls confirming the statistical data obtained from the various schools of research. The researcher asked the pupils if they have sewing centre for their practical works. To her surprise, the only school that responded yes was the Antoakrom JHS, which happens to be a public school. The rest of the schools in both the private and the public did not have but they rather use their classrooms for their practical works. The pupils of Manso JHS said because of the absence of a workshop in their school they found it very difficult to practice on their own when their sewing teachers are absent. They also said that found it very difficult doing their practical works when they were given assignment simply because of the absence of a workshop in their school. This is a big blow to some of them who have keen interest in the sewing course. It was also realized that none of the sewing teachers found in the three selected private schools was a professional because of that they found it very difficult handling the courses embodied in the programme. The practical aspect, they said has their main problem. But in the public schools, researcher realized that their teachers were all professional teachers and therefore found their teaching of the programme easier, as compared to the private schools.

4.7 Number of subjects taught and learned in the Private and the Public Schools.

These schools in the Amansie West District were selected by the researcher since all the schools in the district could not have been possible used for his population. This is the main reason why only six of the schools were sampled for her population. Only

one of the six schools was offering all the subjects in the BDT programme. Two of the schools were also offering two of the three subjects in the programme and the other two schools who happened to be the private schools were offering one out of the three subjects.

It was realized that Antoakrom D/A JHS was the only school which was offering Pre-Technical Skill, Home Economics and Visual Arts (catering plus sewing) whilst Manso Model JHS and MansoNkwanta D/A JHS are doing Pre-technical Skills and Home economics. The researcher, upon visiting the Abore School, met the head teacher who gave him more insight on Basic Design and Technology and the way it is taught in their school. He said, in the first year, they teach them the core skills as the curriculum demands. The syllabus in the first year comprises the basic parts of the main programme. According to him, in Forms Two and Three some schools decide either to teach the three, the two or one of the three courses embodied in the programme. He said his school teaches only one of the courses because the stake holders of the school feel it is a waste to register all the three courses under the programme. They also said they would rather prefer to employ more teachers for Mathematics, English and Science. According to them the pupils can decide to study the programme when they pursue further to the second-cycle institutions. The head said in their school, no pupil is allowed to choose anyone of the courses in the programme by him or herself. Upon interviewing some of the pupils of the school about which of the courses they prefer, most of them said they rather prefer to study the home economics to the other two courses under the programme.

The researcher, upon contacting the head teacher of True Faith JHS realized that the result was almost the same as what she experienced at the Abore D/A JHS. The head

teacher, upon hearing that the researcher was coming to conduct a study in BDT in his school told the researcher that the proprietors of the school were not around so he could not give the chance to conduct the study. The researcher went back to the school on several occasions and he kept telling him the same old story. One faithful morning, as the researcher went there she told him the same story again. Fortunately and unfortunately, one of his proprietors came out to the researcher's rescue. The researcher told him her story and he allowed him to conduct the study in the school. During researcher's interview, she got to know from some of the pupils that though they are doing Pre-technical and Home economics, their sewing teachers do not teach them the subjects effectively so it is making them loose interest in art. They said, their BDT teachers try to teach the theory part when examination is approaching without teaching them the practical aspect of the subjects. According to some of the heads and their art teachers, factors that are responsible for these problems are lack of encouragement for pupils with creative ability, lack of tools and materials for pupils" practical works and above all the general disregard for the vocational subjects by the general public. Some of the head teachers interviewed also recognized the important role that sewing plays in the socioeconomic and technological advancement of Ghana. They also complained that Ghanaian schools lack professional and dedicated sewing teachers to impart sewing into pupils.

At the Manso Model JHS the head of department for BDT who holds first degree in Home Economics Education was teaching Pre-Technical skill which is an aspect of the programme and a female certificate "A" teacher was also teaching catering. At Manso Nkwanta JHS there were two certificates "A" teachers who were teaching Pre-Technical and Home Economics respectively. At the Antoakrom D/A JHS, I was

informed by the head teacher that his school has two Higher National Diploma Certificate teachers and a Certificate "A" teacher and one had majored in teaching sewing.

