

UNIVERSITY OF EDUCATION, WINNEBA

**CLOTHING AND TEXTILES COURSE AS A FOUNDATION FOR THE
FASHION DESIGN AND TEXTILES PROGRAMME IN ACCRA
TECHNICAL UNIVERSITY**

**SHIRLEY-ANN SYLVESTER
(8160100007)**



**A thesis in the Department of Clothing and Textiles Education,
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Graduate Studies, impartial fulfilment
of the requirements for the award of the degree of
Master of Philosophy
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MAY, 2021

DECLARATION

Student's Declaration

I, Shirley–Ann Sylvester, hereby declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and that it has not been submitted, either in part or whole, for another degree elsewhere.

Signature

Date.....

Supervisor's Declaration



I hereby declare that the preparation and presentation of this dissertation were done in accordance with the guidelines for supervision of thesis laid down by the University of Education, Winneba.

Name of Supervisor: Professor Phyllis Forster

Signature

Date.....

DEDICATION

To my family, Sarah, Lady Ann, Mr. Lawrence Lumor and Madam Grace Acquaful



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LIST OF ACRONYMS

FCUBE	:	Free Compulsory Universal Basic Education
SHS	:	Senior High School
ELK	:	Entry Level Knowledge
MOE	:	Ministry of Education
GES	:	Ghana Education Service
TVET	:	Technical, Vocational, Education and Training
IFHE	:	International Federation of Home Economics
TLMs	:	Teaching and Learning Materials
VTIs	:	Vocational Technical Institutions
CBT	:	Competency-Based Training
ICT	:	Information and Communication Technology



ABSTRACT

The study was conducted in Accra Technical University. It determined whether Clothing and Textiles graduates from the Senior High School have a foundation for Fashion Design and Textiles programme in Accra Technical University. The objectives of the study were to; ascertain the contents learnt in Clothing and Textiles at the S.H.S level; identify teaching methods used to deliver the contents of the Clothing and Textiles subjects at the S.H.S level; examine students' views on the usefulness of contents learnt in S.H.S Clothing and Textiles and Fashion Design and Textiles at the University level; find out from students' their performance in Fashion Design and Textiles in the Technical University. The cross-sectional design was used for the study. Two hundred and sixty (260) Fashion students were sampled through stratified and simple random sampling techniques for the study. Questionnaire with Crobach's alpha reliability coefficient (α) of 0.77 was used as a research instrument to collect data. Frequency count, percentage and mean, generated through Statistical Package for Social Sciences (SPSS) version 26 software, were used to describe and analyse the data. Pearson's correlation test was used to test a hypothesis on a significance level of $p < 0.05$. The study revealed that the Clothing and Textiles syllabus for Ghanaian Senior High Schools (S.H.S) is content-rich and to equips students with appropriate vocational knowledge and practical skills. The study found out that Clothing and Textiles lessons were taught mainly via, lecture, brainstorming, discussion, demonstration, projects and practical work. The study also revealed that the students had acquired foundation knowledge and skills in Textiles production. The findings indicated that students performance assessment scores were generally high. The study recommended that the Ministry of Education and Ghana Education Service should institute and incorporate internship or apprenticeship programmes into the curriculum of Senior High Schools to expose Clothing and Textiles students to operations in the garment industry. Again, Clothing and Textile teachers in Ghanaian SHS should design and use practical activities and interactive lessons that engage students in active learning and experimentation to boost student interest in Clothing and Textiles and entrepreneurship. The study recommended that Clothing and Textiles teachers should organise field trip to enable effective and practical teaching and learning. Again policy makers should include Clothing and Textiles programme to be selected at the Senior High School and teachers on that field should encourage students to offer Clothing and Textiles especially in selecting subject in the pre-tertiary level.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Today's Clothing and Textiles sectors offer exciting and rewarding career opportunities with ever-increasing demands from skill professionals. Although, worldwide Fashion and Textiles industry has been facing a number of challenges due to globalization, there is still a bright future for properly qualified graduates who wish to have a career in the Clothing and Textiles industry (Elmer, 2010). However, imparting appropriate knowledge and skills into the development of human resource for the industry is very pertinent, and that could be done successfully by educating individuals to make meaningful contributions towards social and economic development.

According to Encyclopedia Americana (2005), education is any process by which an individual gains knowledge or insight or develops attitude or skills. Education is perceived as essential for all as it is fundamental to all-round material and spiritual development (Aggarwal, 2004). Like other generic concepts, many prominent thinkers of old defined education in various ways albeit towards the same objective as the total development of the educated. Farrant (2004) also described education as the process of human learning by which knowledge is imparted, faculties trained and skill developed. To the ancient thinkers of India, education was considered the 'third eye' of man which shows him to act; it leads to salvation and in the mundane sphere, it leads to all-round progress and prosperity (Aggarwal, 2004). Aggarwal stressed, education as preparing for complete living.

Aggarwal (2004) concluded that functionally, education is a process which draws out the best in a child with the aim of producing well-balanced personalities, culturally defined, emotionally stable, ethically sound, mentally alert, morally up-right, vocationally self-sufficient and internationally liberal. Societies transform individuals to become independent citizens who can make meaningful contributions towards social development through education. Quality education at each level, from basic to the tertiary, imparts knowledge and skills to individuals that help lift people out of deprivation (Asare, 2007).

According to Farrant (2004) education may be obtained through formal, informal or non-formal systems and their contributions. Farrant (2004) and two functionalist, Davis and Moore (2009), explained that formal education is given through the school system and ends with the award of a certificate; non-formal education entails organized teaching and learning activities outside the school system that is aimed at meeting specific learning needs of particular group of people in the community with planned curriculum, and may end with award of certificates, just like formal education; while informal education entails sub-conscious teaching and learning, has undefined location, and is not associated with the award of certificates.

In Ghana, the most popular form of education is the formal system offered in schools and colleges. School education is compulsory for all children in Ghana, aged 4 to 15 years (Ministry of Education, 1996) under the Free Compulsory Universal Basic Education (FCUBE) policy. Durkheim (2009) stressed that it is important for individuals to learn to co-operate with those who are neither their kin nor their friends and the school provides a context where these skills can be learned. He found the school to be a small society, and a model of the social community in terms of a fixed set of rules. The experience prepares learners to interact with members of the society

as a whole in terms of society's rules. The ultimate goal of school therefore is to shape students by providing knowledge and skills and by developing character and instilling virtue (Sergiovanni, 1991). Therefore, it is the duty of the school to ensure that all students, irrespective of their social, economic and intellectual statuses study well and become responsible and productive members of society.

School moulds a common standard for the training of members in the society to prepare them for independent adult life and enable them make good contributions towards development. Currently, a major objective of the Ghanaian educational system which is predominantly formal, is to equip individuals with the right knowledge, skills and attitude to enable them contribute meaningfully towards national development goals of poverty alleviation and wealth creation as stated by the Ghana Education Service [GES] (2007). With regards to the current educational system, majority of the Junior High School graduates are now moving towards the Senior High Schools to gain more experience and the prestige around it. Students who complete the Junior High School aiming to become fashion leaders, no longer want to be trained in the Technical and Vocational Institutions but rather run into the Senior High School to pursue Clothing and Textiles (GES, 2007).

Education has always embraced some vocational elements and aims (MoE, 2002). Technical, Vocational, Education and Training (TVET), has been an important part of Ghana's economic and social development strategy since independence and was affirmed in the Education Act 1961 (Akyeampong, cited in Gale, 2011). Over the years attempts to provide employment for the teaming unemployed youth in Ghana have found expression in TVET. Palmer (2009) noted that;

“It has always been a policy concern for Government to make educational systems more portable and adaptable to the environment of work. It has achieved this by establishing and promoting school base TVET. Though providing short-term skills training in Vocational Technical Institutions (VTIs), and a short-term skills upgrading for master-craftsmen and traditional apprentices, Government aims at closing the unemployed gap” (p. 277).

These attempts to provide vocational skills to young people were meant to equip them with skills, make them employable and for progress on the educational ladder so that poverty could be eliminated as a result of income generation (Palmer, 2009). The 2007 educational reform in Ghana stressed on TVET education in order to provide the youth with employable skills and reduce unemployment. Home Economics is one of the programmes under TVET in Ghana, which is learnt at all levels of education. Home Economics focuses on theory and practical in schools, and may be oriented as an academic programme. Skills and knowledge developed in Home Economics are useful to learners not only in their personal and family lives but also in securing and holding career opportunities (International Federation of Home Economics [IFHE] (2008). Smith and de Zwart (2010) emphasized that Home Economics is the only programme, which focuses on everyday life and basic needs of life.

According to Mann (2017), in the early twentieth century, ambitious programmes in Clothing and Textiles were established in many schools offering Home Economics. Clothing and Textiles is one of the subjects studied in Home Economics at all the levels of education (basic, secondary and tertiary) in Ghana. At the basic level it falls under a subject called Basic Design and Technology (BDT) which combines principles and processes in various aspects of Pre-technical skills, Home Economics and Visual Arts (GES, 2007).

The core skills components are studied in the first term at Junior High School form one, while the subsequent years is optional in the BDT subject. Home Economics option comprises of Catering and Sewing and students are expected to study the fundamentals of Home Economics before progressing to the secondary level, where they can opt for either Clothing and Textiles or Food and Nutrition. In the 21st century, emphasis on sewing skills has continued within exploratory or introductory course at Junior and Senior Secondary Schools and in advanced or career development courses at the tertiary levels in Ghana. At the basic and secondary levels the subject provides foundation for further studies of clothing and textiles at the tertiary level. Teachers in that field of specialization are considered as sewing experts who transmit knowledge to the students.

Sewing from a technical perspective continues to be a predominant part of Clothing and Textiles subject in the classroom. The main aim of teaching Clothing and Textiles is to train students to acquire knowledge, performance skills, understanding, interest and appreciation in Clothing production and management (Ministry of Education, 2008). As such, it is very important for learning institutions teaching Clothing and Textiles to pay particular attention to the skill attainment of their graduates at all levels of education. In this study, Clothing and Textiles is a course offered at the Senior High School level.

1.2 Statement of the Problem

Clothing and Textiles sectors can employ many students after graduating from school. If students are well trained to acquire the relevant job skills, it will go a long way to reduce youth unemployment in the country. Many educational scholars have conducted a lot of studies into Clothing and Textiles. For example, Forster *et al.*

(2017) researched into the views of teacher-trainees on Clothing and Textiles Education in two Teacher Education Universities in Ghana and found out that the teaching of Clothing and Textiles at the senior high school level serves as foundation for teaching at the universities. However, their study did not address how teaching of Clothing and Textiles at the senior high school level serves as a foundation for Fashion Design and Textiles programme. Arubayi and Obunadike (2011) also conducted a study on the challenges of teaching Clothing and Textiles at the Senior High Schools in Anambra State, Nigeria. Their study was restricted to the challenges of teaching the course at the Senior High School level.

From the literature, minimal studies have been conducted on how Clothing and Textiles studies at the Senior High School level serves as a foundation for Fashion Design and Textiles programme at the tertiary level. Among the Fashion Design students in Accra Technical University, students spend time learning basic sewing skills and some basic terminologies in Clothing and Textiles all over again from the initial lessons of the course at the Technical University, in order to be well prepared for the Fashion Design programme. It is based on this ground that the study was conducted to find out whether Clothing and Textiles programme at the senior high school level serves as a foundation for Fashion Design and Textiles at the Accra Technical University.

1.3 Purpose of the Study

The purpose of the study were to determine whether Clothing and Textiles graduates from the Senior High School have a foundation for Fashion Design and Textiles programme in Accra Technical University.

1.4 Research Objectives

The objectives of the study were to:

1. ascertain the contents learnt in Clothing and Textiles at the S.H.S level;
2. identify teaching methods used to deliver the contents of the Clothing and Textiles subjects at the S.H.S level;
3. examine students' views on the usefulness of contents learnt in SHS Clothing and Textiles and Fashion Design and Textiles at the University level.
4. find out from the students their performance in Fashion Design and Textiles in the Technical University.

1.5 Research Questions

The study attempted to find answers to these questions;

1. What did the students learn in Clothing and Textiles at the SHS level?
2. What teaching methods were used to deliver the contents of the Clothing and Textiles subjects at the S.H.S level?
3. What are the views of the students on the usefulness of contents learnt in S.H.S Clothing and Textiles and Fashion Design and Textiles at the University level?
4. How are the students performing in Fashion Design and Textiles in the Technical University?

1.6 Hypothesis

H₀: There is no significant relationship between students' grade in Clothing Textiles at SHS and their performance in Fashion Design and Textiles at Accra Technical University.

H₁: There is a significant relationship between students' grade in Clothing

Textiles at SHS and their performance in Fashion Design and Textiles at Accra Technical University.

1.7 Significance of the Study

This research is justified on the grounds that, it will provide empirical evidence to guide theory, policy and practice as regards the teaching of Clothing and Textiles at the Senior High School as a foundation for Fashion Design and Textiles programme at the tertiary level. Theoretically, the findings of this study will add up to existing literature for any researcher interested in this area of study. That is, it will help bridge the gap created as a result of misalignment in curriculum content at both the pre-tertiary and tertiary levels of education in Ghana.

Policy wise, the findings of this study will provide the Ministry of Education and Ghana Education Service additional information needed for improving existing content in the Clothing and Textiles as well as the Fashion Design and Textiles curriculum. This will guide curriculum content development and implementation. In this age and era where many people complain about unemployment, the results of the study will help curriculum planners, designers and evaluators align the contents of the syllabus to meet what they set to achieve.

Practically, it is anticipated that the findings of this study will be beneficial to Clothing and Textiles as well as the Fashion Design and Textiles teachers in improving their classroom practice in pre-tertiary and tertiary institutions. To teachers, the findings from this study will inform them on the need to employ appropriate pedagogies in teaching Clothing and Textiles as well as Fashion Design and Textiles to students.

Additionally, the study would be of interest to curriculum implementers such as teachers or lecturers in Senior High Schools and Universities where the implementation of Clothing and Textiles as well as the Fashion Design and Textiles curriculum take place.

1.8 Delimitation

The scope of the study was delimited to Fashion Design and Textiles students at the Accra Technical University only, even though the scope of the problem demands a countrywide investigation. Majority of these students had studied Clothing and Textiles in Senior High School, and pursuing Fashion Design and Textiles. This implies that the accessible population for the current study involved only a smaller sample of respondents who studied Clothing and Textiles in S.H.S. Content wise, this study focuses on Clothing and Textiles in Senior High School as a foundation for Fashion Design and Textiles in Accra Technical University.

1.9 Organisation of the Study

The study is organised into five chapters. Chapter one is the introduction, it gives a background to the study, problem statement, purpose of the study, research questions and scope of the study. It also includes significance of the study and organisation of study. Chapter two reviews literature pertinent to the study. Chapter three, which is the methodology, describes research design, population, sample size, sampling techniques, data collection, instrumentation, validity and reliability of the instrument, data collection procedures, data analysis and ethical consideration. Chapter four concentrates on the presentation of results and discussions. Chapter five

gives the summary of findings, conclusion and recommendations based on the results of the study. This chapter also makes suggestions on relevant areas for further studies.



CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter looks at other studies that are closely related to the study. It relates the study to the larger ongoing dialogue in literature about the topic and it also provides a frame work for establishing the importance of the study as well as a benchmark for comparing the results of the study with other findings. The conceptual base of the study was also looked at. The chapter consists of the following sub-headings: theoretical framework, conceptual framework, contents of the senior high school Clothing and Textiles syllabus, Methods of teaching Clothing and Textiles in Senior High School, usefulness of Clothing and Textiles as well as Fashion Design and Textiles education to students, Technical, Vocational, Education and Training in Ghana and students' performance in Fashion Design and Textiles in the university.

2.2 Theoretical Framework

Kwabia (2006) stated that no research problem originated from a vacuum, hence for effectiveness, research must be based on a theory. The Functional Theory and Constructivism underpin this study. The Functionalist Theory views the basic aim of education as keeping society running meaningfully and smoothly (Armstrong, *et al.*, 1989). The functionalist view of education tends to focus on the positive contributions education makes to the maintenance of the social system. Durkheim (2009), a French sociologist saw the major function of education as the transmission of society's norms and values. According to Durkheim, education is the medium through which common standards and values are set to ensure solidarity and unity of thought in society. Other functionalists also contributed to what education is all about.

Merton (2009) described education as training given in schools with common curriculum to prepare people for the world of work and Parsons (2009) added that after primary socialization within the family, the school takes over as the focal socializing agency and acts as a bridge between the family and society to prepare children for their adult roles.

Constructivism is derived from the work of Dewey (1944), Piaget (1967), Vygotsky (1978), and many others who studied how learners acquire knowledge, as cited in Acikalin (2006). Constructivism is a philosophy of learning founded on the premise that, by reflecting on experiences, learners construct their understanding of the world they live in. An individual generates his/her own “rules” and “mental models,” which are used to make sense of our experiences. Learning, therefore, is merely the process of adjusting mental models to accommodate new experiences. The basic elements of constructivism incorporate the ideas that learners “construct” their learning. It is an individual process which is based on prior knowledge, and the process is affected by outside influences. The learning process is social in that learners gain understanding to interact with others. All of the interpretations of constructivism posit that the student is an active participant in their learning (Elkind, 2004).

Currently, the learning theory emphasis the importance of learning with understanding (Bransford *et al.*, 2000). This suggests that the clothing and textiles curriculum and teaching approaches should emphasis understanding rather than memorisation, provide opportunities for in-depth study to allow for a firm foundation of knowledge and conceptual development, and enhance students’ abilities to recognise and use meaningful patterns of information.

Constructivism has implications for Clothing and Textiles education. Constructivism emphasis hands-on problem-solving. In the context of instruction, under the theory of constructivism, educators focus on making connections between facts and fostering new understanding in students. Teacher educators tailor their teaching strategies to student responses and encourage students to analyse, interpret, and predict information. Teachers also rely heavily on open-ended questions and promote extensive dialogue among students.

The constructivist learning theory is also adopted for this study because of its influence on the teaching and learning of clothing and textiles. The demonstration, field trip and project methods of teaching (instruction) and learning promote the in-depth study of a topic and encourage active and social learning with application to life outside of the classroom. The elements of demonstration, field trip and project techniques of teaching and learning, and differentiated instruction and learning fit well into the basic tenets of constructivism.

In summary, constructivism is the most frequently cited theory underpinning pedagogy, with active learning and more student-centred practices cited as the most-promoted pedagogies in national reforms and interventions. Practices described as student-centred include drawing on examples from the students' backgrounds, problem-solving, use of Teaching and Learning Materials (TLMs), good interaction and relationships between student and teacher, and use of pair and group work.

The Functionalist Theory lays emphasis on what education entails within the society. This also implies that dysfunctioning of basic education affects the foundation of students to exhibit values in the society. Davis and Moore (2009) also contributed to what the other functionalists perceive education to be. They saw education as a means of role allocation where learners are trained for different roles

and levels. Clothing and Textiles have to be well thought from the foundation stages in the pre-tertiary for better understanding in Fashion Design and Textiles at the tertiary level, this would help students competency in Clothing and Textiles education which can prepare them for the world of work in the society. Clothing needs of society have to be met and it is the responsibility of the education system to train the youth for that purpose.

2.3 Conceptual Framework

Figure 1 shows how Clothing and Textiles Education at the pre-tertiary level serves as a foundation for the Fashion Design and Textiles programme in the Technical University. Clothing and Textiles when well-taught at the pre-tertiary level, will help the individual student understand concepts in the Fashion Design and Textiles course at the Technical University.