The researcher also realized that the public schools had better facilities than their counterparts in the private schools which will help to promote teaching and learning art in their schools. The GES which is the major stakeholder of education in Ghana seems to offer insignificant assistance to the Basic Design and Technology Programme administratively. Sometimes some head teachers are compelled to see the needs of the department. At the Universal Manso JHS, there was nothing different except that the art teacher was teaching art in forms one to three and the same time teaches them other subjects too.

4.8 Qualification and Programmes of BDT Teachers in the selected JHS

During the research, the researcher realised that in the public schools, there were both male and female teachers teaching the programme whilst in the private schools, only male teachers were handling the programme. The researcher also looked at the qualifications of each teacher. The male teacher at the MansoJHS, was teaching pre-technical skills has BEd. in Wood Work, Catering and Hospitality, Fashion Design and Technology whilst the female teacher was teaching home economics hasBEd. in Wood Work, Catering and Hospitality, Fashion Design and Technology.

Out of the two men in MansoNkwanta D/A JHS, one was teaching pre-tech and has BEd. in Wood Work, Catering and Hospitality, Fashion Design and Technologywhilst the other one was teaching home economics also had BEd. in Wood Work, Catering and Hospitality, Fashion Design and Technology. The three teachers in the

Antoakrom D/A JHS, one of the art teachers with HND was teaching sewing whilst the other one too was teaching pre-technical skills. The last but not public and two private schools had all their teachers teaching pre-technical skills.

4.9 Availability of BDT Books

Non Availability of BDT books in the schools. About 79% of the total number of respondents in the Private Schools confessed that they do not have text books on BDT in their schools, except the teachers who have unprescribed books they had bought from the bookshops. There were adequate text-books on BDT at the Public Schools and yet the pupils were not allowed to use them simply because according to their teachers they would destroy them when allowed to use them. Both teachers and pupils at both categories of schools need reference books on Basic Design and Technology to help to read and understand the subject matter.

4.10 Practical Works in BDT in the Schools

Pupils at the selected Private JHS were not given practical works by their BDT teachers. The researcher asked a question as to whether they prefer doing practical works or not. Almost all the Pupils responded yes and continued that they needed to be given adequate practical works. During the researcher's observation, it was realized that pupils would be more skilful if they did practical works regularly. Teachers at the selected Private JHS said periods allotted for sewing subjects at the basic level are not adequate for practical works also have no workshop as well. Art Teachers at the selected Public JHS when interviewed said they have the required text books, yet they do not have studios to do their practical works, they only teach practical ones a week in their classrooms.

4.11 Teaching Methods Used by Teachers in the Two Categories of Schools

The researcher observed that the teachers in the various schools were using four different types of teaching methods. These are the project method, expository or lecture method, demonstration method and individualized method. It was realized that lecture method outweighed the other methods the teachers used in teaching their learners in both categories of schools. About 70% of the lecture method was being employed by teacher at the Private Schools and 30% at the public schools. However, in teaching sewing subjects, the best methods to adopt should be demonstrative and lecture methods.

The lecture method of teaching needs to be very flexible since it may be used in different ways. For example, there are several types of lectures such as the illustrated talk where the speaker relies heavily on visual aids to convey ideas to the listeners. With a briefing, the speaker presents a concise array of facts to the listeners who normally do not expect elaboration of supporting material. During a formal lecture, the speaker's purpose is to inform, to persuade, or to entertain with little or no verbal participation by the students. When using a teaching lecture, the instructor plans and delivers an oral presentation in a manner that allows some participation by the students and helps direct them toward the desired learning outcomes. The lecture may be conducted in either a formal or an informal manner. The informal lecture includes active student participation.