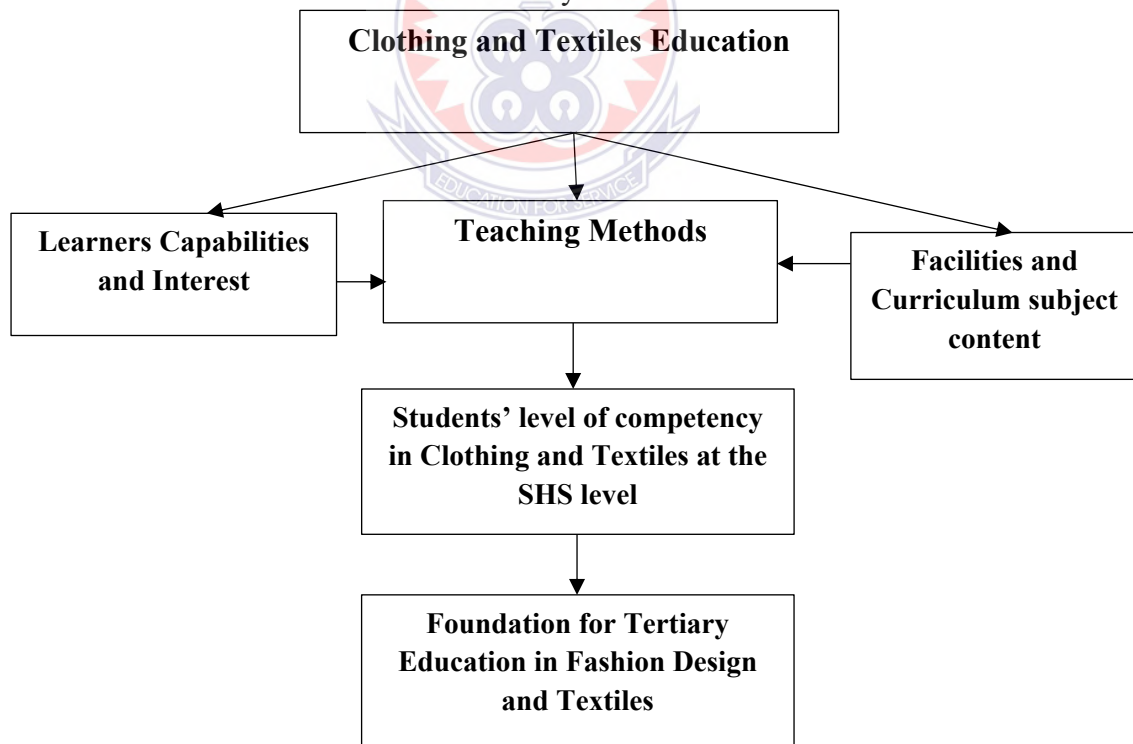


Figure 1: Conceptual framework on the focus of Clothing and Textiles Education

Forster *et al.* (2017) emphasized that for Clothing and Textiles Education to be effective teacher quality should be good, the right infrastructure and the teaching learning materials should be available and adequate. Hence, there are vital inputs which will determine the quality of acquired knowledge, skills and attitude.

2.4 Contents of the Senior High School Clothing and Textiles Syllabus

In Ghanaian secondary education system, the Clothing and Textiles course falls under Home Economics programme while Textiles is embedded in the Visual Arts programme. In the opinion of Arkhurst (2004), the modern Home Economics programme emphasise on the significance of Clothing and Textiles in the curriculum. Clothing and Textiles is one of the branches in the teaching of Home Economics as a subject in senior high schools in Ghana. It has been included in the curriculum with the view of developing competencies among the students towards national development and self-employment.

Textiles is defined as “the process of producing fabrics, which involves twisting of fibres into yarns interlacing or otherwise of yarns to form fabrics, decoration, finishing and how to care for the fabrics” (MoE, 2010, p.10). The teaching syllabus for textiles describes textiles as activities that result in two-dimensional and three-dimensional art works that depend on fabric, fibres and yarns (MoE, 2010). Textiles may therefore be described as the production of fibres, yarns and fabrics and the decoration, finishing and care of fabrics made from the yarns. Sackey (2002) views textiles as “the act of producing, decorating and improving the efficiency and value of fibres, yarns, and fabrics to serve the needs of man” while Adjekum (2010) describes textiles as fabrics produced by weaving. According to Adu-Akwaboah

(2010), textiles imply the manufacture of clothing and all the materials that can be formed or have been formed into yarns or fabricated into cloth.

Amissah (2004) posits that the variety in textiles materials due to the taste, fashion and the different uses of textiles products have led to the concept of textiles being redefined to cover non-woven products. Even though the etymology of textiles focuses on weaving, the concept now extends beyond the art of weaving cloth to include any means by which cloth could be made to serve a specified need. As such all persons who engage in textiles production, fashion design, interior decoration, laundering and other operations must have a good knowledge of textiles technology.

The Textiles programme is intended to educate individuals with a means to clothe themselves and their families in an efficient and economical way. Another objective is to provide students with a more formal understanding of the textile industry for future career opportunities within that field. Textiles in SHS covers the history, principles and practice of textiles as a vocation, and aims at providing adequate foundation for further education in textiles. The subject also offers enough knowledge and skills those students who terminate their education at the end of SHS to be able to practise textiles as a vocation (MoE, 2010). The Textiles course in the Senior High School syllabus is a subject which embraces all activities that result in two-dimensional and three-dimensional forms. The textiles component of the Visual Arts programme is designed to:

1. Provide career opportunities such as weaving, dyeing, printing, knitting, embroidery, crocheting, textiles designing, and others.
2. Promote the development of resources in the environment for textiles, for example, dye fibres.

3. Enhance design and production of textiles for socio-economic development in the country.
4. Preserve, transmit, promote and sustain culture through textiles.
5. Lay a sound foundation in textiles for further education at the tertiary level for those who may continue their education.

According to the Ministry of Education [MoE] (2010), the study of textiles provides information on the following:

- a. Understanding the behaviour and character of fibres, yarns and fabrics when in use.
- b. Fabric designing, construction, decoration and finishing processes.
- c. Why certain fabrics are more durable and serviceable for specific purposes.
- d. Why certain fabrics are cool or warm to wear and the impression of coolness or warmth when used as decoration.
- e. The use of textiles to promote, preserve, transmit and sustain culture.
- f. Intelligent appraisal of standards and brands of merchandise for making appropriate choices.
- g. Proper use of different fabrics for specific purposes and occasions.
- h. How to care for and maintain fabrics to increase their life span.
- i. Textiles as a vocation for earning a living.
- j. How textiles are used to foster community, national and international relationships.
- k. Textiles as a foundation for further education.

The Clothing and Textiles syllabus of the Home Economics programme is organised under units, specific objectives, contents, teaching and learning activities and evaluation. As a course, Clothing and Textiles is developed around six central

themes. They include the study of fabrics, garment construction, clothing maintenance, consumer education, decorative processes and wardrobe planning. Some of the content areas across the three years secondary education include, but not limited to fibres, fabric production, good grooming, personal hygiene, stitches, openings, fastenings, pockets, interfacing, patterns drafting, freehand cutting, sewing notions, clothing care, care labels, clothing storage, mending, embroidery, and entrepreneur. The detailed content areas are specified in Table 1.



Table 1: Contents of the Ghanaian Senior High School Clothing and Textiles syllabus

Year one	Year two	Year three
Reasons for studying Clothing and Textiles	Different types of openings	Mending
Some careers in Textiles and Clothing	Classification of openings	Methods of mending
Basic requirements for careers	Factors that influence the selection of openings	Reasons for renovation and remodeling
Work ethics	Practical work on openings	Ways of renovating
Benefits of work ethics	Fastenings	Ways of remodeling
Fibre	Choice of fastenings	Practical work on remodelling
Identification of fibres	Fixing of fastenings	Importance of creative use of fabrics
Common textiles terms	Types of pockets	Differences between patchwork and appliqué
Methods of fabric production	Fixing pockets	Soft toys and cushions
Fabric finishes	Lining	Hand embroidery
Types of fabric	Importance of lining	The consumer
Uses of fabrics	Importance of interfacing	Sources of clothing/textiles items
Clothing	Fabrics for lining and interfacing	How to shop
Classification of clothing	Types of lining	Entrepreneur
Factors to consider in selecting family clothing	Fashion features on garments	Setting up an enterprise
Good grooming	Frills practical work	Knowledge and skills in clothing and textiles
Personal hygiene	Importance of designing	Clothing and textiles enterprises
Selection of appropriate clothes and accessories	Forms in which the elements appear in a design	Characteristics required in clothing and textiles careers
Proper use of cosmetics	Principles of design include	Exhibition
Classification of sewing equipment and tools	Organizing elements of design	Types of exhibition
Factors that affect the choice of sewing equipment and tools	Criteria for determining figure type	Purpose of clothing and textiles exhibition
Reasons for caring for tools and equipment	Sources of ideas	Modelling and fashion show
Care of tools and equipment	Individual creativity	Purpose of modelling/fashion show
Types of sewing machines	Factors that influence creativity	Designer trunk show
Parts of the sewing machine	The importance of patterns	Informal fashion shows
Setting and threading the sewing machine	Types of patterns	
Care of the sewing machine	Types of commercial patterns	
Common faults in sewing and their causes	Methods of making patterns	
Types of stitches	Pattern symbols	

Functional classification of stitches	Taking body measurements
Working of temporary stitches	Drafting of basic block patterns
General use of seams	Adaptation of basic block patterns
Groups of seams	Freehand cutting
Factors affecting choice of seams	Advantages of freehand cutting
General rules for making seams	Disadvantages of freehand cutting
Working of seams	Practical work on freehand cutting using the principles of drafting
Methods of arranging fullness	Types of sewing supplies
Factors to consider in choosing wardrobe	Difficult-to-handle fabrics or special fabrics
Preparing different fullness	Sewing notions
Shirring edge finishes	Types of sewing notions
Reasons for finishing edges	Fabric motifs and designs
Types of edge finishes	Correct pinning of patterns
Points to consider when choosing edge finishes	Transfer of pattern markings
	Assembling garments
	Importance of clothing care
	Care labels
	Information on care labels
	Care habit
	Removal of stains
	Procedure for laundering white cotton and linen
	Procedure for laundering coloured cotton and linen
	Laundering woollen clothes
	Dry-cleaning
	Importance of storage
	Storage facilities for clothing
	Guidelines for clothing storage
	Packing procedures

Source: Ministry of Education, Ghana (2008). Clothing and Textiles for Senior Secondary Schools. Accra: MoE/CRDD.

2.4.1 Rationale for teaching Clothing and Textiles

According to MoE, the major objective of the Ghanaian educational system is to equip individuals with employable skills to enable them contribute meaningfully towards the development of the nation, and students to acquire knowledge and skills

in Clothing production and management. Thus the Clothing and Textiles syllabus aims at providing students with experiences that will develop their competences in textiles selection and use, and clothing production and management (MoE, 2008).

2.4.2 Scope of content

The Clothing and Textiles programme has been designed in such a way as to offer skills that are terminal and can be put to immediate use. The programme at the same time provides the foundation for further studies in areas of Clothing and Textiles.

Clothing and Textiles covers the following areas:

1. Study of fibres and fabrics
2. Selection, use and care of clothing and furnishing
3. Sewing processes
4. Repair and customizing
5. Clothing design and construction
6. Creative crafts
7. Consumer education
8. Entrepreneurship
9. Career opportunities in the Textiles and Clothing industry



2.4.3 Profile dimensions

A 'dimension' is a psychological unit for describing a particular learning behaviour. More than one dimension constitutes a profile dimensions. A specific objective such as, 'The student will be able to describe...' etcetera, contains an action verb 'describe', that indicates what the student will be able to do after teaching has taken place. Being able to 'describe' something after the instruction has been

completed means that the student has acquired ‘knowledge’ (MoE, 2008). Being able to explain, summarize, give examples, etc. means the student has understood the lesson taught. Similarly, being able to develop, plan, construct, etc. means that student has learnt to create, innovate or synthesize knowledge. Each of the specific objectives in this syllabus contains an ‘action verb’ that describes the behavior the student will be able to demonstrate after the instruction. ‘Knowledge’, ‘Application’, etc. are dimensions that should be the prime focus of teaching and learning in schools. Instruction in most cases has tended to stress knowledge acquisition to the detriment of other higher level behaviours such as application, analysis etcetera. MoE (2008) is interested in most of all, to produce problem-solving persons and practically oriented persons through the educational system. Each action verb indicates the underlying profile dimension of each particular specific objective.

In Clothing and Textiles, the three profile dimensions that have been specified for teaching and learning are:

Knowledge and Understanding	15%
Application of Knowledge	25%
Practical Skills	60%

Each of the dimensions has been given a percentage weight that should be reflected in teaching, learning and testing.

2.5 Methods of teaching Clothing and Textiles topics in schools

Teaching is the process that facilitates learning. It can be explained as the process by which the teacher brings the learner and the subject together. Simply put, teaching is learning. There are three focal points in teaching: the teacher, the learner and the subject. Effective teaching depends on how well a teacher presents his or her

materials or information to students. Thomas (2001) asserted that there can be no effective teaching without a good teacher. Good teaching affects the total implementation of any curriculum, including Clothing and Textiles curriculum.

A method of teaching is a general term that is often used to cover everything that a teacher does in the classroom (Ayaaba & Odumah, 2007). The authors emphasized that a method of teaching is the systematic way teachers go about their teaching. In other words, a method of teaching is how a teacher intends to proceed with a lesson. Similarly, Alorvor and Sadat (2011) held the view that a method of teaching is the processes through which teaching and learning takes place. Again, Ayaaba, *et al.* (2010) posit that “a method of teaching may be explained as a teacher’s overall approach to a lesson” (p. 44), while Ayaaba and Odumah (2007) described a method of teaching as the way a teacher generally intends to systematically approach his or her lesson.

Many educational authorities are of the view that there are only two methods of teaching (Alorvor & Sadat, 2011). These are teacher-centred and child-centred methods. The teacher transmission or presentation method is referred to as teacher-centred method. It is called so because most of the activities in the classroom are performed by the teacher. In other words, the teachers’ approach is to tell the students what they need to know.

According to Alorvor and Sadat (2010), the principle of andragogy suggests that teaching and learning should be a process necessitating a two-way communication between the teacher and the learners. This implies that only those techniques which promote two-way communication and thus make the students actively involved in the teaching and learning task should be considered in promoting effective learning in students. Ayaaba and Odumah (2007) were of the view that in

the teaching and learning process, the discovery method is more preferred. They emphasized that the teacher's role here is to organize a series of activities such as field trips, small group discussion, or project in which the students are to investigate a problem.

The discovery or inquiry method is known as child-centred method. Alorvor and Sadat (2010) opined that learner oriented method of teaching is a method of teaching which places interest in the learners' ability, experiences, interest and aptitude. They emphasized that this method involves the teacher selecting techniques based on the emotional and physical characteristics of the learners. Then the teacher provides the learning situations and motivates the learners to carry on with their learning. The child-centred method seeks to challenge students to examine, investigate and explore an issue. With this method, it is the learner who examines, investigates or explores the subject matter. In other words, most of the activities selected for the lesson are performed by the learner; hence, the name child-centred method.

In the opinion of Arkhurst (2004), teaching methods are the broad patterns of thinking which a teacher follows to help his/her students reach the goal of the course. In other words, they are structured outlines used by teachers to convey messages to students. There are varied methods used in teaching vocational-oriented subjects such as Clothing and Textiles, Fashion Design, Food and Nutrition. These include field trip, demonstration, discussion, lecture and questioning, project and on the job training. These various methods of teaching are the vehicles used for implementing learning exercises.

A technique of teaching, according to Tamakloe (2008), refers to all the activities which are performed in class, either by teacher or learners in order to

achieve the method chosen for the lesson. For example, the techniques which can be employed to achieve problem-solving method include students' participation in projects, grouping, role-playing or simulation. If the method is transmission, then the techniques might be lecturing, dictation of notes and recitation. Alorvor and Sadat (2010) described teaching techniques as approaches used by the teacher to foster learning. Technique of teaching involves all the activities which are performed in the classroom by the teacher and the learners.

In the view of Ayaaba and Odumah (2007), a technique of teaching refers to an activity teachers ask students to perform in the classroom. They emphasized that it is a change in stimulus variation as the lesson goes on. For instance, a lesson can start with a film show, followed by dramatization and debate in the same lesson. It must be mentioned that it is the method which a teacher selects which determines the appropriate technique to be employed in teaching. If a teacher decides to use teacher transmission method in teaching, some of the techniques which fall within the domain of this method include lecturing, dictation of notes and recitation. If on the other hand, the teacher decides to approach the lesson using problem solving method, the techniques which could be employed include role playing or dramatization, panel discussions, debates, simulation or educational games and field trips. It must be emphasized that teaching techniques are not used in isolation in any teaching session. Two or more techniques may be combined to form a calling strategy in any lesson.

Strategy of teaching, on the other hand, is the sequencing or the ordering of techniques that a teacher selects to teach a particular lesson. Ayaaba and Odumah (2007) defined strategies as ways of “sequencing or organizing a given selection of techniques” (p.72). Thus during one lesson, the strategy could be an introductory lecture, followed by grouping and then a panel discussion. Dynneson and Gross

(1999) viewed strategy as a delivery system aimed at establishing, clarifying, and expanding students' ability to understand and interact with the subject matter. Strategy of teaching is simply the sequencing or ordering of the techniques a teacher has selected to teach the lesson (Ayaaba *et al.*, 2010). It must be noted that a good teacher should not depend on only one technique of teaching right from the beginning of a lesson to the end.

Strategies and methods of teaching have great influence on students because they come to school with unique sets of characteristics that may assist or impede academic performance (Gray *et al.*, 2005). However, as Vin-Mbah (2012) posited, effective teachers have a thorough knowledge and understanding of their subject matter, are able to use their knowledge of learning processes to determine the right strategies to communicate the content of their lessons to their students' understanding. The outcome of any strategy is influenced by the teacher's motivation, the effort that has been put into the planning and preparation of the lesson (De Bortoli & Thomson, 2010).

Students in a class come from different backgrounds and with different abilities and problems. Arkurst (2004) ascertained that the makeup or personality of the class also influences the selection of learning experiences. A teacher who has knowledge of this will be able to help such children to adjust and learn more effectively with much understanding.

Methods play a very important role in maintaining effective, interesting and stimulating learning. The type of method chosen by the teacher depends largely on his/her ability and desired objectives. Annoh (2001) added that the selection of a particular lesson method also depends on the duration of the lesson, materials and equipment available in the school and the number of teachers teaching the lesson.

Arkhurst (2004) outlined some guidelines to be considered in the selection of teaching methods. These are:

1. Group-size large, small and individualized instruction;
2. Instructional objectives, based on cognitive, affective and psychomotor domains;
3. The type of learning to be encouraged in teaching that is principles, problem solving;
4. Individual differences among learners such as sex, intelligence: needs and desires; learning styles; educational background: socio-economic background: motivational characteristics: interests , aptitudes;
5. Nature of subject to be taught that is abstract, practical-oriented or both.
time, which is duration of the lesson;
6. Instructional facilities available; and
7. Teachers experience-educational qualification.

The uses of field trips, for instance offer students opportunity to have first-hand information about learning packages and acquire new ideas. Light and Cox (2001) contended that role play also gives students opportunities to act the roles of the experts in the fields of their studies. For instance through work placement in the fashion and textiles industries, students get chance to understudy fashion and textiles designers, pattern cutters, machinists, merchandisers and retailers. Here, emphasis is laid on helping students to acquire key skills that will lead them onto appropriate employment. Also, relevant work experience is key in work placement and internship programmes; hence the need for work placement cannot be overemphasized (Brennan, 2000). Student should be assisted by their lecturers to take up work

placements relevant to their programmes of study to enable them to acquire additional competency skills from experts in the industry.