The primary consideration in the lecture method, as in all other teaching methods, is the achievement of desired learning outcomes. Learning is best achieved if students

participate actively in a friendly, relaxed atmosphere. Therefore, the use of the informal lecture is encouraged. At the same time, it must be realized that a formal lecture is still to be preferred on some subjects and occasions, such as lectures introducing new subject matter. The instructor can achieve active student participation in the informal lecture through the use of questions. In this way, the students are encouraged to make contributions that supplement the lecture. The instructor can use questions to determine the experience and background of the students in order to tailor the lecture to their needs, or to add variety, stimulate interest, and check student understanding. However, it is the instructor's responsibility to plan, organize, develop, and present the major portion of a lesson.

The Private Schools were using about 42% project method while the Public Schools were using about 58% of it. The Private Schools were using about40% demonstration method and the Public Schools were using about60%. Finally, the Private Schools were using about 70% individualized type of method and the Public Schools were using 30%.

Table: 7 implies that concerning the Project, the Demonstration and Individualized methods at the public schools, the BDT teachers took the course more seriously since the BDT programme needs all the three types of methods to handle it more effectively. From the researcher’s perspective, though the public is using more percentage of all the three types of methods, there is a lot more to be done by them to beef the position of art in the sector in future. Also, if the Private schools should take the teaching and learning of visual art more seriously like they are doing to the other subjects, it is believed art will go a long way.

Table4.5: Percentage of Teaching Methods used by the Categories of Schools

Category of school	Project method	Expository or Lecture method	Individualized method	Demonstration method
Private schools	42%	70%	70%	40%
Public schools	58%	30%	30%	60%
Total	100%	100%	100%	100%

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1: Summary

An evaluative study really helps to assess categories of things. The researcher is evaluating the teaching and learning of the Basic Design and Technology (sewing) in both the public and the private junior high schools, and how the problems encountered (if any) can be solved. The system of education during colonialism and pre-colonialism in Ghana was not up to expectation simply because it was based on foreign philosophies and culture. To make it to have its required standard, the GES in collaboration with MOE and other bodies in 1987 teamed up to reform the educational system. In Anamuah-Mensah's 2002 report, he said due to the lack of adequate facilities and trained personnel its products do not fit into the expected sectors. The researcher upon noticing some of these problems realized the need to examine the situation by evaluating in some parts of the Amansie West District.

It was deemed very important to take this study as the objective to investigate into the teaching and learning of the BDT (sewing) and whether the programme was run in these selected schools and the availability of facilities and trained personnel. The study has discovered the strengths and weaknesses of teaching and learning of sewing and also suggests measures to be adopted. The study also reveals that due to inadequate professional sewing teachers and the diminishing interest in sewing in the various schools, the teaching and learning of the BDT (sewing) programme especially the practical aspect is not adequately done in most of the schools. The study was also presumed to discover the strength and the weaknesses, and then suggest ways of solving them.

The exercise was limited to six JHS within the Amansie WestDistrict in the Ashanti region of Ghana, by comparing the strengths and the weaknesses of the teaching and learning of the BDT programme. Another problem is the areas where some of the schools are located. Sewing for instance, should be located at where materials such as fabric, off-cut materials from the tailors' shops for the preparation of doormats, fluffy balls and a few others can be found. This notwithstanding, these materials may be availability and yet sewing may not be seriously taken.

The researcher believes that part of the negative influence about sewing might have come from the MOE and the GES. The negative attitudes of the majority of the head teachers, art teachers and the society at large have prevented them from reorganizing the special role that sewing plays in the social, economic and technological advancement of Ghana. This has also prevented the encouragement of the teaching of sowing in the various JHS. There is also inadequate provision of funds for the necessary infrastructure for the teaching and learning of sewing. There are many factors that contribute to these problems of not taking art seriously especially in the individual schools. Many head teachers are not well informed about sewing as a subject, and also, are not aware of the role of the art in society, and in the economy of Ghana.

The wrong impressions created about the vocational subjects in general as a result of the nature of western education introduced in the country and the general disregard for manual skills in favour of clerical or white-collar occupations is another factor. Lazy, ineffective and unprofessional sewing teachers have also contributed to the negative attitudes of some of the head teachers. The attitude and contribution of the

Ministry of Education (MOE) and the Ghana Education Service (GES) towards Art is not affirmative. This is manifest in the Ministry's inadequate assistance to the promotion of Art teaching. The attitude of the Ministry does not only set a bad example but creates problems for head teachers, for instance in the public junior high schools in the handling of problems connected with the teaching of Art in the schools. For instance, most of the schools are not offering Visual Arts but rather they are doing Home Economics and Pre-technical Skills. Only one school (a public school) among the sampled schools was offering the three courses in the Basic Design and Technology Programme and the rest of the public schools offer two of the courses.

The sampled private schools offer only one among the three subjects in the programme. Does it mean that there is not even a single pupil in these schools who does not have the flare for visual arts? This testifies that the proprietors, head teachers and art teachers of most of our private JHS have no keen interest in visual arts. Besides, most of the pupils, especially the girls, have more interest in the home economics than the other courses. There is the implication that if pupils should be given the chance they could even study the three subjects in the programme. Most of these pupils' talents are being suppressed due to the unprofessional and selfish behaviour of some proprietors, head teachers and art teachers.

Also, the negative attitude of some of the head teachers is appalling though there are a few of them who show positive signs especially those in the public schools. Some of them show positive attitudes to visual arts but they are not often given the needed attention from stakeholders and at the schools. The GES is adamant to talk highly about visual arts. Some of the head teachers with positive attitude to visual arts have

provided art rooms and have means of generating funds to promote the successful teaching of art in their schools despite the MOE not giving them any support.

5.2 Conclusions

According to the guidelines of the new Educational Reform, the Ministry of Education states categorically that the traditional schools were criticized for placing too much emphasis on academic work and for being too far removed from the socio-economic development and national manpower requirement. The Junior High Schools are programmed in order to correct the anomalies in some sections of the educational sector. It is specially designed to address the problems by placing emphasis on the vocational subjects among which is the Home Economics.

Home Economics as an option is vital in the attainment of the set goals of educational reform because it has been observed that among the three courses embodied in the Basic Design and Technology programme cuts across all subjects. It is believed to have been part and parcel of every living being. For instance, walking, singing, eating and above all a non-talented designer cannot become a good surgeon. The best Architect is said to be a very good designer. The implementation of the Basic Design and Technology Programme started some few years ago and by this it should be given special attention since it is the old system which has been disguised or the same thing programmed differently.

It is also adequate enough for one to assess its failure or otherwise. Comparatively, the Private or the individual schools in Ghana's history has always been the best as compared to the Public or the Government schools. But according to the researcher's

study, she rather got this in the negative way concerning the Home Economics in her selected schools. However, whereas positive efforts are being made by some enthusiastic Head teachers, Sewing Teachers and their learners, it has become obvious from this study that there are still some problems in the Home Economics Departments in the various schools especially the selected private schools.

The most painful aspect of it all is that, the other subjects are seriously taken care of whereas Home Economics (Sewing) is comparatively, not given even half that care. The setbacks of the Sewing Education include the attitude of some Head teachers and lack of qualified Art Teachers especially in the private schools to handle the course. These problems the researcher believes are not too cumbersome that they cannot be solved. They can be solved through the effort of the MOE, GES, Head teachers, Sewing Teachers and the society at large.

5.3 Recommendations

To help curb the problems, the following recommendations are made to the Ministry of Education, Ghana Education Service, Headteachers, Sewing Teachers as well as the Society.

To ensure all seriousness in the behaviour of Head teachers, Art Teachers, Learners and the Society who have negative perception about Sewing need to change their negative attitude and pupils should properly be educated by the Government of Ghana through the MOE, GES and other stake holders by firstly making Home Economics a compulsory subject at all the levels of education in the country.

The general public should also be educated through the television, FM stations and the other media. The general public can also take Sewing seriously by reading more

about the course and its prospects. They should also be given the awareness of the importance to contribute to changing the negative attitude of always concentrating on only one or two courses making them the most important among the rest especially sewing.