Arkurst (2004) reported that Clothing and Textiles students with anxiety problems will not be able to acquire the needed skills. Participation in practical lessons helps in the acquisition of skills expected in Clothing and Textiles. The attitude of students to the subject is also another factor that may hinder or motivate the learning skills. Some students see the subject as difficult and time consuming. From the ongoing discussions, for a good teaching and learning of Clothing and Textiles to take place therefore, the teacher must have a good knowledge of his subject matter, motivate the learner and involve him/her in learning activities. Good teaching affects the total implementation of any curriculum and the Clothing and Textiles curriculum is not left out.

Gray *et al.* (2000) contended that, in the tertiary institutions, students build on what they know and do. For this reason, any instructional objective and the pedagogy that a teacher uses should be measurable and should cover the cognitive, affective and psychomotor domains of learning. Based on this premises, some teaching methods used by lecturers of Clothing and Textiles/Fashion Design include lecture, discussion, demonstration, fieldtrips, role play, apprenticeship or internship, and practical (experiment and laboratory work).

Darling-Hammond (2000) affirmed that teachers who have had more preparation for teaching are more confident and successful with students than those who have had little or none. The curriculum is usually situated within a discipline, which determines the curriculum contents and the disciplinary norms and expectations that shape the academic culture and values and the ways of learning which are

expected or assumed (Crosling, Heagney & Thomas, 2009). The methods of teaching Clothing and Textiles are discussed in sub-sections 2.5.1 to 2.5.7.

2.5.1 Lecture technique

The lecture technique is the oldest and the most traditional technique of teaching where the teacher transmits information in an autocratic fashion to passive listeners. It is an activity in which a teacher teaches a group of students using mainly verbal exposition (Alorvor & Sadat, 2011). It is one way verbal communication. In the pure form, students have no opportunity to ask questions or offer comments during the lecture. Alorvor and Sadat (2011) defined it as “giving information, generating understanding and creating interest” (p.31). Central to what actually happens during a lecture is the skill of explaining. During lecture all the analysis, the opinions on the issues and generalizations are done by the teacher and embodied in the lecturer’s notes, which are read out to the students (Alorvor & Sadat, 2011). The teacher’s delivery is generally expected to be done without interruption. However, the teacher may pause occasionally to ask or invite questions from the learners.

The role of the learners here is to pay attention to what the teacher reads out. The success of the learner depends on their ability to listen, and also their ability to make quick notes as the teacher reads on (Alorvor & Sadat, 2011). Learners are expected to memorize the content of the teacher’s lecture, and to use it in doing assignments or answering examination questions. It is glaring that the most obvious feature of the lecture technique is that it is teacher dominated. During the process of lesson delivery, the teacher is talking or demonstrating to the learners most of the time. Generally, the role of the students is comparatively less active and more passive during instruction (Tamakloe *et al.*, 2005).

In using the lecture technique to teach, the teacher needs to take certain precautions to enable the learners derive maximum benefit from the lecture. Orlich, *et al.* (2004) provided the following precautions:

1. The teacher should avoid talking too much. Although lecture is essentially a teacher – talking dominated technique, if the teacher talks too much, the significance of the teacher’s words may be lost because some students will tune the teacher out. This is because-learners have a definite attention span.
2. Another caution is to avoid talking too fast. Students can hear faster than they can understand what they hear. It is therefore a good idea for the teacher to talk slowly and to check frequently for student comprehension of what he or she is talking about.
3. A third caution is that the teacher should be sure students are able to hear and understand him or her. Sometimes teachers talk in too low a pitch or use words that are not understood by many of the learners. It is essential for the teacher to vary the pitch of his or her voice. The teacher should also stop intermittently to explain new or unfamiliar words to the students.
4. Fourthly, the teacher should not appear boring and monotonous to the students. Students appreciate teachers whose voices exude enthusiasm and excitement (although not to be overdone) about the subject. Such enthusiasm and excitement for learning is contagious. A voice that demonstrates genuine enthusiasm for teaching and learning is more likely to motivate students to learn.
5. The teacher should establish eye contact frequently during the lecture. This point cannot be over emphasized. Only momentarily should the teacher look at the notes, the projection screen or the writing board. To establish eye contact

with the learners means that the students are aware that the teacher is looking at them. Frequent eye contact with the class has two major benefits. First, as the teacher “reads” a student’s body posture and facial expression, he or she obtains clues about that student’s attentiveness and comprehension. Second, eye contact helps to establish rapport between teacher and the student.

2.5.2 Talk

According to Nalini (2003), a talk means to speak in order to give information or express ideas or feelings. This implies it is a kind of teaching strategy in which a teacher, a well versed person in an area of study, an experienced person gives a lecture on a topic/theme and share knowledge and experiences with some people. Nalini (2003) added that, every effective talk must communicate your arguments and evidence, persuade your audience that they are true and be interesting and entertaining. Listening is hard work, especially at conferences, where audience listen to many talk over many hours, people need the speaker’s help to maintain their focus. Nalini (2003) purported that these steps should be followed. It is very important to talk, rather than read so that it will be easier to understand and you will make genuine contact with your audience. In other words, a teacher who gives a talk should communicate his/her points by talking without reading. He/she should be in a standing position whiles delivering a talk. This lets people in the back rows see your face and hear you better. (Rule of thumb: if you cannot see their faces, they cannot see yours.) The audience wants you to be in charge, so go ahead and take the top-dog position, physically above their heads.

2.5.3 Discussion method

Talabi (2008) explained discussion as a method of teaching that uses the multiple channel of communication. This method encourages the participation of all learners and provides opportunity for interaction among learners by experiences and decisions on the lesson topic. Namale and Buku (2009) stated that the discussion method of teaching involves activity in which learner and teacher talk together in order to share information about a topic or problem.

Ayaaba and Odumah (2013) held the view that discussion as a technique of teaching calls for a purposeful consideration of a topic and might therefore commence with a question. In other words, in this type of classroom interaction, the teacher raises an issue for the students to wrestle with. Ayaaba and Odumah (2007) contended that “it is thus a speaking- to- learn technique that assists students in developing their critical thinking and interpersonal skills. It gives them practice in expressing ideas orally in a logical manner and help them to clarify thinking, hear others’ viewpoints, resolve conflicts, arrive at conclusions and find alternative solutions” (pp. 43-44). It can be inferred from all these views that discussion technique requires the teacher to develop a view point and to tolerate and facilitate the exchange of a wide range of ideas.

Orlich *et al.* (2004) corroborated the view expressed by Gagne and Aggarwal and stressed that discussion “involves an exchange of ideas, with active learning and participation by all concerned” (p. 268). Conclusively, discussion is a fundamental democratic process. Its value lies chiefly in the fact that it represents a type of intellectual team work, resting on the principle that the pooled knowledge , ideas and feelings of several people have greater merit than those of a single individual (Parker, 2001).

The discussion method or model may be implemented in a variety of ways such as the whole or large group discussion, the small group of buzz group discussion, and the panel group discussion. Oppong-Frimpong *et al.* (2009) explained that during discussion the class or each group must know the matter that is to be discussed. The teacher plays the role of a moderator and advisor. The teacher as director of the discussion asks question, clarifies student's comments and make tentative summaries to help students achieve understanding of the topic. They further explained that in some cases depending upon the situation and type of discussion a chairman and secretary may be appointed. The chairman moderates the discussion and generally directs affairs while the secretary writes down the major issues and point raised and writes a report.

On merit of discussion method as identified by Namale and Buku (2009) is that it gives learners training in the democratic process of learning. Everybody cooperates in the discussion and the ideas and opinions of everybody are respected. Thus, there is development of democratic way of thinking. Another merit of discussion strategy according to Talabi (2008) is that, it encourages social interaction and promotes interpersonal relations among learners. He also identified that the discussion method helps to improve the oral expression of learners. This is right because everybody is required to express his or her idea in a clear and concise manner. One other important merit of the discussion method of teaching is that it creates the chance for inter-learning thus both the teachers and the students are better able to exhibit what they do.

Notwithstanding these strengths, the discussion method has some weaknesses. Talabi (2008) explained that discussions if not well controlled can result into meaningless debates between rival factions of a group of learners and this may lead to

deviation from the main topic with the class getting out of control and being rowdy. He added that some extroverts may tend to dominate the discussion while most introverts may remain passive. Thus, it does not ensure the full participation of all learners. However, the above lapses could be eliminated by effective organization of discussion lessons. Simple illustrations and other aids should be used to enrich a discussion lesson. Where a large group of learners is involved, the group can be broken into smaller groups for easy communication control.

2.5.4 Demonstration

Ayaaba and Odumah (2013) described demonstration as a process during which “the teacher shows his students how to do something or perform a skill on their own” (p. 39). Alorvor and Sadat (2011) shared this view and stressed that demonstration consists of showing -learners how a new skill should be performed. This showing is done by the teacher while the students observe. The showing is accompanied by explanation of how the skill is demonstrated. Demonstration could be described as a method in which the teacher assembles all needed material and equipment, properly arranges and emphasizes the key steps (Ayaaba & Odumah, 2013). In this method the teacher shows the process or performs an activity and the student copies the activity. In this wise the teacher should be well versed in the skill being shown, to motivate the students and build the confidence in them.

After a demonstration lesson, the students should take part in the actual work in the form of practical work to have a feel or a hand in what has been done. Practical lessons are very important as they provide feedback to the teacher, to know whether what was demonstrated was understood and right skills acquired (Ayaaba & Odumah, 2013). Demonstration is actually the best method in teaching vocational skills

(Annoh, 2001). Demonstration, for instance, can be very helpful in providing maximum opportunities to learn. skills (Annoh, 2001). Demonstration during a lesson can be used to show procedures, to explain new techniques, to establish standard for individual and group work and to illustrate methods when funds or time are limited.

Demonstration technique is based on the assumption that by seeing exactly what takes place, the learners will learn more effectively (Kellough, 2003). For Kellough (2003), demonstration serves the following purposes.

1. To assist students to recognize a solution to a given problem.
2. To demonstrate a thinking skills.
3. To model a skill used in conflict resolution.
4. To establish problem recognition.
5. To give students an opportunity for vicarious participation in active learning.
6. To illustrate a particular point of lesson content.
7. To introduce a lesson or unit of studying in a way that grabs the students' attention.
8. To reduce potential safety hazard (where the teacher demonstrates with materials that are too dangerous for students to handle).
9. To save time and resource (as opposed to the entire class doing that which is being demonstrated).

There are guidelines for using demonstration. When planning a demonstration lesson, the teacher should be guided by certain considerations. Kellough (2003) provides these:

1. Decide the most effective way to conduct the demonstration. It might be a verbal or silent demonstration by a student or the teacher; by the teacher with a student helper, by a student with the teacher as a helper or by a combination of

these, such as first by the teacher, followed by a repeat of the demonstration by a student or a succession of students.

2. Ensure that the demonstration is visible to all students. For this reason, some teachers use overhead projectors or video cameras that are connected to large screen T.V. monitors.
3. Practice with the materials or procedures before the actual demonstration in class. This is to avert embarrassment and failure in the class.
4. Consider your spacing of the demonstration, allowing for enough student wait-see-and-think time. During demonstrations, as in other learner-centered techniques of teaching, use frequent stops to check for students understanding.
5. Ensure that the demonstration takes place in an area free of unnecessary object that could destruct learners, or pose a safety hazard.

There are procedures for conducting a demonstration lesson. Alorvor and Sadat (2011) suggested that for a good demonstration teaching, the teacher must:

- a. Arrange the group so that all can see and hear.
- b. Have all needed materials and equipment at hand and properly arranged.
- c. State the objectives of the demonstration to motivate the students.
- d. Make tie up with previous and future lessons.
- e. Explain thoroughly each step in the operation as it is being performed.
- f. Emphasize each key step.
- g. Perform operation skillfully.
- h. Use questions to good advantage.
- i. Assign students to work stations effectively.
- j. Follow up and check individual performance.
- k. Keep others constructively occupied while demonstrating to part of the class.

- l. Stress safety precautions.
- m. Speak directly to the students; not to the equipment or wall.
- n. Summarize the demonstration.

2.5.5 Field trip or excursion

The Curriculum, Research and Development Division (CRDD) of the Ministry of Education (2010) has identified field trip as one of the recommended educational exercises that help to strengthen the understanding of concepts presented in the classroom setting. Field trip or excursion method sends the students outside the classroom where major portion of their learning takes place, after school. Annoh (2001) asserted that students find themselves face to face with real life situation that they have previously learnt. A more complete idea of what was taught is gained through direct observation. It promotes deeper understanding, and this enhances retention. Learners also develop as field trips are the most valuable instruction materials (Annoh, 2001). Despite these laudable advantages, most teachers and heads of schools are not eager to undertake that venture because it is time consuming in terms of planning and organization. Secondly, it involves additional expenses and travelling.

Field trips and excursions are recommended by the syllabus (Opoku-Asare et al., 2014; CRDD, 2010) as educational exercises that help to explain the concepts presented in the classroom setting. Field trips could supplement information provided through clothing and textiles lessons, yet this resource is not utilized. Very few schools are able to utilize this exercise in teaching. For instance, in a study by Opoku-Asare et al. (2014) of 420 students had never been taken anywhere outside their school premises on a field trip.

Aggarwal (2004) posited that the school community provides “concrete, seeable and tangible resources which are extremely dynamic, interesting and meaningful for teaching and learning of social studies” (p. 242). Hence, it is not enough for learners to be given factual knowledge about the community resources. Rather, they must be given the opportunity to have acquaintance with the multiplicity of resources in the community through a variety of fieldtrips, since the local community provides a wealth of resources for learning concepts. For fieldtrips to be authentic and meaningful, the teacher must plan and organize carefully. This implies that guidelines for planning and conducting out-of- classroom experience must be followed at all stages of the fieldtrip. These stages are the pre-fieldtrip, fieldtrip, and post fieldtrip (Aggarwal, 2004; Parker, 2001; Seefeldt, 2001).

2.5.6 Project method

According to Oppong-Frimpong *et al.* (2009), project is a method of teaching in which students individually, or in groups, accept an assignment to gather and integrate data relative to some problem and are then free to fulfill the requirements independently of the teacher who furnishes help only when necessary. Talabi (2008) stated that the project method is one of the best ways to show learners that the solution to a problem requires the interaction of many people, subject and ideas. He added that the method requires co-operation, some forms of originality and outdoor activities by those working on the project. In order to arrive at a successful project work, Annoh (2001), came up with some steps to be followed by the teacher.

According to Annoh (2001), the teacher must ensure that the learners undertaking the activity and understand what they ought to do. The teacher must also ensure that equipment and facilities for the work are secured before the project starts.

Where learners are to work in groups, careful supervision and control of learners is necessary to prevent chaos and perform the required activities without deviating. For project work to be successful in enhancing students' performance, the teacher must try to provide a situation which learners are eager to carry out according to their needs and interest.

There are many advantages of project method of teaching. According to Namale and Buku (2009), the project approach covers all levels of the cognitive and affective domains. It therefore stimulates thinking and relies much on co-operation and personal interactions. They added that learners can be involved in planning the project work, thus increasing their interest and motivation. This is because the project method makes learning real by presenting real tasks for students to tackle. Learning becomes clear because teachers supply a concrete objective so that the students know at the end, if they have succeeded.

Talabi (2008) stated that projects help foster co-operation and unity among students irrespective of their age, intelligence, religion or ethnic origin. This suggests that it helps to enhance social interaction among learners. This also implies that project makes learning social because several students work together: they instill leadership qualities in learners appointed to be in charge of groups. Teachers also help to sustain motivation through the natural enthusiasm they generate. It aids discovery and in the process of finding solution to the project a lot of new ideas may be revealed (Patience, 2004). In addition he said the project method helps learners to realize that no subject, problem or human being exist in isolation. Effective teaching depends on how well a teacher presents his or her materials or information to the student. A number of writers address themselves to the issue of effective teaching. Parrott (1982)

as cited in Thomas (2001), asserted that there can be no effective teaching without a good teacher.

On the contrary, project method of teaching has some disadvantage. According to Namale and Buku (2009), projects are time consuming. This is because often materials and resources needed to do an effective project work are limited. In the view of Talabi (2008), the project method is very expensive to administer and use. He said that, a lot of relevant books, experts and instructions are required to ensure the success of a project. In addition, he said that, lazy students are encouraged to take refuge under the group work involved in a project method to be passive and unruly. Though there are some few shortcomings, well organization of projects with the needed resources and other logistics in place would assist learners to acquire basic practical skills through their own investigative efforts in order to sustain their interest (Patience, 2004).

2.5.7 Activity method

Nartey and Agbosu (2001) indicated that activity method of teaching involves teaching in which the student is placed at the centre of the teaching process and made to interact with materials to discover concepts or facts with maximum inference by the teacher. The idea is that students learn best by doing, find interest and enjoy the activity. He further explained that the child learns to walk by walking, learns to read by reading and learns to cook by cooking. This implies that the learner must be involved in learning processes. This suggests that it is an approach, which helps to make the child active physically and mentally. They explained that activity methods of teaching take into consideration learner's natural tendency to explore previous

knowledge and experiences, developmental stages and individual differences and abilities.

Nartey and Agbosu (2001) added that activity methods of teaching gives first-hand information and experiences, reduces forgetfulness. It promotes skill acquisition, create interest and foster co-operation among students. It exposes students to the skills and allows them to practice. Nartey and Agbosu (2001) indicated that discussion, demonstration and project methods of teaching among others as activity methods suitable for teaching Home Economics programmes such as Clothing and Textiles, Food and Nutrition.

2.6 Methods of Learning Clothing and Textiles

According to Rani and Shukla (2012), every student has his or her own learning style. They cited that some students enjoy listening to lecturers, others prefer to read in library some like to be given specific assignment, others to define a problem for themselves and search for solutions, and some prefer verbal interaction. On the other hand, others like laboratory or other learning experience requiring manipulation or strenuous physical efforts, some are strong minded, self-directed and quite capable of independent study, while others prefer interaction with peers. Similarly, some learners are quite sensitive to physical environment features such as sound levels, conversations, street noises and other distraction while others are insensitive to these factors (Rani & Shukla, 2012).

Rani and Shukla (2012) acknowledged that there are benefits that go with knowledge about learning styles to lecturers: These are:

- a. Teacher may match his or her teaching styles with the learning style of the students. Though it will be difficult for him in-group teaching.

- b. Administrators and principals should provide various teaching aids, equipment, good physical surrounding, more books etc. Therefore, that teacher may create conducive learning environment in consideration of students learning style preferences.
- c. Students can gain confidence in their strengths and develop diverse strategies for coping with challenging situation. They may begin to see how they learn most effectively and efficiently and they learn that their ways are not better or worse than those of their peers, they simply differ in learning style (p. 39).

What makes teaching and learning exciting is the fact that students have different learning styles which calls on the lecturer/teacher to be in a position to make use of different methodologies so as to meet the individual needs of students. This is because a method which makes learning to one student may not necessarily make learning come to another student (Higher Education Bureau, 2010). Furthermore, lecturers need to make use of modern techniques to augment students' enthusiasm in the subject (Mokhtar et al., 2011).

Young (2006) explained that there is need for lecturers to be provided with the necessary facilities and resources which would enable them deliver concepts in a manner which would make it easier for students to understand. These academic and vocational pedagogies facilitate learning. This means that vocational pedagogy is embedded within the framework of constructivism, as against the lecture method.

It has been observed that when there is a discrepancy in the learning styles, students may become disoriented, restless and perform poorly. Therefore, a competent teacher has to be skilled in choosing the suitable teaching methods for the subject he or she teaches. Stronge *et al.* (2004) stated that it is impossible for a lecturer to teach what he or she is not familiar with Wenglinsky (2002) indicated that teachers with a

better content knowledge enjoy the subject they teach which makes it easy for them to deliver the curriculum in a manner which makes it easier for students to understand. Stronge *et al.* (2004) felt that without adequate educational coursework preparation, lecturers cannot exert themselves fully in their work. According to Stronge *et al.* (2004), educational coursework entails — courses teachers took as part of their preparation programme for teaching or as part of post graduate work to earn their certification” (p.11).

2.7 Usefulness of Clothing and Textiles Education to Students

In Ghana, the Ministry of Education [MoE] (2010) indicated that the teaching syllabus for clothing and textiles as a subject is designed to equip students who study it with practical skills that will enable them to set up businesses and become self-employed in the field of textiles if they are not able to further their studies beyond senior high school (SHS). However, some research findings have revealed that many clothing and textiles students who graduate from the SHS are presumed to have acquired enough practical knowledge and technical skills in Textiles and Clothing for self-employment in this subject area, but they are unable to do so (Danso-Sintim, 2008; Banson, 2010; Boadi, 2012; Keteku, 2008). This points to three issues: the curriculum content is not rich, either the teachers of the subject are not teaching the subject well enough for students to understand what they are taught or the students are not motivated enough or interested to learn what they are taught in the subject area, which reflects as failure to answer questions set by the West Africa Examinations Council (WAEC) in the final Textiles and Clothing examinations.

The textiles syllabus for Senior High Schools also points out that, global competition in the textiles industry is suppressing the textiles industry in Ghana to the

extent of adversely affecting employment of textiles graduates in Ghana (Bruce-Amartey, 2012; Sackey, 2002), particularly the textiles manufacturing companies which were established partly as employment avenues. Promoting the study of Clothing and Textiles is therefore important for diversifying and sustaining Ghana's indigenous textiles industry. Sustaining textiles education in SHS with workshops and relevant educational resources will therefore support Ghana's socio-economic development as contained in a President's speech (Dzamboe, 2017).

Arubayi (2004) indicated clothing and textiles help learners acquire knowledge, skills and techniques for meeting personal and societal clothing needs. The aim of clothing and textiles curricular at the senior secondary school level is to teach the learners how to strategically plan and use available resources in his/her environment to improve his/her home family and societal clothing needs (Osisefo, 2004). Clothing and Textiles in schools curricular also provides students in apprenticeship clothing and textiles and fashion (Mberengwa, 2004). In other words, through the subject students would be trained for homemaking and employment in textile mills and clothing factories (Redick, 1995). Clothing and Textiles also enable students to learn practical skills which would be useful to them in higher education or enable them get jobs in industries or other formal sectors of the economy hence making them self-reliable.

The syllabus also provides information on the history of fashion and social implications, concerns for the consumer as well as actual clothing construction. Awareness is given to individuals on the importance of choosing designs and styles suitable for the body type so as to construct clothing and advice others on the choice of fabrics and clothing to wear on different occasions. Studies show that the most

enjoyable parts of the Home Economics discipline is the ability for students to treat their own clothes or other projects (Arkhurst & Anyakoha, 2004).

The study of Clothing and Textiles in the SHS offers students how to correctly use the various tools and materials necessary to construct their clothing (MoE, 2003). They learn how to follow the sewing instructions with limited assistance and are encouraged to use their creative skills. Different tailoring techniques and ways to assess their quality are also demonstrated. With these skills, Clothing and Textiles students are supposed to demonstrate the skill of interpreting clothing labels, how to perform the laundry, purchasing behaviours, managing an apparel, budget and select the right clothes for specific occasions. This knowledge makes them different from those who acquired the skill through apprenticeship (MoE, 2005).

2.8 Clothing and Textiles Prospects

Clothing and Textiles is of the major subjects that make up the Home Economics curriculum. As outlined by the Ministry of Education (2010), the under listed constitute the motive for including Clothing and Textiles programme in Senior High schools to help students to:

1. Appreciate Clothing and Textiles, as an integral part of constructive living.
2. Develop self-esteem, pride, confidence and patriotism through appreciation of his/her own creative collections.
3. Develop the capacity for creativity and problem –solving activities that use traditional and/or contemporary tools, materials and ICT.
4. Develop effective manipulative skills.
5. Develop critical thinking that assists in harmonizing opposing ideas, contradictions and inconsistencies in human life and in human relations.

6. Be aware of the variety of vocations available in the field of clothing and textiles and opt for a viable, fulfilling career in Clothing and Textiles.
7. Develop appropriate attitudes and skills for sustainable development.
8. Appreciate products of locally produced textiles fabrics, and patronize them.
9. Develop positive attitudes for exploring the indigenous textiles industry.

In Ghana, Senior High School education provides the foundation for equipping the youth with entrepreneurial skills for employment. The subject is designed to prepare students to acquire skills in areas as follows: the use and care of fabrics; clothing production and management for different occasions; operation of the sewing machine, tailoring, needlework and embroidery; laundering and storage of clothing; and repair of clothing.

2.8.1 Careers in Clothing and Textiles

Some careers in Clothing and Textiles include fashion designing, dressmaking, tailoring, interior decorating, wardrobe engineering, pattern developing, teaching, research and fashion merchandizing among others. Others include textiles designer, textiles engineer, textiles retailer, textiles technologist, textiles chemist, quality controller / supervisor, and textiles teacher (Sottie, 2007; Evans-Solomon, 2004). Textiles has enabled many nations to improve their socioeconomic status as well as the quality of life of their people (MoE, 2010). The textiles syllabus acknowledges that in Ghana, the combined energy of textiles, science and technology is needed to reinforce national survival and development.

Forster (2014) has outlined several careers in Clothing and Textiles. Some of these are buyer, clothing /fashion accessory designer and producer, clothing technologist, computer aided design programmer, cutter, display worker and window

dresser, dressmaker/tailor, launderer, dyer, embroidery maker, entrepreneur, fabric designers, factory worker, fashion or clothing merchandiser, fashion coordinator, fashion designers, fashion illustrator, fashion journalist/writer, finishing, haberdashery dealer, image consultant, interior decorator, market researcher/tester, mender and alteration worker, milliner, pattern maker, personal shopper/clothing consultant, production manager, quality controller, sample sewer/maker, sales manager, sales promoter, sewing machinists, spinner, teaching/lecturing, textile chemist, textiles engineers, and textile merchandising. These are discussed below.

Forster (2014) described clothing and textiles buyer as a person who connects designers and garment makers with the stores where clothing is sold. In her opinion, buyers must be able to spot fashion trends many months in advance and purchase wisely for their customers. Buyers have to select styles and colours from current trends that customers will like. A buyer may work for a large department store, a chain of stores, a mail-order house or a local specialty store. In a small specialty store, the owner of the store is often the buyer. Large stores have a number of buyers who travel to fashion shows and fashion centers. Higher education such as a degree or diploma from a tertiary institution is required in this case.

Clothing /fashion accessory designer and producer is another career prospect of studying Clothing and Textiles. Articles such as head wear such as hair slide, foot wear, jewelry, hand bags are all clothing accessories that are required to complement dressing. Forster (2014) indicated that workers in this area may be trained on the job, may be taken through short courses, or may take related courses in vocational school and polytechnic.

Another career prospect in the study of clothing and textiles is clothing technologist. To Forster (2014), clothing technologists cover all aspects of garment construction. They are up to date with innovations including the use of modern equipment and materials to improve production. Their main tasks include liaising with designers, adapting designs to suit production methods, acquiring fabric and accessories, undertaking quality evaluations of materials and responding to product queries including complaints from wholesalers and customers. A higher degree in Textiles from a tertiary institution such as the polytechnic or university is required for the position.

Forster (2014) stated that computer aided design programmer is another prospect in the study of Clothing and Textiles. The worker makes use of software to create new designs of clothing items. Career skills include computer literacy, the ability to use the software and a high level of creativity. A degree in Art or Fashion illustration offers a better chance for the position in the textile and clothing industry.

Another career in Clothing and Textiles education is cutter. According to Forster (2014), a cutter uses a machine, a pair of scissors and shears, rotary cutters, round knives, straight knives, to cut fabrics for sewing. This is a skilled trade performed by people trained on the job. Many sewing industries employ cutters.

Display worker and window dresser is also a career in Clothing and Textiles (Forster, 2014). These are people who arrange products in attractive ways to attract consumers. They usually have an interest in art and also acquire skills on the job. A good background in Art is helpful but anybody with the interest can be trained for such jobs. A Clothing and Textiles expert can therefore be employed in this area.

In the opinion of Forster (2014), dressmakers make clothes of all kinds for males and females of all ages. In Ghana, dressmakers or seamstresses usually sew for

females but tailors sew for both females and males. To her, dressmakers and tailors engage in custom-made clothes production for people. This means, clothes production for people. This means, they sew to the specifications of their clients. In the case of clothes they use the body measurements of their clients to cut and make clothes in designs desired by the clients. They may however take up contracts to sew items in bulk or produce items for sale. The majority of dressmakers and tailors are self-employed, but few of them are employed by well-established ones who pay wages or salaries. Some tailors and dressmakers are trained through apprenticeship. Others train in second cycle institutions such as senior high schools, technical schools, vocational schools and others in polytechnics.

Launderer is a career in clothing and textiles education (Forster, 2014). Launderers clean clothing on a large scale. People in this career must know how to choose the right chemicals to remove stubborn spots and stains and clean dirty clothing in general without damaging them. They learn the techniques to use for each type of fabric and stain. This job requires making complex decisions. Formal education in textiles and clothing care at the senior high school level provides a good foundation for on the job training in a commercial dry cleaning and laundry industry and a university degree is necessary for efficiency.

Forster (2014) identified dyer as a career in Clothing and Textiles education. Dyers apply colours to fabrics to beautify them. One may be employed to take up this job in the industry or may set up a tie-dye, batik screen printing and stenciling enterprise. On the job training, apprenticeship, and are all that is needed to take up the job, but these skills are learnt at the secondary and tertiary levels.

Embroidery maker is also a career prospect in Clothing and Textiles education (Forster, 2014). This career involves beautifying clothing items with decorative

stitches. Stitches may be done by hand or machine. Embroidery makers go through apprenticeship and on the job training.

In the view of Forster (2014), Clothing and Textiles education offers a career opportunity of being an entrepreneur. In her opinion, skilled sewers with good business sense can set up their own clothing and textiles businesses to do clothing repair alterations and custom dressmaking and tailoring. She observed that many people who go into apprenticeship training, or study sewing, dressmaking, tailoring and fashion set up their own small-scale businesses but do not set up repair and alteration businesses. To her, very few people in Ghana, go round carrying sewing machines from one house to the other to mend clothes for a small fee, but mending can be very big enterprise if it well planned.

Forster (2014) identified fabric designer as a career in Clothing and Textiles. She stated that a fabric designer creates textures by using computers to design patterns with different yarns. The designers can quickly colour the designs in a variety of combinations and print a copy of each design on paper for the fabric to be produced. A degree in textiles and knowledge of computer applications are required for this career (Forster, 2014).

Factory worker career is a prospect in the field of Clothing and Textiles education (Forster, 2014). She mentioned that factory workers do not require high levels of formal education. Rather, basic and secondary/technical school education qualifies people to be factory workers. In her opinion, such workers are trained on the job in the sections they are employed to work. Factory workers may off-load and load goods, package, plan lays for cutting, stitch different sections of an article, service machines.

Fashion or clothing merchandiser is another career prospect in the field of Clothing and Textiles education as observed by Forster (2014). She pointed out that people in this career buy and sell clothes or garments and accessories to target consumers. Seniors Higher School level of clothing and textiles education is a basic requirement for enhanced performance in this career, but a diploma or degree in marketing enhances one's chances of acquiring the position in the industry (Forster, 2014).

Fashion coordinator is also a career prospect in the field of Clothing and Textiles education. To Forster (2014), a fashion coordinator develops advertising themes and plan fashion events that bring people into the store. He/she often involves community groups such as schools in their projects. He/she works closely with buyers, to make sure that different departments of a store sell clothing and accessories that go well together. He/she also keeps buyers informed about latest colors and styles. For instance, he/she makes sure that a customer who selects a bag in a new colour can find matching shoes in other departments. Fashion coordinators are graduates of Fashion or Clothing and Textiles from tertiary institutions who majored in Family and Consumer Sciences or Home Economics and Art (Forster, 2014). He/she may in addition attend special fashion institutes and merchandising schools to get work–study experiences.

Fashion designer is another career prospect in the field of Clothing and Textiles education (Forster, 2014). She describes a designer as a person who is creative enough to have new and interesting ideas which are translated into products. He or she is a key person in the fashion or clothing and textiles industry. Every piece of clothing or fabric buyer selects and wears first takes shape in the mind of a designer. In the perspectives of Forster (2014), designers come up with new ideas in

fashion, designing and the making of garments, they plan the fabric or choose it and plan every detail of the new garment or clothing item. They then make sketches and samples from which a pattern can be made. Designers also translate other people's ideas into new designs. Fashion designers may enroll in tertiary programmes.

Fashion illustrator is also a career prospect in the field of Clothing and Textiles education (Forster, 2014). She observed that this is an area where specific training has existed. Most successful fashion illustrators train as fashion designers by way of degree courses. They have a sound understanding of garment construction, fabrics and the human body. Work for illustrators comes from designers, manufacturers, fashion forecast, consultancy companies, magazines and the press.

Forster (2014) identified fashion journalist/writer as a career prospect in the field of Clothing and Textiles education. She describes fashion journalists as people who identifies Clothing and Textiles related social issues, fashion trends, production, usage etc. for coverage and media presentations in order to draw public attention to important clothing/fashion related issues. She indicated that fashion journalists know how to design, cut and sew and how the industry runs gives them a sound background to write and publish information about fashion (Forster, 2014). To her, a fashion journalist/writer requires a fashion design background in Clothing/Fashion and Textiles education in Senior High School or Technical School and a diploma or degree in journalism from the university.

Finishing as a job or finishing career is also a prospect in the field of clothing and textiles education (Forster, 2014). She describes this job as involving final pressing, airing, and labelling of sewn goods. This career may combine quality control and packaging in small-scale industries. Workers in the finishing career need basic and secondary education and on-the-job training.

Haberdashery dealer or career is also a job in the field of clothing and textiles education (Forster, 2014). She describes a haberdashery dealer as a shopkeeper who sells articles such as buttons, pins, lace, interfacings, and fastenings which are used together with fabric to produce clothing. Forster (2014) pointed out that graduates of second cycle institutions can take up this career.

Another job in the field of clothing and textiles education is an image consultant (Forster, 2014). She describes an image consultant as a person who helps someone who wants a new look or is moving up the corporate ladder or who has a higher appointment and needs a new wardrobe to select suitable clothing. You will require the services of an image consultant when you become a chief executive officer of a big enterprise or the president. A degree in clothing and textiles or fashion is required for this career.

Forster (2014) identified interior decorator as a job in the field of clothing and textiles education. This involves the production of soft furnishings for homes and offices. Their products range from curtains, windows dressing, cushion covers right down to flowers. Short courses, apprenticeship training and on the job training in interior decoration are all that is required in this career.

A market researcher/tester is another job or career prospect in in the field of clothing and textiles education (Forster, 2014). He or she surveys the target market to identify client's needs, tastes and products acceptance, to provide information on customer needs for improved acceptance of products by the target customers. Marketing researchers are usually graduates from tertiary institutions such as polytechnics and university.

Mender and alteration worker is a job or career prospect in in the field of clothing and textiles education (Forster, 2014). Dry cleaning companies employ

menders to repair and alter customers, clothing. Large clothing stores also hire alteration workers to alter garments to fit customers. These careers require on the job training but background knowledge of Home Economics, apprenticeship training and vocational/technical dress-making education and senior high school clothing and textiles education provides a good foundation for such training.

Milliner is a job or career prospect in in the field of clothing and textiles education (Forster, 2014). According to her, milliners make hats and other hair decorations such as bow-ties, hair bands and combs. Milliners make use of sequins, ribbons, tapes, buttons, feathers, flowers, and beads, plastic and metal ornaments, to decorate their products. They usually acquire the skills through apprenticeship from skilled people. Millinery is however in vocational, technical and polytechnic institutions.

Forster (2014) has identified pattern maker as a job or career prospect in in the field of clothing and textiles education. The pattern maker holds the highest paid and most important production job in a garment industry. Such a person is a skilled worker who makes a pattern from the designer's original sample. All the patterns for a garment are copies of this first one so accuracy is crucial. Many years on the job experience are needed to become skilled in this career. However, learning how to make patterns in school helps to build a person's competencies in pattern making. Polytechnic and University education are required for this position.

Personal shopper/clothing consultant is a job or career prospect in in the field of clothing and textiles education (Forster, 2014). People in this career, select fashion goods that ensure a particular customer's needs are met to save time and energy for a busy customer. Many shops employ personal shoppers. Senior high school, polytechnic and university graduates in Clothing or Fashion and Textiles are capable

of taking up these careers, but workers in this shop can also be trained for this purpose. Like an image consultant, a personal shopper must have good taste, be able to work within a predetermined budget and have the ability to choose clothing that is suitable and pleasing to different customers (Forster, 2014).

More so, a person can be a production manager after pursuing clothing and textiles education (Forster, 2014). She describes production managers as people who control and supervise workers and activities to ensure that targets and standards set for goods production are met. Production managers require knowledge and entrepreneurship. Graduates from tertiary institutions are fit for this job level.

Similarly, a person can be a quality controller after pursuing clothing and textiles education (Forster, 2014). According to her, quality controllers ensure that products are of high quality and meet standards set internally by the industry or externally at the national and international levels where the products are for export. He or she checks that goods are produced within quality tolerances by inspecting some of the work passed by product examiners, correcting them as necessary, reporting excessive numbers of cloth defects and poor quality tolerances by inspecting some of the work passed by product examiners, correcting them as necessary, reporting excessive numbers of cloth defects and poor quality from different parts of the factory. Quality controllers are managers with academic qualifications up to the tertiary levels or experts with long periods of work experience (Forster, 2014).

Forster (2014) has also identified sample sewer/maker a job or career prospect in the field of clothing and textiles education (Forster, 2014). A sample sewer/maker creates samples for designers. They are highly skilled machinists so their employment is based on experiences and not academic qualification.

Moreover, a person can be a sales manager after pursuing clothing and textiles education (Forster, 2014). A sale manager controls deliveries to the sales outlets and supervises workers in the sales unit. A diploma or degree is required for this position.

Sales promoter is a job or career prospect in in the field of clothing and textiles education (Forster, 2014). She describes sales promoters as people who introduce new products to customers by designing advertising schemes and implementing them. A sales promoter may go from office to office or house to house to introduce new products to customers. They may also position themselves in shops to attract customers to new products. Sale promoters may even organize fashion shows or wear some products to attract customers. A career in sale promotion may be pursued by graduates of second cycle or tertiary institutions (Forster, 2014).

Sewing machinists is also a job or career prospect in in the field of clothing and textiles education (Forster, 2014). These people do the stitching. Most of them are trained on the job to use special machines for specific sewing jobs. They may also receive training in a Technical or Vocational school. Beginners start with the easiest seams. Their wages begin with a minimum pay, but they can earn more as they gain skill and responsibility. Operators who show an ability to work with people can become supervisors.

Teaching/lecturing is also a job or career prospect in in the field of clothing and textiles education (Forster, 2014). It involves imparting knowledge and skills on all aspects of Fashion and Textiles education at different levels of education. Clothing or Fashion and Textiles teacher should be competent enough to teach with confidence, to enable students acquire relevant knowledge and skills for working and for further training. A diploma, first, second or third degree is required depending upon the level at which you want to teach.