The contribution of the serious sewing Teachers in the schools is also an important factor in the changing of behaviour of Head teachers, the lazy sewing Teachers as well as the general public. Another important aspect that the pupils must know is that BDT is not always about painting, drawing, carving as well as clay work but has other aspects too. Comparatively, the researcher also realised that sewing in the selected public Junior High Schools are more or less seriously into the Basic Design and technology than their counterparts at the private Junior High Schools.

During the research the researcher realised that most of the proprietors in the private schools find it very difficult involving pupils in all the three aspects of the subjects in the Basic Design and Technology Programme this was because they were about to employ more professional sewing teachers to teach these courses due to the remuneration that they will have to pay them. It is also recommended that proprietors of private schools should deem it important to employ professional sewing teachers into their schools to handle the subjects.

There should be introduction of theoretical knowledge about the history of Art in general; role of the sewing in society; appreciation; and evaluation of works of sewing; and finally, the values and beliefs of the society and how these influence artistic expression as well as serve as sources of ideas for sewing. Head teachers also

need to become aware of the educational importance of sewing to each individual pupil. Sewing provides the pupil with a variety of vocational and career opportunities; it provides him/her with cognitive psychomotor and affective modes of development.

Through the explanation of ideas, materials and tools and creative process the pupil's intellect is developed. Sewing is a course that helps pupils to think and create things properly; apart from it being an area where he/she is trained to observe, look and see things clearly. Sewing can also help pupils to develop socially. Through consistent practicing of sewing the pupil is given the opportunity to manifest this creativity himself. Some head teachers, sewing teachers and the general public do not regard sewing because they are often not aware of the important role of sewing in the development of a nation.

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APPENDICES

APPENDIX 1

QUESTIONNAIRE DESIGNED FOR PUPILS VISUAL ARTS, PRE-TECHNICAL SKILLS AND HOME ECONOMICS PROGRAMMES SELECTED IN JUNIOR HIGH SCHOOLS INTRODUCTION:

This questionnaire is to solicit for information from the JHS pupils of the selected schools in the Amansie West District to help to evaluate and improve upon the quality of the Basic Design and Technology (sewing) programme. Your assistance will mostly be appreciated. Thanks in anticipation.

NAME OF STUDENT: Charity SenaAmenya

NAME OF SUPERVISOR: Dr. B. K Dogbe

Select appropriate answers or fill in the space or tick where applicable.

[1] Sex of pupil M ( ) F ( )

[2] How old are you? ……

[3] What class are you? .....

[4] What is your school's name……

[5] Which of the following are you? Visual Art Student [ ] Home Economics Student [ ] Pre-Technical Skills Student [ ]

[6] Give the number of visual art teachers ( ), home economics teachers ( ) and pre-technical teachers you have in your school.

[7] List the number of course(s) under the basic design and technology programme that your school offers……..……

[8] State the number of periods allocated to each of the courses in your school

……

[9] Does your school have a sewing workshop? Yes ( ) No ( )

[10] If it is yes, is it adequately equipped Yes ( ) No ( )

[11] Have you always been provided with tools and materials for practical work in your school? Yes ( ) No ( )

[12] List some of the tools and materials provided by your school during practical work.

……

……

[13] List some items provided by pupils themselves.

……

[14] Give the names of text books that your school uses.

……

[15] How many periods do you have in a week in theory and practical? Three periods ( ) four Periods ( ) five periods ( ) six periods ( )

[16] Do you have any intention of choosing a sewing course when selecting schools? Yes ( ) No ( )

If yes, state why ……

……

If no, state why……

…… ……

[17] Do your parents show any interest when you are doing your sewing works at home? Yes ( ) No ( ) If yes, state why.

……

……

……

[18] Were you compulsorily asked to offer the area of BDT you are offering now by someone?

If yes, who forced you? A friend ( ) your head teacher ( ) your art teacher ( ) your parents

[19] Which one of the three do you prefer most? Visual art ( ) Pre-Technical skills ( ) Home Economics ( ) State your reason

…….