Other jobs or careers related to clothing and textiles education are spinner, textile chemist, textile merchandising and textiles engineers. Spinner is a job or career prospect in in the field of clothing and textiles education (Forster, 2014). Spinners make yarns or threads out of fibers. They are usually trained on the job in textile industries. Textile merchandising is the marketing or targeting of textiles products to particular customers sector of the consumer market (Forster, 2014). According to her textiles chemists develop new fibers and finishes. This group of people requires post graduate masters or doctorate degrees in textiles science in order to perform well. Lastly, textile engineers develop new techniques for making yarns and fabrics (Forster, 2014). They seek to improve quality and yet keep production cost at a minimum level. People who qualify for this job have masters or doctorate degree. To conclude, the skills students should gain from studying clothing and textiles include entrepreneurship, fashion designing, and many other vocational skills.

2.9 Technical, Vocational, Education and Training (TVET) in Ghana

The term vocational, has different connotations in various languages and cultures and among countries in northern Europe and Anglo-Saxon countries (Aring, 2011). In countries of the latter which are mostly developing countries and former British, the term “vocational” has a negative perception or limited social status. In these countries there is a missing link between industry (employers) and education. Accidentally, these are places where there are few resources to invest in state of vocational equipment needed for acquiring modern competitive skills (Aring, 2011). The Report of the President’s Committee on Review of Education Reforms (2002), therefore, puts it succinctly when it observed that Ghana cannot fully benefit from the creativity of its citizens as long as Clothing and Textiles and the technical/Vocational

sub-sector of the nation's public educational system is poorly resourced. Therefore, TVET should be should positively impact on access and human capital growth for economic development.

After JHS, a student wishing to pursue vocational education may do vocational and technical programmes in SHS or attend a technical and vocational institute. Upon successful completion and having passed the West African Senior School Certificate Examination (WASSCE), SHS graduates can enroll into a University or Polytechnic programmes. TVET students however usually follow a 4 year curriculum, divided in two cycles of two years, leading to 'awards from City & Guilds, the Royal Society of Arts or the West African Examinations Council.

2.10 The Forms of TVET in Ghana

Three different forms of TVET have emerged in Ghana over the years (UNESCO, 2011). These are: Formal, Non- formal education and training and informal. The definitions of these are outlined in sub-sections 2.10.1 to 2.10.3

2.10.1 Formal TVET

This is training typically provided by an education or training institution, which is structured (in terms of learning objectives, learning time or learning support and leading to certification. Formal learning is intentional from the learner's perspective. The formal system include primarily time-bound, institution-based, graded and certified training. It is offered by institutions such as the NVTI (National Vocational Technical Institute), Ghana Education Service (GES) technical institutes, youth training institutions and a variety of private vocational training schools (Amedome&Fiagbe, 2013). While school-based TVET is supposed to art this strategic role in developing a country's capacity to complete internationally, there are simply

not sufficient numbers of the type of formal technical jobs to absorb even these small numbers of TVET school leavers (Palmer *et al.*, 2007).

2.10.2 Non- formal education and training

This is education and training which takes place outside the formal system either on a regular or intermittent basis. This typically has structured learning objectives, learning times and learning support but will normally not lead to certification. Workshops, short courses, and seminars are typical examples of non-formal learning (Amedome & Fiagbe, 2013).

2.10.3 Informal learning

This is learning resulting from daily life activities related to work, family or leisure. Informal learning is part of non-formal learning. It is often referred to as experience bases learning and can to a certain degree be understood as accidental learning (UNESCO, 2010). “ these are primarily in the form of traditional apprenticeships and are limited by master teachers’ own limited training, overreliance on out dated technologies and poor working conditions” (Pinar *et al.*, 2012 p.6). This sector caters for the needs of out-of-school youth, early school leavers and adults (Afeti, 2014). Traditional apprenticeships make up the majority of the informal sector (Amedome & Fiagbe, 2013; Afeti, 2014), making about 90% of TVET in Ghana, taking the form of apprenticeship.

The informal economy provides employment for 9 out of 10 people in many developing economies. Pinar *et al.* (2012) agreed that this sector finds expression in dressmaking and tailoring, tie-dye making, aluminum fabrication and welding, plumbing, carpentry etc. Ghana’s well-established traditional apprenticeship system provides a useful comparison between skills training delivered in the work place and

training delivered in institutions as potential devices for poverty reduction (Palmer *et al.*, 2007). This echoes the views of Pinar *et al.* (2012) who stated that the development of human capital in the informal economy requires highly effective, market-driven education and training programs. This is more flexible sector than the formal sector which is characterized by rigid admission criteria, age restrictions and foreign language restrictions on learners. Palmer *et al.* (2007) argued that “on-the job training, such as apprenticeships, tends to be more accessible, more relevant and give better employment prospects than institutional training”.

2.10.4 The aims of TVET

According to Kere (n.d), the introduction of technical and vocational subjects in the curriculum is aimed at “providing an opportunity to all learners to acquire relevant knowledge and skills in technical and vocational occupation and to impart in learners positive attitudes towards the world of work. Again, the sponsoring or controlling body of vocational programme, assumes that skill is the bridge between learning and employment (UNESCO, 2006). By UNESCO’s standards’ an integral aspect of the general school curriculum should include:

- a. The acquisition of knowledge, skills and attitudes desirable for career development and productive engagement in the world of works;
- b. The preparation of the learner for further studies at advanced level in a chosen occupational field; (Kerre. N.d)

In this light, Pinar *et al.* (2012) argued that the skills associated with human capital development have been divided into three broad categories, cognitive skills, non-cognitive skills and Technical/trade skills.

2.11 Challenges of Clothing and Textiles Education

Clothing and Textiles Education, and for that matter SHS education in Ghana is plagued with a myriad of challenges. For the purpose of this study, they are discussed under curriculum, resources and incompetent instructors/tutors.

2.11.1 Curriculum

Raihan (2015) has observed that more often than not, the social network and association linkages of academics and industry have no link with each other, the former creates curriculum with no understanding of industry requirements. The skills mismatch that occurs at the end of the day is because SHS delivery systems are largely school-base and driven by rigid supply-side curriculum (Afeti, 2014). Again, it has been observed that the wholesale introduction of foreign curriculum without the attendant support system has done more harm than good in the attempt to introduce TVET into Ghana's system. A case in point is the copious introduction of the British City and Guilds curriculum in 1922 into technical education of Ghana which was only reviewed recently (Essel *et al.*, 2014). Thirdly, a SHS curriculum devoid of ICT in a world that now thrives on ICT has also been seen to be a problem with SHS education and its graduates. According to Clarke and Palmer (2011), "by not having ICT represented in the curriculum students come out from TVET institutions with skills that do not respond to the demands of the industry" (p6). They however argued that such attempts to give meaning to TVET through ICT should be "supported by a proper policy framework that embraces an ICT integration strategy and acknowledges the importance of developing students' 21st century skills' (Clarke & Palmer, 2011, p.60). Moreover Clothing and Textiles manufacturing setup may want to bring to bear the practicalities of the operations in a textile or clothing factory, notwithstanding

how brilliantly the curriculum has been written. In situations like this, the facilitator may only teach in vague due to the apparent lack in practical skills.

Again, Clarke and Palmer (2011) advised that an ideal curricular should not be static; they have to be competency-based and leave room for flexibility regarding which tools, software, techniques that are best suited to carry out a task. Competency-based curricula should integrate both basic ICT skills and vocation specific ICT skills. This holds potential to improve the quality and equipping students with relevant practical skills that are attractive to the labour market.

According to Anane (2013), Competency-Based Training (CBT) is an industry and demand driven (outcomes-based) education and training programme based on well-defined industry generated standards (occupational standards). Any well-meaning curriculum should be grounded in this because to ensure that what is taught conforms to industry standards, and it should be upon this bases that learning materials should be designed and developed. To enhance cost effectiveness, however, quality of programmes, especially in the promotion of self-learning contemporary educational technology, particularly the internet, interactive multimedia materials, audiovisual aids, and mass media should be harnessed to the fullest (Stolte, 2006).

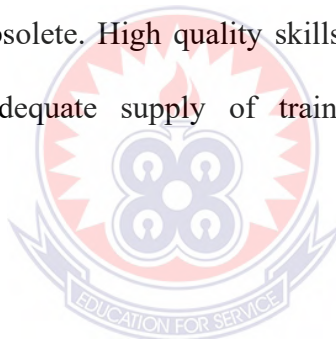
2.11.2 Resources

Resources are the materials, humans and other assets (tangible and intangible) needed by a person or organization to function effectively. Resources in this sense refer to the materials and other non-materials items necessary for executing the curriculum, in regards to the contents in the S.H.S Clothing and Textiles syllabus. A good curriculum is necessary but not a sufficient condition to achieve the good intentions of its designers. Some tangible and intangible resources are required to

ensure that learners acquire what they are expected to. A few of such resources are discussed as follows:

2.11.2.1 Teaching materials

These are media or materials intended to be used by the teacher/instructor to facilitate teaching (Sarfo, 2007). Example in Clothing and Textiles include, Clothing and Textiles textbooks, tools and equipment such as sewing machine, fabric shears, tracing wheels, ironing boards, cutting tables, notions to mention but a few. These and others constitute the mandate instructional materials needed for the smooth operation of a Clothing and Textiles lesson. Afeti (2006) has observed however that most schools lack these instructional materials to aid proper skills training, and when they are provided, they are obsolete. High quality skills requires, appropriate laboratory/workshop equipment, adequate supply of training materials, and practice by learners’.



2.11.2.2 Field trips

Although the Ministry of Education (2010) has identified field trip as one of the recommended educational exercises, very few schools are able to utilize this exercise in teaching. This challenge has been cited by Opoku–Asare *et al.* (2014) who reported that some students had never been taken anywhere outside their school premises on a field trip.

2.11.2.3 Practical lessons

In the study by Opoku–Asare *et al.* (2014) teachers were not adhering to the instructional hours stipulated by the Teaching Syllabus for practical lessons. Some reasons cited for this include the huge number of students far and above the ideal

teacher–student ratio prescribed by the Ghana Education Service/Ministry of Education, and the refusal of students to make financial contributions for acquiring practical materials. Ideally, schools are to provide for such inputs for effective teaching and learning but since school authorities complain of lean budgets inadequate to cover such expenses, students make periodic monetary contributions for such exercises. The solution could be adoption of group study so that the teachers could supervise the students for effective learning (Opoku–Asare *et al.*, 2014). Another barrier to practical lessons could be the limited time to cover the curriculum. For instance, a pre survey conducted in Gaza strip showed that, Technical Vocational teachers perceived that, two years of training is sufficient for students who will opt for further education, but insufficient for those who will enter directly into the labour market (ASSAHEL Consultants, 2013).

2.11.3 Teacher competency in Clothing and Textiles Education

The inability of some instructors to prepare students for the world of work emanates from the fact that the former are themselves-ill-equipped to deliver because they are the products of the same system. Afeti (2006) notes that instructors/teachers are inadequately trained, and the training also emphasizes on theory and certification rather than on skills acquisition and proficiency testing. To ensure they live up to their mandate by way of preparing learners to meet industry demands, instructors must be empowered in their efforts to transfer relevant skills and knowledge (Clarke & Palmer, 2011). Teachers must also have both technical skills and pedagogical/teaching methodology to effectively prepare students in Vocational oriented programmes (Clarke & Palmer, 2011). Sarfo and Ellen (2014) succinctly added that ICT is not a solution to development of contemporary competencies; it

only supports teaching method. Teachers should therefore be adequately prepared to be able to operate in and adapt to, an ever-changing scientific, technological and social environment while being guided by appropriate teaching qualities (Stolte, 2006). In concordance, the AU (2007) opined that the competence of a vocational teacher is measured in terms of theoretical knowledge, technical and pedagogical skills and knowledge of state of the art technological in the workplace. These therefore are ingredients that should define a competent teacher worth his name or personalities.

2.12 Students' performance in Clothing and Textiles, Fashion Design and Textiles

Students' academic achievement has always been one of the main goals of education. Information relating to such progress can be gathered from evaluation reports on the student to ascertain the learning outcome. According to Otu-Danquah (2002), academic performance is what a student is capable of achieving when he is tested on what he/she has been taught. It is how well a student meets standards set out to be attained in an educational institution. It implies that academic performance is determined after the student has been taught specified courses of academic studies or curriculum. According to Adams and Hayes (2001), academic performance really means three things:

- a. The ability to study and remember facts,
- b. Being able to study effectively and see how facts fit together to form larger patterns of knowledge and being able to think for yourself in relation to facts and thirdly,

- c. Being able to communicate your knowledge verbally or writing it down on paper.

Globally, standardized tests or examinations and assignments are used to measure pupils' levels of academic performance. In Ghana, the West African Senior School Certificate Examination (WASSCE) is one of the standardized examinations meant to measure Senior High School (SHS) students' levels of academic performance after three years of secondary education.

Clothing and Textiles is one of the three major areas of Home Economics taught in tertiary institutions. It is among the elective Home Economics subjects which students are expected to study at the Senior Secondary school level of education. Anyakoha (2002) indicated that the essence of separating the components of Home Economics is to ensure that students specialize in the fields of their choice.

Arubayi (2006) observed that the value of the quality of instruction in the teaching of Clothing and Textiles in tertiary institutions to National development and the economic empowerment of individuals is not in doubt.

In the views of Etsey and Amedahe (2005), educators are interested in the progress of the child especially as it relates to learning. Schools, colleges and universities admit students with basic prerequisite results or admission requirements as an entry behavior. This requirement is an indicator of the quality of input (student). Entry qualifications are those prerequisites that qualify a student to enter into any school. Entry qualification is the prerequisite for entry into any school or course of study. It is a criterion for students' admission, continuance and graduation within an institution (Kasworm & Pike, 1994). Details of entry requirement vary from institution to institution in addition to the basic national requirements. According to Alias and Zain (2006), quality of students' intake is one of the factors that contribute

to quality of graduates. A student's grades on entry are probably the single most revealing indicator of his or her successful adjustment to the intellectual demands of a particular college's course of study. Student's cognitive entry qualification which is believed to reflect student's intelligence is a factor that determines student academic performance (Durotolu, 1994). Entry requirements determine a student's educational readiness and progress. In order to obtain or identify the student's background, strengths and weaknesses in a lesson or course of study, a process of tests, interviews and observations are carried out. After this, one would then be able to determine the gap or differences between what the learner is at the point of entry and what he/she is expected to be at the completion of the specified course of study.

Entry behaviour of students has been established by Nakhanu (2009) as a factor affecting syllabus coverage. She further observed that students who entered form one with low marks were found to be slow learners and thus delayed coverage of the syllabus. Low entry behaviour has been identified as a challenge experienced by schools in attempt to provide quality education (Mobegi, 2007). Nakhanu (2009) and Mobegi (2007) agreed that entry behaviour can affect the quality of education provided for students. These findings further agree with those of Mwebi (2012) who established that high entry behaviour leads to provision of quality education.

CHAPTER THREE

METHODOLOGY

3.1 Overview

This chapter discusses the methods, which were adopted by the researcher, to conduct the study. It comprises the research design, population, sample and sampling techniques, instrumentation, validity and reliability of the instruments, data collection, data analysis procedures and ethical considerations.

3.2 Study Area

The study was conducted at Accra Technical University. Accra Technical University was the first Technical University to be established. It was established in 1949 as a Technical School and commissioned in 1957 as Accra Technical Institute. In 1963, the Institute was renamed Accra Polytechnic by the orders of the then President, Dr. Kwame Nkrumah. By the Polytechnic Law of 1992 (PNDC 321), which became fully operative in the 1993/1994 academic year, Accra Technical University was elevated to a tertiary status. The institution was then placed under the Higher Education Council with autonomy to award Higher National Diploma (through the National Board for Professional and Technician Examinations [NABPTEX]). Accra Technical University is located in the Central Business District of Accra; its strategic position renders it as the only Technical University within the “inner city”. Accra Technical University share borders with other noble institutions such as Movenpick and Accra City Hotel (former Novotel) whilst the northern zone is shared with the Trade Union Congress (TUC) and the City Campus of the University of Ghana. The Ghana Assembly Press guards the institution from the south whilst the

Central Police Command, the Ghana Cocoa Board and two Telcos (Airtel Tigo and MTN) border is to the west.

Accra Technical University began to offer Higher National Diploma (HND) programmes in Mechanical Engineering, Electrical/Electronic Engineering, Building Technology, Civil Engineering, Furniture Design and Production, Secretaryship and Management Studies, Bilingual Secretaryship and Management Studies, Accountancy, Marketing, Purchasing and Supply, Hotel Catering and Institutional Management, Fashion Design and Textiles, Mathematics and Statistics, and Science Laboratory Technology. The technician courses offered by the Polytechnic were maintained.

Currently, the University has 5 faculties – Faculty of Engineering, Faculty of Built Environment, Faculty of Applied Sciences, Faculty of Applied Arts, and Faculty of Business – and 16 departments. Currently, ATU has a student population of about 17,000.



3.3 Design of the Study

Designing a study helps the researcher to plan and implement the study in a way that will help the researcher to obtain intended results, thus increasing the chances of obtaining information that could be associated with the real situation (Creswell, 2012). This study employed the cross-sectional design. This enabled the researcher gather quantitative data during and with a particular period for data collection (Fraenkel, Wallen & Hyun, 2012).

A cross-sectional study is one that produces a ‘snapshot’ of a population at a particular point in time. The epitome of the cross-sectional study is a national census in which a representative sample of the population consisting of individuals of

different ages, different occupations, different educational and income levels, and residing in different parts of the country, is interviewed on the same day (Creswell, 2012). The single ‘snapshot’ of the cross-sectional study provides researchers with data for either a retrospective or a prospective enquiry (Cohen, Manion & Morrison, 2007).

The descriptive cross-sectional survey was therefore employed to help produce a good amount of responses from a section of Senior High School graduates who pursued Clothing and Textiles in the S.H.S and were currently pursuing Fashion Design and Textiles, to ascertain whether knowledge and skills in Clothing and Textiles, at SHS lays any significant foundation for the Fashion Design and Textiles programme at the Technical University. This enabled the researcher to collect enough data to determine the nature of the group studied as it existed at the time of the study. The strategy allowed the use of questionnaires to large volumes of data that were analyzed statistically. The wide and suitable coverage gave credibility to generalized statements made on the basis of the research. The design permitted the generalization of research findings about the population studied.

The design allows researchers to easily describe and provide an understanding of a phenomenon using simple descriptive statistics (Bell, 2003). Best and Khan (2005) postulated that descriptive statistical analysis limits generalization to the particular group of individuals observed and that no conclusions are extended beyond this group. Further, the researcher employed descriptive statistical tools such as percentages, frequencies and mean in analysing the data collected. They agreed that descriptive study simply describes and provides an understanding of a phenomenon usually with simple descriptive statistics and it is particularly valuable when an area is first investigated.

However, Fraenkel and Wallen (2000) indicated that the descriptive cross-sectional design has some weaknesses which include the difficulty of ensuring that a sufficient number of questionnaires are administered for meaningful analysis to be made. In order to mitigate the effects of the weaknesses associated with the use of descriptive survey for the study, the questionnaires were pilot tested. This offered the researcher the opportunity to reframe and sharpen ambiguous items. Further, respondents were assured of their anonymity and the confidentiality of responses provided to enable them to respond candidly and dispassionately. Also, in some instances after administering the instrument, the researcher waited for respondents to fill in their responses and collected them. As a result, the descriptive cross-sectional survey design was considered most appropriate for the study.

3.4 Population of the Study

According to Saunders, Lewis and Thornhill (2009), the population of a study is the full set of cases from which a sample is taken. It is the group to which the researcher would want the results of a study to be generalized to (Fraenkel & Wallen, 2000). The accessible population was eight hundred and sixty-eight (868) students. This comprised all Fashion Design and Textiles students at Accra Technical University, who offered Clothing and Textiles at the S.H.S level. The total population of students was categorized under the following;

Table 2: Population of students by programme and level

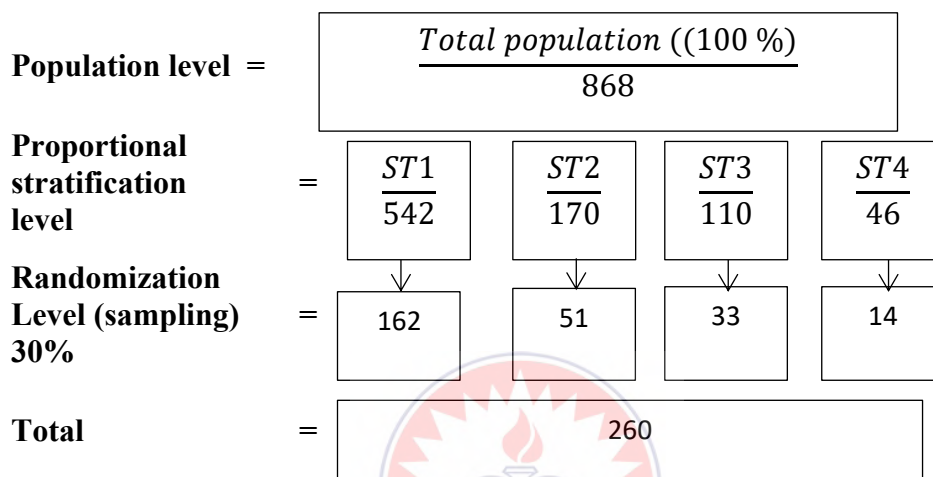
Programme	Level	Number of Students
Full –time Higher National Diploma (HND)	100	232
Full – time Higher National Diploma (HND)	200	170
Full – time Higher National Diploma (HND)	300	140
Part–time HND	100	60
Part – time HND	200	65
Part–time HND	300	45
Advanced	1 st year	65
Advanced	2 nd year	45
Bachelor of Technology	100	20
Bachelor of Technology	200	26

3.5 Sample and Sampling Procedure

A sample consists of carefully selected subset of the units that comprises the population (Amedahe, 2000). In this study, a sample of two hundred and sixty (260) students was drawn from a population of eight hundred and sixty eight (868) Fashion Design and Textiles students who studied Clothing and Textiles in the S.H.S through the stratified and simple random sampling methods. Equal proportions of 30% of respondents were drawn from each level or year category of the students, regardless of the differences in population size of each year or level. Table 2 indicates the stratified population and sample size for the study.

Table 3: Stratification of population

Strata	Categories of students	Population
ST1	HND (full time)	542
ST2	HND (part time)	170
ST3	Advanced	110
ST4	Bachelor of Technology	46
Total		868



*ST – Stratum

Figure 2: Schematic diagram of the stratified sampling design

A total of 260 students, which represents 30% of the target population was chosen for the study. The choice of 30% of the respondents is based on Manion's (1980) assertion that 30% of a study population gives a fair representation for an acceptable accuracy of results. The sample was chosen via a combination of stratified and simple random sampling technique.

Firstly, the students were stratified or categorized into four levels (ST 1, ST 2 ST 3 and ST 4). The stratified sampling technique is appropriate, in the sense that the population for the study was heterogeneous in nature. An equal proportion (30%) of the respondents were drawn from each level or year category regardless of the population size. In this regard, characteristics which appear in the wider population which must also appear in the sample were identified, that is the wider population was

divided into homogeneous groups (strata). It is a probability sampling technique in which each stratum is properly represented so that the sample drawn from it is proportionate to the stratum's share of the population. It is a sampling technique where by the population is sub-divided into homogenous groups called 'strata', from which the samples are selected on a random basis (Cohen *et al.*, 2011). A proportionate stratified sampling method was employed. This is because, students from each stratum were selected in proportion to the size of the strata since the total number of students for the various levels differed from level to level. As such, categories with more students were apportioned higher numbers as compared to those with fewer number of students. The proportionate sampling technique was used because it has the advantage of offering a high degree of representativeness. Figure 2 indicates the stratified population and sample size for the study.

Secondly, simple random sampling technique was used to select the students to give room for equal chances of selection without bias (Seidu, 2007). Simple random sampling is where sample units are drawn directly from the population by some procedure. The lottery method is designed to meet the essential criterion of randomness. In the lottery approach, pieces of papers which is equal to the total number of study units (sample frame) of the students by class or level categories was designed by the researcher. In order to select respondents from ST 1 for example, the researcher designed one hundred and sixty-two (162) pieces of paper with the inscription "Yes" whilst the other remaining three hundred and eighty (380) pieces of paper were captioned "No". The pieces of paper were folded, and put in a box. ST 1 students were made to assemble at a lecture hall to pick the pieces of paper one after the other after a briefing session. The box was turned over and over again to ensure that the pieces of paper were well mixed after each student had picked a paper and

dropped it back to guarantee that each students has an equal opportunity of being selected. A student who picked a piece of paper which had ‘Yes’ response was enrolled as a respondent for this study. This process was repeated to select respondents from ST 2, ST 3 and ST 4 in proportion to the size of categories. The random selection ensured that each student had an equal chance of being selected, and this was required for generalization of the results to the target population as noted by (Creswell, 2009). Ease of using simple random sampling represents the biggest advantage of opting for such a procedure. Also, as indicated by Crossman (2017), simple random sampling is meant to be an unbiased representation of a large group, since every member of the population has an equal chance of getting selected. The stratified and simple random sampling techniques ensured representativeness of the sample, and it also eliminated selection bias.

3.6 Instrumentation

Primary data were collected through the use of questionnaire. Data collection instruments are tools such as questionnaire, interview guide and observation checklist used by researchers to collect information from respondents when undertaking a study (Golafshani, 2003).

Questionnaire is a written instrument that contains a series of questions or statement that attempt to collect information on a particular topic (Agyedu *et al.*, 2011). It is useful for large-scale surveys and such was administered to the respondents.

The questionnaire for this study (Appendix A) contained a four -point Likert - type: ranked strongly agree (SA =4), agree (A =3), disagree (D=2) and strongly disagree (SD=1) and a few other form of close and open-ended questions. The items

were built to reflect on the key themes raised in the research questions. It consist of sections: A, B, C, D, and E. Section ‘A’ had items on socio-demographic data of the respondents, Section ‘B’ had items on contents of the Senior High School Clothing and Textiles syllabus studied. Section ‘C’ captured items on methods of teaching Clothing and Textiles in SHS. Section ‘D’ contained questions on usefulness of Clothing and Textiles content studied in SHS. The last section, ‘E’ was on academic performance of students in Fashion Design and Textiles courses at the university. The questions were straight forward, concise and brief.

3.7 Validity and Reliability of Instruments

Validity, according to Kankam and Weiler (2010), refers to the ‘‘degree to which an instrument accurately measures what it is intended to measure’’ (p. 78). It is the extent to which the research instrument serves the use for which it is intended (Seidu, 2007). To ensure that the instrument is valid, it was scrutinized by peers and the research supervisor. Construct validity was ensured by employing accepted definitions and constructions of concepts and terms; operationalising the research and its measures. Face validity was done by giving the instruments to colleague Master of Philosophy students in the Department of Home Economics Education of the University of Education, Winneba for scrutiny. Indeed, the studends comments were considered in reviewing the questions. The content validity of the instruments was granted by expert in the area of Clothing and Textiles education as well as the supervisor who scrutinized the items for their suitability before pre-test. All the necessary corrections in the items were made and declared valid by the supervisor before the administration was done.

The research instrument, was pre-tested on twenty (20) Fashion Design and Textiles students of the Koforidua Technical University to ensure reliability. The test-retest technique was used. The same twenty (20) Fashion Design and Textiles students who took part in the first pilot trail were asked to answer same questions. The results were subjected to Cronbach's alpha reliability analysis using version 26 of Statistical Package for Social Sciences (SPSS). This yielded a reliability coefficient (α) of 0.77. This value is in line with that of other researchers (Dornyei & Taguchi, 2010) who indicated that the acceptable value of alpha ranges from 0.70 to 0.95. The pilot study offered the researcher an opportunity to identify some of the problems that could have occurred in the main study. This informed necessary corrections in the questions before the main study.

3.8 Data Collection Procedures

In conducting a study, Creswell (2005) advised researchers to seek and obtain permission from authorities in charge of the site of the study because it involves a prolonged and extensive data collection. Prior to undertaking the study, a letter of introduction (Appendix B) from the Home Economics Education Department of University of Education, Winneba, was obtained. This sought permission from the Registrar of Accra Technical University as well as the Head of Fashion Design and Textiles Department of the same University to engage their Fashion Design and Textiles students for the study. After permission was granted, the researcher informed the study participants of the impending administration of the questionnaire. The administration of the questionnaire was done personally. The researcher assured respondents of the confidentiality of whatever information they provided, the fact that

nobody's identify would be disclosed, and the information would be used for the study only.

3.9 Data Analysis and Presentation

Yin (2003) stated that before interpretation takes place, data should be analysed statistically and presented. Descriptive statistics were used to analyse the data collected. Responses from respondents on the questionnaire were tallied in order to get the number of respondents who answered each set of items. The quantitative data was keyed into the SPSS version 26 software to generate frequency counts, means, standard deviations and percentage distributions of responses according to each research question raised, and this was presented in tables.

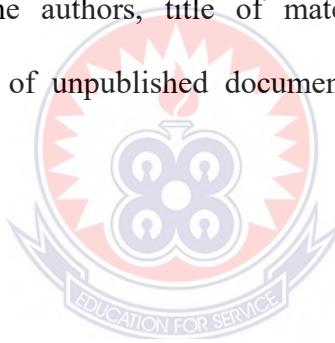
To test for the hypothesis, the researcher used the SPSS to run Pearson correlation test to find the significance of relationship between students' entry level knowledge or behaviour in Clothing and Textiles in SHS and performance in Fashion Design and Textiles in the Technical University. This was done at a significance level of $p \leq .05$ using a confidence interval of 95%. The interpretation of the correlation test results made it possible to make appropriate inferences.

3.10 Ethical Considerations

In line with research ethics, the following ethical standards were adhered to: seeking permission, voluntary participation, and no harm to participants, informed consent, anonymity and confidentiality (Punch, 2005). A letter of introduction (Appendix B) from the Home Economics Education Department of University of Education, Winneba was obtained and used in seeking permission from the Registrar of Accra Technical University, as well as the Head of Fashion Design and Textiles

Department of the same University, to engage their Fashion Design and Textiles students for the study.

Protection and consent of participants and their responses were assured by obtaining due permission from the students, protecting privacy and ensuring confidentiality. In doing this, description of the study, the purpose and the possible benefits and risks were mentioned to participants. The researcher permitted participants to freely withdraw or leave at any time if they deemed it fit. A statement of consent was given to participants to sign as evidence of their willingness to participate in the study. As a way of preventing plagiarism, all ideas, writings, drawings and other documents or intellectual property of other people have been referenced, indicating the authors, title of materials, year of publication, and publishers. In the case of unpublished documents, permission was sought from owners.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Overview

The study determines whether Clothing and Textiles graduates from the Senior High School have a sound foundation for Fashion Design and Textiles programme in Accra Technical University. This chapter presents the results of the data collected from the respondents. The data are presented in tables as frequency count, percentage, mean and standard deviation. The result has been organised, presented and discussed under the following themes: background information; Clothing and Textiles contents studied at Senior High School level; methods used to deliver Clothing and Textiles contents at Senior High School level; views of students on the usefulness of Clothing and Textiles contents learnt at senior high school level; and students' performance in Fashion at the Technical University.

4.1 Background Information of the Respondents

The demographic attributes discussed in this section include the following: gender, age, level/grade of study, programme of study, entry level knowledge (ELK) or West African Senior School Certificate Examination (WASSCE) grade.

Table 3: Background information of respondents

Variable	Variable category	(n = 260)	
		F	%
Gender	Female	182	70.0
	Male	78	30.0
Age (in yrs)	Below 18	32	12.3
	18-21	39	15.0
	22-24	104	40.0
	25 & above	85	32.7
Level	100	78	30.0
	200	90	34.6
	300	92	35.4
Programme of study	HND full-time	162	62.3
	HND part-time	51	19.6
	Advanced	33	12.7
	B-Tech	14	5.4
Pre-entry WASSCE grade	A1	0	0.0
	B2	81	31.2
	B3	52	20.0
	C4	39	15.0
	C5	43	5.0
	C6	45	3.8
	D7	0	0.0
	E8	0	0.0
	F9	0	0.0

Source: Fieldwork data (2019).

Key: F = Frequency; % = Percentage; ~ = Approximately

The gender distribution of the students is skewed towards respondents who were female (n= 182, 70%), and followed by male (n= 78, 30%) students. This indicates that more females have interest in the programme. Similarly, the age distribution of the respondents is skewed towards those who were 22-24 years (n= 104, 40%), and followed by those who were 25 years and above (n= 85, ~33%). The students who were 18-21 (n= 39, 15%) and below 18 years (n= 32, ~12%) constituted the least number. With regard to the age it shows clearly that young adults show delight in pursuing Fashion Design and Textiles.

The distribution of the students in levels 100, 200 and 300 recorded 30%, ~35%, and ~35% respectively. The information on programme of study showed that students who pursued HND on full-time were about 62%, HND on part-time were nearly 20%, Advanced students were around 13%, and Bachelor of Technology students were about 5%.

With regard to entry level grade or entry level knowledge (ELK) in Clothing and Textiles in the West African Senior Secondary School Certificate Examination (WASSSCE), the results indicated that all the respondents had good entry grades of A1, B2, B3, C4, C5 and C6. Notwithstanding, only 31% had B2, with 20% having B3. It could be seen that students' achievement in Clothing and Textiles during WASSSCE as to obtaining grade B was high (51%). It is also clear from the table that 15% of the respondents had C4, 17% had C5, and about 17% scored C6 as threshold entry level grade.

It emerged from the findings that more female students (70%) were enrolled in the Fashion Design and Textiles Programme at Accra Technical University. It also unfolds from this study that about 73% of the students were 22 years and above, and about 62% pursued full-time programme. The majority (51%) of the students enrolled in Technical University with good entry level grade (grades B2, B3) or entry level knowledge (ELK) in Clothing and Textiles in WASSSCE, while 49% had credit passes (grades C4, C5, C6). This implies that entry behaviour into the Fashion Design and Textiles programme at Accra Technical University is reasonably high.

4.2 Contents of the Senior High School Clothing and Textiles Syllabus

Studied

This section is on content knowledge in Clothing and Textiles syllabus studied by the respondents at the SHS level.

Table 4: Contents of Clothing and Textiles Syllabus studied at SHS level

Content	HE	ME	LE	\bar{X}	Decision
	F (%)	F (%)	F (%)		
Textile fibres and fabrics	156(60)	65(25)	39(15)	2.45	Accept
Garment construction	156(60)	78(30)	26(10)	2.50	Accept
Mending	65(25)	104(40)	91(35)	1.65	Reject
Embroidery	117(45)	78(30)	65(25)	2.20	Reject
Stitches	221(85)	26(10)	13(5)	2.80	Accept
Openings	182(70)	52(20)	26(10)	2.60	Accept
Fastenings	156(60)	65(25)	39(15)	2.45	Accept
Pockets	104(40)	91(35)	65(25)	2.15	Reject
Interfacing	104(40)	117(45)	39(15)	2.25	Accept
Pattern drafting	104(40)	65(25)	91(35)	2.05	Reject
Freehandcutting	117(45)	39(15)	104(40)	2.05	Reject
Wardrobe planning	143(55)	52(20)	65(25)	2.30	Accept
Clothing care & maintenance	156(60)	65(25)	39(15)	2.45	Accept
Clothing storage	78(30)	143(55)	39(15)	2.15	Reject
Entrepreneurship	65(25)	143(55)	52(20)	2.05	Reject
Goodgrooming	169(65)	65(25)	26(10)	2.55	Accept
Decorative processes	52(20)	143(55)	65(25)	1.95	Reject
Consumer education	78(30)	104(40)	78(30)	2.00	Reject
Overall mean				2.25	

Key: \bar{X} - Mean; F – Frequency; % – Percentage; **HE** – High Extent; **ME** – Moderate Extent; **LE** – Low Extent

Table 4 presents data on contents of Clothing and Textiles syllabus studied at SHS level by the respondents. Textiles, fibres and fabrics were studied by the respondents to a high (60%), moderate (25%), and low (15%) extent with mean (\bar{X}) =2.45. Also, garment construction was studied to a high (60%), moderate (30%) and

low (10%) extent with mean (\bar{X}) =2.50. Similarly, contents on mending were studied to a high (25%), moderate (40%) and low (35%) rates with mean (\bar{X}) =1.65.

Moreover, embroidery was studied by the respondents to a high (45%), moderate (30%) and low (25%) extent with mean (\bar{X}) weight =2.20. Stitches as a topic was studied by the respondents to a high (85%), moderate (10%) and low (5%) scale with mean (\bar{X}) =2.80. Additionally, openings as a topic in clothing and textiles was studied by the respondents to a high (70%) moderate (20%) and low (10%) basis with mean (\bar{X}) =2.60. Fastenings as a topic in clothing and textiles was studied by the students to a high (60%) moderate (25%) and low (15%) extent with mean (\bar{X}) rating =2.45.

Again, in Table 4, pockets as a topic in Clothing and Textiles was studied to a high (40%) moderate (35%) and low (25%) extent with mean (\bar{X}) =2.15. Furthermore, interfacing in Clothing and Textiles was studied to a high (40%), moderate (45%) and low (15%) basis with mean (\bar{X}) =2.25. Pattern drafting was studied by clothing and textiles students to a high (40%), moderate 25%) and low (35%) extent with mean (\bar{X}) weight =2.05. Also, free-hand cutting was studied by Clothing and Textiles respondents to a high (45%), moderate (15%) and low (40%) extent with mean (\bar{X}) =2.05. Additionally, wardrobe planning was studied by the respondents to high (55%), moderate (20%) and low (25%) basis with mean (\bar{X}) =2.30.

Clothing care and maintenance was studied by the respondents to a high (60%), moderate (25%), and low (15%) extent with mean (\bar{X}) weight =2.45. Clothing storage was studied by the respondents to a high (30%), moderate (55%) and low (35%) rates with mean (\bar{X}) =2.15. Entrepreneurship was studied by the respondents

to a high (25%), moderate (55%) and low (20%) extent with mean (\bar{X}) weight =2.05. Good grooming was studied by the respondents to a high (65%), moderate (25%) and low (10%) scale with mean (\bar{X}) =2.55. Additionally, decorative processes was studied by clothing and textile respondents to a high (20%) moderate (55%) and low (25%) basis with mean (\bar{X}) =1.95. Consumer education was studied by the respondents to a high (30%) moderate (40%) and low (30%) extent with mean (\bar{X}) rating =2.00.