……

……

[20] Do you have a library equipped with sewing books? Yes ( ) No ( )

APPENDIX II

QUESTIONNAIRE DESIGNED FOR HEAD TEACHERS OF SELECTED JUNIOR HIGH SCHOOLS IN THE AMANSIE WEST DISTRICT TOPIC: "Evaluate the teaching and learning sewing in the Junior High Schools"

This questionnaire is purposely designed to request for data from heads of the selected institutions to help to evaluate and improve the quality of sewing among the public (government) and private (individual) Junior High Schools in the Amansie West District. It would be very much appreciated if you could be as personal as possible in your responses. Thanks in anticipation.

NAME OF STUDENT: Charity SenaAmenya

NAME OF SUPERVISOR: Dr. B. K. Dogbe

What is your status in this school? Head teacher ( ) Sewing teacher ( ) Others

For how long have you served in this position? ……...

What is your school's name? ……

What is your area of specialty? ……

What is your qualification? ……...

What is your rank? ……

Which of the subject(s) in the Basic Design and Technology programme does your school offer? …….. …….

Does your school have a workshop or a special room purposely for sewing works? Yes ( ) No ( )

Do you receive grant for your practical works? Yes ( ) No ( ) If yes, how often? Regularly ( ) Not regularly ( )

If no, how do you get tools and materials for their practical works?

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Do you often solicit for assistance from parents in other to keep their children's practical works going? Yes ( ) No ( )

If yes, how do some parents respond to such assistance from them?

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Do pupils choose the subjects themselves or they are imposed on them by their school? ……

If really the school imposes the subjects on pupils, state why.

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In which of the three subjects do you think pupils perform better during exams: Visual Arts ( ) Pre-technical skills ( ) Home Economics ( )

What is the attitude of other teachers towards the sewing programmes in your school?

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Are pupils and their art teachers committed to the sewing subjects? Yes ( ) No( )

which of the two categories of schools do you think treats art more seriously than the other? Private JHS ( ) Public JHS ( )

What comments do you have concerning the programme?

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… ……

Thanks in anticipation.

APPENDIX III

QUESTIONS DESIGNED TO INTERVIEW HEAD TEACHERS AND BDT TEACHERS IN THE SELECTED JUNIOR HIGH SCHOOLS IN THE AMANSIE WEST DISTRICT.

[1] Does your school offer any of the sewing courses under the Basic Design and Technology? Yes ( ) No ( )

[2] Are you a specialist in any of the three subjects in the Basic Design and Technology programme? Yes ( ) No ( )

[3] What is (are) your specialties among the three subjects? ----------

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[4] What is your qualification? ----------

[5] What other programmes are offered in your school apart from the sewing programme.----------

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[6] Which of the three sewing courses do you think the pupils prefer most in your school? ----------

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[7] How do you select pupils into the various sewing courses in your school? ----------

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[8] What importance do you attach to the sewing programme?

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[9] May I know some of the basic tools, equipment and materials used for the sewing programmes and who provides them? ----------

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[10] How do pupils get materials for their sewing work? ----------

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[11] As the head of department, how often do you visit the sewing section? Most often ( ) not often ( ) not at all ( )

[12] What are some of the challenges or problems art teachers face in your school and what efforts have you made to solve them? ----------

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[13] Does your school have enough sewing books to enhance teaching and learning? Yes ( ) no ( )

[14] How does your school benefit from the following, M.O.E, G.E.S and the community? ----------

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[15] How effective are the sewing teachers concerning the teaching of practical skills?

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[16] Which one of the following are you specialist in? Visual Arts ( ) Pre-Technical skills ( ) Home Economics ( ) None of these ( )

[17] What subjects did you study at your last level of education? ----------

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[18] How often do you attend workshops or courses to upgrade yourself prior to your specialty? ----------

[19] Do officers from District Education office pay your school special visits concerning the programme? Yes ( ) No ( )

[20] Do you have anything to say about any of the three comments? ----------

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