Evidence gathered from this study revealed that the contents of the SHS Clothing and Textiles syllabus which were mostly studied by the students were: stitches, openings, good grooming, garment construction, textile fibres and fabrics, fastenings, clothing care and maintenance, wardrobe planning, and interfacing ($\bar{X} \geq 2.25$). This observation is an indication that the Clothing and Textiles syllabus for Ghanaian senior high schools is content-rich to equip students with appropriate vocation oriented knowledge and practical skills to be able to practise Clothing and Textiles as a vocation, to set up businesses and become self-employed in the field of clothing and textiles. The observation is consistent with a report by the Ministry of Education [MoE], Ghana (2010) which indicated that the syllabus for Clothing and Textiles as an elective subject for senior high schools is designed to equip students who study it with practical skills that will enable them to set up businesses and become self-employed in these fields if they are not able to further their studies beyond senior high school. In a related report, the MoE (2005) also indicated that possessing knowledge in Clothing and Textiles and its related contents can help the Ghanaian student to become self-employed in the garment or apparel production industry.

4.3 Methods of Teaching Clothing and Textiles Contents at Senior High School Level

This section presents information on general and specific methods of teaching Clothing and Textiles contents in Senior High Schools attended by the respondents. The methods of teaching are in two categories: teacher-centered (lecture, brainstorming and discussion) and learner-centered (demonstration, project, resource persons, fieldtrip and practical work). The data were collapsed into three categories: high extent, moderate extent, and low extent for interpretation and discussion.

Table 5: Methods of teaching Clothing and Textiles contents at SHS level

Method	VHE	HE	ME	LE	NE	\bar{X}	Decision
	F(%)	F(%)	F(%)	F(%)	F(%)		
Lecture	143(55)	39(15)	39(15)	13(5)	26(10)	4.23	Frequently used
Brainstorming	52(20)	78(30)	52(20)	39(15)	39(15)	3.25	Frequently used
Discussion	117(45)	52(20)	39(15)	39(15)	13(5)	3.85	Frequently used
Demonstration	104(40)	65(25)	65(25)	13(5)	13(5)	3.90	Frequently used
Practical work	52(20)	39(15)	130(50)	26(10)	13(5)	3.35	Frequently use
Fieldtrip	26(10)	13(5)	13(5)	78(30)	130(50)	1.95	Scarcely used
Role play	26(10)	52(20)	39(15)	39(15)	104(40)	2.45	Scarcely used
Project	39(15)	26(10)	65(25)	39(15)	91(35)	2.55	Scarcely used
Resource persons	65(25)	39(15)	39(15)	26(10)	91(35)	2.85	Scarcely used
Overall mean						3.15	

Key: \bar{X} - Mean; F – Frequency; % – Percentage; HE – High Extent; ME – Moderate Extent; LE – Little Extent; NE – No Extent

Table 5 presents data on methods through which respondents were taught Clothing and Textiles contents in Senior High Schools. The lecture technique was used by teachers to a high (70%), moderate (15%) and low extent (15%) with mean (\bar{X}) weight =4.23. Also, brainstorming was used for content delivery to a large (50%), moderate (20%) and low (30%) extent by teachers with mean (\bar{X}) rating =3.25. The

discussion method was used to a high extent (65%), moderate extent (15%), and low extent (20%) with \bar{X} =3.85.

Demonstration technique was used for content delivery to a large extent (65%), some extent (25%) and low extent (10%) with \bar{X} =3.90. Field trip was used for delivery of Clothing and Textiles contents to a high extent (15%), moderate extent (5%) and low extent (80%) with \bar{X} rating =1.95. Role play was used as a technique for content delivery by Clothing and Textiles teachers to a high extent (30%), moderate extent (15%), and low extent (55%) with \bar{X} weight =2.45. The project method was used for delivery of Clothing and Textiles contents to a high extent (25%), moderate extent (25%) and low extent (50%) with \bar{X} =2.55. Resource persons were employed by teachers to teach Clothing and Textiles contents to a high extent (40%), moderate extent (15%), and low extent (45%) with \bar{X} =2.85. Most of the Clothing and Textiles lessons were delivered through practical approach to a large extent (35%), moderate extent (n=50%), and low extent (15%) with \bar{X} =3.35.

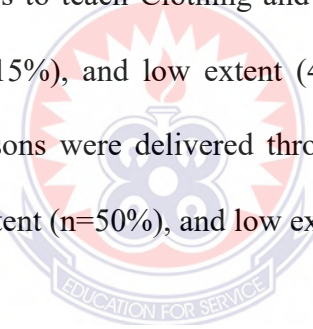


Table 6: Methods of teaching specific Clothing and topics in SHS

(n = 260)

Content/Topic	Method								
	1 F(%)	2 F(%)	3 F(%)	4 F(%)	5 F(%)	6 F(%)	7 F(%)	8 F(%)	9 F(%)
Textile fibres and fabrics	53(20)	0(0)	54(21)	54(21)	18(7)	0(0)	0(0)	0(0)	81(31)
Garment construction	93(36)	0(0)	85(33)	0(0)	0(0)	0(0)	0(0)	0(0)	82(32)
Mending	83(40)	0(0)	60(23)	0(0)	0(0)	0(0)	54(21)	0(0)	63(24)
Embroidery	36(14)	18(7)	39(15)	75(29)	0(0)	0(0)	9(4)	0(0)	83(40)
Stitches	27(10)	0(0)	35(14)	54(21)	0(0)	9(4)	0(0)	9(4)	126(49)
Openings	33(13)	0(0)	39(15)	70(27)	0(0)	9(4)	0(0)	0(0)	99(38)
Fastenings	38(17)	0(0)	28(11)	74(29)	0(0)	0(0)	0(0)	0(0)	120(46)
Pockets	38(17)	9(4)	65(25)	20(8)	0(0)	9(4)	0(0)	0(0)	119(46)
Interfacing	75(29)	0(0)	77(30)	0(0)	0(0)	18(7)	9(4)	0(0)	81(31)
Pattern drafting	57(30)	0(0)	29(11)	95(37)	0(0)	0(0)	0(0)	9(4)	70(27)
Freehand cutting	27(10)	9(4)	37(14)	77(30)	0(0)	18(7)	0(0)	0(0)	72(28)
Wardrobe planning	93(36)	39(15)	94(36)	0(0)	9(4)	0(0)	0(0)	0(0)	25(10)
Clothing care & maintenance	94(36)	38(15)	67(26)	52(20)	0(0)	9(4)	0(0)	0(0)	0(0)
Clothing storage	33(13)	39(15)	76(29)	34(13)	9(4)	0(0)	9(4)	0(0)	0(0)
Entrepreneurship	94(36)	39(15)	57(22)	43(17)	0(0)	27(10)	0(0)	0(0)	0(0)
Goodgrooming	73(28)	0(0)	79(30)	70(27)	9(4)	0(0)	0(0)	0(0)	29(11)
Decorative processes	74(29)	9(4)	20(8)	65(25)	74(26)	9(4)	0(0)	0(0)	18(7)
Consumer education	36(14)	9(4)	59(23)	66(25)	81(31)	0(0)	0(0)	0(0)	9(4)

Key: 1 = Lecture; 2 = Brainstorming; 3 = Discussion; 4 = Demonstration; 5 = Fieldtrip; 6 = Role play; 7 = Project; 8 = Resource person; 9 = Practical lessons; F – Frequency; % - Percentage

With regard to the specific method of teaching textile fibres and fabrics, Table 6 shows that the respondents mentioned lecture technique (20%), discussion (21%), demonstration (21%), field trip (7%), and practical work (3%). Also, the specific methods by which respondents studied garment construction in SHS were; lecture method (36%), discussion (33%), and practical work (32%). The methods by which respondents studied mending in SHS Clothing and Textiles were; lecture method (40%), discussion (23%), project (21%), and practical work (24%).

Lessons on embroidery were taught through the lecture method (14%), brainstorming (7%), discussion (39%), demonstration (29%), project (4%), and practical work (40%). Also, lessons on stitches were taught through the lecture

method (10%), discussion (14%), demonstration (21%), role play (4%), resource persons (4%), and practical work (49%). The methods by which respondents studied openings in SHS Clothing and Textiles were; lecture method (13%), discussion (15%), demonstration (27%), role play (4%), and practical work (38%).

Lessons on fastenings in SHS Clothing and Textiles were mainly taught via the lecture method (17%), discussion (11%), demonstration (29%), and practical work (46%). Also, lessons on pockets in SHS Clothing and Textiles were taught via the lecture method (17%), brainstorming (4%), discussion (25%), demonstration (8%), role play (4%), and practical work (46%). Concerning the teaching of contents on interfacing, the techniques used were: lecture (29%), discussion (30%), role play (7%), project (4%), and practical work 31%).

In Table 6, the methods by which respondents studied pattern drafting in SHS Clothing and Textiles were; lecture method (30%), discussion (11%), demonstration (37%), use of resource persons (4%), and practical work (27%). The respondents studied freehand cutting in SHS Clothing and Textiles via lecture method (10%), brainstorming (4%), discussion (14%), demonstration (30%), role play (7%), and practical work (28%). Wardrobe planning as a topic in SHS Clothing and Textiles was mainly taught by teachers via lecture method (36%), brainstorming (15%), discussion (36%), field trip (4%), and practical work (10%).

The methods by which respondents studied clothing care and maintenance in SHS Clothing and Textiles were; lecture method (36%), brainstorming (15%), discussion (26%), demonstration (20%), and role play (4%). The respondents studied clothing storage in SHS Clothing and Textiles via lecture method (13%), brainstorming (15%), discussion (29%), demonstration (13%), field trip (4%), and project (4%). Lessons on entrepreneurship in SHS Clothing and Textiles were mainly

taught via the lecture method (36%), brainstorming (15%), discussion (22%), demonstration (17%), and role play (10%).

The respondents studied good grooming in SHS Clothing and Textiles via lecture method (28%), discussion (30%), demonstration (27%), field trip (4%), and practical work (11%). The methods by which respondents studied decorative processes in SHS Clothing and Textiles were; lecture method (29%), brainstorming (4%), discussion (8%), demonstration (25%), field trip (26%), role play (4%) and practical work (7%). Lessons on consumer education in SHS Clothing and Textiles were mainly taught via the lecture method (14%), brainstorming (4%), discussion (23%), demonstration (25%), field trip (31%) and practical work (4%).

In Tables 5 and 6, the study found that Clothing and Textiles lessons in SHS were taught mainly via lecture, brainstorming, discussion, demonstration, and practical work. The specific contents which were mainly delivered through these approaches include stitches, fastenings, pockets, openings, embroidery, textile, fibres and fabrics, pattern drafting, freehand cutting, mending, and garment construction. It could be concluded from the results that both theoretically-oriented and practically-oriented methods were used for the delivery of Clothing and Textile contents studied by respondents while in SHS. However, teacher-centred techniques such as lecture, brainstorming and discussion were dominantly used by Clothing and Textiles teachers. The result implies that both theoretical and activity or practically oriented techniques were employed in the teaching and learning of specific contents of the Clothing and Textiles syllabus at the SHS level. There is a combined use of teacher-centred and learner-centred methods of teaching although the learner-centred techniques are largely required in teaching vocation-oriented subjects.

Also, it could be inferred from the results that little attention was paid to the use of role play, project, use of resource persons and field trip as techniques of teaching and learning contents of the SHS Clothing and Textiles syllabus. These findings contradict the views of Gray *et al.* (2005) who found that demonstration, experimentation, field trip and project work or problem-solving methods are mostly used in schools for the teaching of Clothing and Textiles. A number of researchers (Annoh, 2001; Oppong-Frimpong *et al.*, 2009; Opoku-Asare *et al.*, 2014) have rather recommended the use of these techniques as the best methods for teaching vocational skills, including Clothing and Textiles. For instance, Annoh (2001) indicated that demonstration is actually the best method in teaching vocational skills and practical subjects such as Clothing and Textiles because demonstration can be used to show procedures, to explain new techniques, to establish standard for individual and group work and to illustrate methods when funds or time are limited. For instance, field trips and excursions are recommended by the Clothing and Textiles syllabus (Opoku-Asare *et al.*, 2014; MoE, 2010) as educational exercises that help to explain the concepts presented in the classroom setting. This is because students find themselves face-to-face with real life situation that they have previously learnt (Annoh, 2001). Again, the project method or problem-solving method is another suitable method for teaching Clothing and Textiles as noted by Oppong-Frimpong *et al.* (2009).

Notwithstanding, the study found that lecture, brainstorming and discussion methods were mostly used in the teaching of Clothing and Textiles. This finding vindicates Gray *et al.* (2005) who observed that explaining or lecturing and discussion methods are mostly used in schools for the teaching of Clothing and Textiles. It is likely that teachers mostly use teacher-centred methods because of large class sizes, convenience and inexpensive nature of teacher-centred teaching methods in terms of

cost and time. In other words, teachers are discouraged to use activity-oriented teaching techniques probably because they are time consuming and costly in terms of money to provide equipment and materials for practical lessons.

It could be inferred from the findings of the study that although less attention is paid to the use activity-oriented methods of teaching Clothing and Textiles contents at the SHS level, the combined use of some teacher-centred and learner-centred methods of teaching contents will generally equip students with appropriate vocational skills in garment production. Several researchers give credence to the combined use of teacher-centred techniques (Gray *et al.*, 2005) and learner-centred methods (Annoh, 2001; Oppong-Frimpong *et al.*, 2009; MoE, 2010; Opoku-Asare *et al.*, 2014) as best and suitable methods to equip students with vocational skills and practical subjects such as Clothing and Textiles.

4.4 Students' Views on the Usefulness of Clothing and Textiles

Contents Learnt at Senior High School Level

This section presents information on entrepreneurial competencies or skills gained by students who studied Clothing and Textiles in the Senior High School. The data were collapsed into three categories: high, moderate, and low level of opinion for interpretation and discussion.

Table 7: Students' views on the usefulness of Clothing and Textiles contents learnt at Senior High School level

(n = 260)

Statement	Response					\bar{X}	Decision
	VR F(%)	R F(%)	FR F(%)	LR F(%)	IR F(%)		
<i>Acquired relevant knowledge and skills in/to ...</i>							
construct personal clothes	117(45)	65(25)	52(20)	0(0)	26(10)	3.95	Relevant
sewing	143(55)	65(25)	26(10)	13(5)	13(5)	4.20	Relevant
dressmaking/tailoring	78(30)	72(28)	83(32)	0(0)	27(10)	3.66	Relevant
clothing care and maintenance	78(30)	59(23)	58(22)	39(15)	26(10)	3.47	Irrelevant
research	91(35)	46(18)	58(22)	39(15)	26(10)	3.52	Irrelevant
cloth merchandizing	65(25)	69(26)	59(23)	52(20)	15(6)	3.45	Irrelevant
clothing technology	65(25)	78(30)	72(28)	32(12)	13(5)	3.57	Irrelevant
computer aided design programming	39(15)	60(23)	72(28)	56(22)	33(12)	3.06	Irrelevant
teaching/lecturing	82(32)	76(29)	56(22)	33(12)	13(5)	3.69	Relevant
Overall mean						3.61	

Key: X - Mean; F – Frequency; % – Percentage; VR – Very Relevant; R –Relevant; FR – Fairly Relevant; LR – Less Relevant; IR – Irrelevant

Table 7 presents respondents' opinion on the usefulness of Clothing and Textiles course studied in Senior High School. With regard to the acquisition of relevant knowledge and skills to construct personal clothes, the majority of the respondents (70%) indicated a high opinion, satisfactory opinion (20%) low opinion (10%) with mean (\bar{X}) value =3.95 generally indicating relevance. Respondents' opinion on the acquisition of sewing knowledge and skills was high (80%), moderate (10%) and low (10%) with \bar{X} =4.20.

Also, respondents' views on the acquisition of dressmaking/tailoring knowledge and skills was high (58%), satisfactory (32%) and low (10%) with \bar{X} =3.66. Respondents' views on the acquisition of relevant knowledge and skills in clothing care and maintenance was high (53%), satisfactory (22%) and low (25%), but the \bar{X} value of 3.47 was low. Similarly, respondents' opinion on the acquisition of

knowledge and skills in research was high (53%), satisfactory (22%) and low (25%), but the \bar{X} value of 3.52 was low.

Respondents' opinion on the acquisition of knowledge and skills in research was high (53%), satisfactory (22%) and low (25%), but the \bar{X} value of 3.52 was low. Similarly, respondents' opinion on the acquisition of knowledge and skills in cloth merchandizing was high (51%), moderate (23%) and low (26%) with \bar{X} =3.45. Again, respondents' opinion on the acquisition of knowledge and skills in cloth technology was high (55 %), satisfactory (28%) and low (17%) with \bar{X} =3.57. which fell below the accepted relevance value of 3.60.

Also, in Table 7, respondents' opinion on the acquisition of knowledge and skills in computer aided design programming was high (38%), satisfactory (28%) and low (34%) with \bar{X} =3.06. Respondents' views on the acquisition of knowledge and skills in teaching was high (61%), moderate (22%) and low (xx7%) with \bar{X} =3.69. The following were the views from the students on the usefulness of Clothing and Textiles skills and competencies learned at Senior High School:

I have gained knowledge in fibres, yarn, and etcetera. I will be able to do anything related to sewing, bead making and designing. (Student #1)

I have gained knowledge in merchandise, textile making and making Kente. I also have knowledge about the tools and equipment's, fabric and some ideas about sewing processes. (Student #2)

I have learned more skills on decorative styles in production. I have also gained skills and knowledge in sewing, textile designing, making of garment pattern and using the sewing machine properly. (Student #3)

Generally, I have learned more ideas and skills in clothing industry. Also, studying Clothing and Textiles in SHS made me gain knowledge

on how to dress decently and good grooming. This made me know how to present myself in the midst of people. (Student #4)

I am able to make patterns of bodies block and design a shoe with African prints I also do tie and die. (Student #5)

I have acquired skills in sewing, pattern making, cosmetics, sewing, tie and dye making. (Student #6)

I am able to cut and sew clothes. I make fabric and design them. In fact, I have acquired skills in weaving and garment production. (Student #7)

I have gained sewing, decoration and designing skills. These skills will help me gain more skills and knowledge. I am able to design dresses and sketch wedding gown. (Student #8)

I have gained skills in clothing construction, I am able to do anything related to sewing, bead making and designing. I design wedding gowns and others. (Student #9)

It has equipped me with skills to be creative, enterprising and self-reliant. Yes, it offers me an opportunity to be absorbed in clothing manufacturing because of the competence I acquired in Clothing and Textiles. I can also be an entrepreneur. (Student #10)

Yes, I have gained entrepreneurship skills. Now, I can be employed by industries because of the skills I have gained in Clothing and Textiles. (Student #11)

What is being taught in the senior high school does not align with the expectations of the industries. We are behind in terms of machinery for practical work. I mean we lacked hands-on skills because we had no exposure to the machinery and equipment for clothing and textile practical lessons. (Student #11)

I did not gain so much practical skills because of lack of resources for practical lessons. Corroborating this view, the respondent remarked; I only learn for examination purposes. (Student #12)

I did not gain so much practical skills because of lack of resources for practical lessons. Corroborating this view, the respondent remarked; I only learn for examination purposes. (Student #13)

At times because of limited knowledge, I find myself concentrating on those topics I am well versed with. We don't cover some topics, for example, fabric printing and dyeing because of shortage of equipment to use. (Student #14)

I have gained knowledge in pattern making, designing skills, actual sewing of the garments and operating different types of machines. (Student #15)

I have been exposed to operating different types of machines, pattern making, and designing. In fact, I have gained hands-on experience. (Student #16)

No exposure to different machinery and accessories in senior high schools, for example, buttonhole sewers and folders. I do not know how to operate different machinery, pattern making, and garment sewing. (Student #17)

The practical lessons we learned are not adequate. We need field trips to compliment the theory we get. (Student #18)

It's not adequate; there is no involvement of the industry in terms of assessment when we are in school. We need the industry to be involved. (Student #19)

That's why I am saying our education must have the psycho-motor elements. If you get an education and that education does not enable you to do things that education is hollow and we don't want hollow education. (Student #20)

I feel not adequately trained in the Clothing and Textiles area. I gained very little in skills- acquisition; so creative, enterprising and self-reliant skills have eluded me. (Student #21)

Yes, as a university student I have been absorbed in clothing manufacturing industries because of my competence I am now an entrepreneur. (Student #22)

Designing skills, operating different types of machines, designing, pattern making, garment construction, operating different types of machinery and equipment. (Student #23)

Yes, some of us have gained entrepreneurship skills. Some students are now employed by industries because of the skills they have acquired in clothing and textiles. (Student #24)

What is being taught in Senior High Schools does not align with the expectations of the industries. (Student #25)

We learned pattern making, designing skills, actual sewing of the garments and operating different types of sewing machines. (Student #26)

I have learned to fix textile machinery when they develop a problem, steps to take in identifying the problem and to fix them. (Student #27)

As students we are allowed to use machinery for our own projects. We are given material to use for projects. (Student #28)

On the career / vocations and job opportunities in textiles and clothing, the students' responses are presented below. (Student #29)

Certainly, I can be a fashion designer and fashion merchandiser. I can also engage in bead making and pattern making. (Student #30)

Surely, I can be a fashion designer, fashion consultant, teacher, wardrobe planner, and I can engage in computer aided designing. (Student #31)

It has offered me the job opportunity to be pattern maker, cutter, fashion designer, textile designer and fashion teacher. (Student #32)

I have a lot of opportunities as a fashion designer, customized products producer, fashion illustrator, wardrobe consultant, clothing lecturer, and textiles chemist. I can also be into interior decoration. (Student #33)

From these responses it was laid bare that Clothing and Textiles taught in Ghanaian Senior High Schools produce students who are marketable of entrepreneurial skills. From the above revelations, it was revealed that students learnt a variety of skills in Clothing and Textiles whilst in Senior High School. The researcher reasons that skills like pattern making, designing, garment construction, operating different machinery and fixing them when need arose have been seen as

major skills a student needs to have if quality is to be achieved in Technical and Vocational Education (TVE). The results revealed that, students were exposed to different types of skills ranging from pattern making, designing, and pattern grading, and operating different types of machinery.

It emerged from the results that generally the respondents' level of opinion was high with regard to the acquisition of relevant knowledge and skills in sewing, construction of personal clothes, dressmaking/tailoring, and teaching ($\bar{X} \geq 3.61$). The result is an indication that the Clothing and Textiles course studied by the respondents in SHS is useful. This implies that respondents had primarily gained the requisite foundation knowledge and competencies in sewing, garment construction, dressmaking/tailoring. These findings imply that the Clothing and Textiles course taught in Ghanaian Senior High Schools imbibe in students some knowledge, life skills and employable skills in garment production and teaching. The findings affirm the views of Evans-Solomon and Opoku-Asare (2011) who indicated that Home Economics constitutes one of the options of the vocational skills programme of the Senior High School (SHS) elective curriculum. This suggests that Senior High School graduates who study Clothing and Textiles and other vocation-oriented courses at school can engage in self-employed jobs or employment after graduation. This observation is parallel to the views of other researchers (Banson, 2010; Boadi, 2012; Danso-Sintim, 2008; Keteku, 2008) who revealed that many graduate students who study vocational and technical programme are presumed to have acquired enough practical knowledge and technical skills for self-employed or employment in this subject area. This observation also buttresses the views of Anthony (2014) who noted that over the years Ghana has infused the general school curriculum with vocation

oriented subjects meant to equip the youth with entrepreneurial, productive and employable skills so they can function effectively in the global economy.

In support, Danso-Sintim (2008) remarked that Ghana's strategy for nurturing vocational skills among the citizens has focused on training students to become enterprising so they can adapt to the demands of a global knowledge-based economy that is driven by science and technology. This is because possessing knowledge in Clothing and Textiles and its related contents can help the Ghanaian student to become self-employed in the garment industry as reported by the Ministry of Education [MoE] (2003, 2010) in Ghana. However, researchers (Boadi, 2012; Banson, 2010; Danso-Sintim, 2008; Keteku, 2008) have noted that a number of Senior High School graduates who study vocational and technical-oriented programmes are unable to engage in self-employed jobs or employment.

4.5 Students' Performance in Fashion Design and Textiles at the Technical University

This section deals with respondents' opinions on their academic performance in Fashion Design and Textiles course at the technical university. The grades were collapsed into four categories: excellent/very good (grade A), good (grades B+ and B), satisfactory/average (grades C+ and C), and below average/poor (grades D+ and D) for interpretation and discussion.

Table 8: Students' performance scores or grades in Fashion Design and Textiles at the Technical University

(n = 260)

Performance indicator	Grades						
	A F(%)	B+ F(%)	B F(%)	C+ F(%)	C F(%)	D+ F(%)	D F(%)
Class tests/quizzes	39(15)	78(30)	104(40)	39(15)	0(0)	0(0)	0(0)
Mid-semester examination	39(15)	91(35)	82(32)	0(0)	22(9)	13(5)	13(5)
Class work/assignments	26(10)	104(40)	69(27)	22(9)	13(5)	13(5)	13(5)
Projects	104(40)	39(15)	91(35)	26(10)	0(0)	0(0)	0(0)
Practical examination	78(30)	52(20)	49(19)	42(16)	13(5)	13(5)	13(5)
End of semester examination	78(30)	65(25)	78(30)	0(0)	13(5)	13(5)	13(5)

Key: F – Frequency; % – Percentage; A – Excellent/very good; B = Good; C - satisfactory/average; D – below average

Table 8 presents academic performance of respondents in Fashion Design and Textiles course at the technical university as responded by respondents themselves. A few (15%) respondents had excellent grade (A) in class tests/quizzes, 70% had good grades (B+, B), while 15% had relatively weak but average grades C+ and C with. Also, 15% of the respondents recorded very good grade (A) in mid-semester examination, 67% had good grades (B+, B), 9% obtained average grades (C+ and C), whereas 10% had below average or poor grades (D+ and D).

Again, 10% of the respondents recorded excellent grade (A) in class work/assignments, 67% had good grades (B+, B), 14% obtained average grades (C+ and C), and 10% had poor grades (D+ and D). With regard to performance scores in projects, 40% of the respondents obtained excellent grade (A), 50% scored good grades (B+ and B), and 10% had average grades (C+ and C).

As regards practical work or examination, 30% of the respondents scored excellent grade (A), 39% had good grades (B+ and B), 21% recorded average grades (C+ and C), while 10% obtained below average grades (D+ and D). Also, 30% of the respondents obtained excellent grade (A) in end of semester examination, 55% scored

good grades (B+ and B), 5% recorded average grades (C+ and C), while 10% obtained below average grades (D+ and D).

Evidence gathered from the findings of this study indicate that respondents' performance assessment scores were high in projects, class tests/quizzes, and end of semester examination. Respondents' performance in these indicators could be attributable to past experiences and foundation in Clothing Textiles education as well as entry level knowledge (ELK) and grades obtained in the SHS Clothing and Textiles course. Reasonably, it is probable that entry behaviour (predictor) in Clothing and Textiles in WASSCE is extrapolative of overall performance status (criterion) of students in Fashion Design and Textiles courses at Accra Technical University. This observation supports the finding of Stodola and Stordahl (1967) who indicated that past experience or entry behaviour is often useful in predicting the future or terminal behaviour.

4.6 Testing of Hypothesis

One null hypothesis was formulated and tested as regards the relationship between entry level knowledge (ELK) or grade in the SHS Clothing and Textiles course and performance in Fashion Design and Textiles at Technical University.

H₀ = There is no significant relationship between students' grade in Clothing Textiles at SHS and their performance in Fashion Design and Textiles at Accra Technical University.

To test for this hypothesis, inferential statistics using Pearson product moment correlation was run via Statistical Package for Social Sciences (SPSS) version 26 software to find out the degree of influence of the independent variable or predictor (entry level grade in WASSCE) on the dependent variable (performance scores in Fashion Design and Textiles). This was done at a significance level of $p < .05$ at a

Confidence Interval (C.I) of 95%. The interpretation of the correlation analysis made it possible to make appropriate inferences. Results of the correlation is presented in Table 9.

Table 9: Pearson product moment correlation analysis showing relationship between students' grade in Clothing and Textiles at SHS and their performance in Fashion Design and Textiles at Accra Technical University

Independent variable	Correlation Co-efficient (r)	p. value	Decision
Entry level grade score (ELK) or grade in Clothing and Textiles in SHS	0.786	0.01	Significant

* Correlation is significant at the 0.05 level; $p \leq 0.05$ (2-tailed)

The result in Table 9 shows a strong positive and statistically significant relationship between grade with regard to entry level knowledge (ELK) or behaviour of students in Clothing Textiles at SHS and their performance in Fashion Design and Textiles at Accra Technical University ($r = 0.786$, $p = 0.01$) at 95% confidence interval (CI). Logically, the result suggests that entry level knowledge (ELK), entry behaviour or referenced grade in Clothing and Textiles in WASSCE (**predictor**) significantly predicts the overall academic performance scores (Criterion) in Fashion Design and Textile courses at Technical University (**dependent variable**). The performance indicators included scores in quizzes, assignments, projects, practical work or examination, mid-semester examination and end of semester examination. It becomes clear that the academic performance of respondents in Fashion Design and Textile courses at Technical University was significantly associated with entry level knowledge (ELK) or grade in Clothing and Textiles in WASSCE. The implication of the result is that ELK significantly predicted academic performance in Fashion

Design and Textiles at the Technical University (**outcome variable**). Since $p < 0.05$ is statistically significant, the null hypothesis is rejected. This finding validates the views of Stodola and Stordahl (1967) who found that that entry behaviour is often useful in predicting the future or terminal behaviour.



CHAPTER FIVE

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTION FOR FURTHER STUDIES

5.1.1 Summary

This study determined whether Clothing and Textiles graduates from the Senior High School have a foundation for Fashion Design and Textiles programme in Accra Technical University. To achieve this purpose, two hundred and sixty (260) students of the university were sampled through stratified and simple random sampling techniques for the study. The study employed the concurrent embedded design. Questionnaire with Cronbach alpha (α) of 0.77 was used as research instruments to collect both quantitative and qualitative data from the respondents. The quantitative data were analysed using Statistical Package for Social Sciences (SPSS) version 26 software. While the qualitative data was interpreted.

5.2 Key Findings

Among the findings of this study were the following:

1. The first research objective was to ascertain the contents learnt in Clothing and Textiles at the S.H.S level. The findings revealed that the students mostly studied stitches, openings, goodgrooming, garment construction, textile fibres and fabrics, fastenings, clothing care and maintenance, wardrobe planning, interfacing, textiles fibre construction its use and care, garment construction/articles and other topics which are content-rich. The finding indicates that the Clothing and Textiles syllabus for Ghanaian Senior High Schools is content-rich to equip students with appropriate knowledge and practical skills for further education at Technical University.

2. The second objective was to identify teaching methods used to deliver the contents of the Clothing and Textiles subject at the S.H. S level. The findings revealed that Clothing and Textiles lessons were taught mainly via lecture, brainstorming, discussion, demonstration, projects and practical work.
3. The third research objective sought to examine students' views on the usefulness of contents learnt in SHS Clothing and Textiles to Fashion Design and Textiles education at the University level. The findings revealed that the students had acquired relevant foundation knowledge and skills in textiles production and garment construction course at the Technical University.
4. The last objective of this study sought to find out from the students' their performance in Fashion Design and Textiles in the Technical University. The findings indicate that students performance assessment scores were generally high, their performance ranged from A, B+ and B which indicated 90% in projects, 82% in class tests/quizzes, 85% in end of semester examination, 77% in class work/assignment and 69% in Practical examination respectively.

5.2 Conclusions

Based on the findings of this study, the following conclusions are drawn:

1. All indications from this study show that the Clothing and Textiles for the Senior High School is content rich, which is a foundation needed for the Fashion Design studies at the Technical University;
2. It was concluded that both teacher-centred technique and learner-centred technique were used by their teachers to teach Clothing and Textiles lessons. Learner- centred were dominantly employed by their teachers in the Clothing

and Textiles deliveries. Hence they were able to acquire the necessary foundation in knowledge and skills for further studies;

3. The Clothing and Textiles the students learnt in the Senior High School has provided them with solid foundation for their Fashion Design and Textiles programme at the Technical University;
4. Finally, students performance in Fashion Design and Textiles at the Technical University were generally high due to their past foundation in Clothing and Textiles at the Senior High School level.

5.4 Recommendations

In the light of the findings of this study, the following recommendations are put forward:

1. This study found that the Clothing and Textiles for Ghanaian Senior High Schools is content-rich to equip students with appropriate vocation oriented knowledge and practical skills to be able to practise textiles as a vocation, to set up businesses and become self-employed. It is recommended that internship or apprenticeship programmes should be instituted by the Ministry of Education (MoE) and Ghana Education Service (GES) and incorporated into the curriculum to expose Clothing and Textiles students to the garment industry. Again, Clothing and Textile teachers in Ghanaian SHS should design and use practical activities and interactive lessons that engage students in active learning and experimentation to boost student interest in vocations and entrepreneurship, and make the Clothing and Textile syllabus relevant to the socio-economic needs of Ghana.

2. The study found the combined use of teacher-centred and learner-centred methods of teaching, but the learner – centred was largely used by the teachers. Therefore, it is recommended that the GES must organise periodic in-service education and training to upgrade the capacity of Clothing and Textile teachers to use teaching methods that are activity and practical oriented to scale up or equip students with appropriate vocational and entrepreneurial skills.
3. It emerged from this study that students who studied Clothing and Textiles course in Ghanaian Senior High Schools had acquired relevant foundation knowledge and skills in sewing, garment construction or dressmaking. Hence, Clothing and Textiles should organise field trip to enable effective and practical teaching and learning.
4. The study found that Fashion Design and Textile students' performance assessment scores were high in projects, class tests/quizzes, and end of semester examination. In this regard, students who hope to further their education in Fashion Design and Textiles should take the course/subject seriously since that is the foundation for a better understanding. Again policy makers should try and include Clothing and Textiles programme to be selected at the Senior High School and teachers on that field should encourage students to offer Clothing and Textiles especially in regards to the selection of subject in the pre-tertiary level.

5.5 Suggestion for Further Studies

Future research should examine studies performance of Fashion Design and Textiles students at the Technical University who never had secondary school Clothing and Textiles education at the S.H.S level.



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APPENDICES

APPENDIX A

Questionnaire for Students

Introduction:

I am a Master of Philosophy student of the University of Education, Winneba. I am carrying out a study on “Clothing and Textiles as a Foundation for the Fashion Design and Textiles in Accra Technical University”. Please be assured that any information given will be treated with the outmost confidentiality and all information provided shall be used for research purpose only. **Thank you.**

Instruction: Please, provide responses to the items that follow by filling in the blank space correctly and where necessary, by ticking (✓) or writing the response that best suits your opinion.

SECTION A: SOCIO-DEMOGRAPHIC DATA

1. Sex/Gender: Male [] Female []
2. Age (yrs.): Below 18 [] 18-21 [] 22-24 [] 25 years & above []
3. Level: 100 [] 200 [] 300 [] 400 []
4. Programme of study: HND full-time/regular [] HND part-time [] B-Tech []
5. What was your pre-entry WASSCE/SSSCE grade in Clothing and Textiles into Polytechnic/University?
A [] B [] B2 [], B3 [], C4 [], C5 [], C6 [] D7 [] E8 [] F9 []

SECTION B: CONTENTS OF THE SENIOR HIGH SCHOOL CLOTHING AND TEXTILES SYLLABUS STUDIED

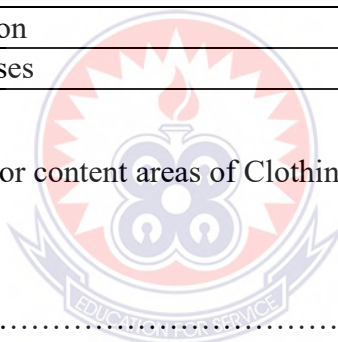
Instruction: Please tick (✓) responses that best suit your opinion on the extent of coverage of core and other content areas in the SHS **Clothing and Textiles syllabus.**

Use the scale below to answer questions 7-25:

Key: 3 = High Extent (HE); 2 = Moderate Extent (ME); 1 = Low Extent (LE)

Content of SHS Clothing and Textiles syllabus studied	3	2	1
6. Study of textile fibres and fabrics			
7. Garment construction			
8. Mending			
9. Embroidery			
10. Stitches			
11. Openings			
12. Fastenings			
13. Pockets			
14. Interfacing			
15. Pattern drafting			
16. Freehandcutting			
17. Wardrobe planning			
18. Clothingcare and maintenance			
19. Clothing storage			
20. Entrepreneurship			
21. Goodgrooming			
22. Consumer education			
23. Decorative processes			

24. What other topics or content areas of Clothing and Textiles did you study in SHS?



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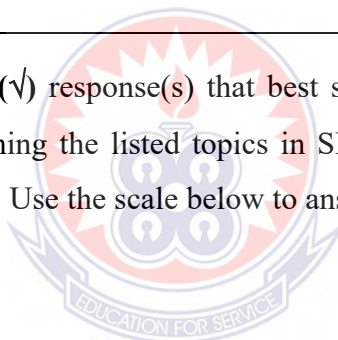
**SECTION C: METHODS OF TEACHING CLOTHING AND TEXTILES IN
SHS**

Instruction: Use the following scale to answer questions 25- 33:

Key: 5 = Very high extent; 4 = High extent; 3 = Moderate extent; 2 = little extent; 1 = No extent

Question	Response				
	5	4	3	2	1
<i>To what extent did teachers use the following methods in teaching Clothing and Textiles in your school?</i>					
25. Lecture					
26. Brainstorming					
27. Discussion					
28. Demonstration					
29. Fieldtrip					
30. Role play					
31. Project					
32. Resource person					
33. Practical lessons					

Instruction: Please tick (✓) response(s) that best suit your opinion on the methods which were used in teaching the listed topics in SHS. *You may tick more than one response per topics listed.* Use the scale below to answer questions 34- 51:



Key: 1 = Lecture; 2 = Brainstorming; 3 = Discussion; 4 = Demonstration; 5 =
5 = Fieldtrip; 6 = Role play; 7 = Project; 8 = Resource person; 9 = Practical
work

Content area or topic	Method of teaching								
	1	2	3	4	5	6	7	8	9
34. Study of textile fibres and fabrics									
35. Garment construction									
36. Mending									
37. Embroidery									
38. Stitches									
39. Openings									
40. Fastenings									
41. Pockets									
42. Interfacing									
43. Pattern drafting									
44. Freehandcutting									
45. Wardrobe planning									
46. Clothingcare and maintenance									
47. Clothing storage									
48. Entrepreneurship									
49. Goodgrooming									
50. Consumer education									
51. Decorative processes									

**SECTION D: USEFULNESS OF CLOTHING AND TEXTILES CONTENT
STUDIED IN SHS**

Instruction: On the scale of 1 to 5, please tick (✓) to indicate or rank the relevance of knowledge and skills gained from the Clothing and Textiles lessons studied in SHS as foundation for the University Fashion Design, Technology and Textiles programme. Use the scale below to answer questions 52- 72:

Key: 5 = Very relevant; 4 = Relevant; 3 = fairly relevant; 2 = Less relevant; 1 = Irrelevant

Question	Response				
	5	4	3	2	1
<i>How relevant are the knowledge and skills gained in Clothing and Textiles in the SHS to the Fashion Design, Technology and Textiles programme?</i>					
51. Foundation for Fashion Design and Textiles programme					
52. Entrepreneurial and saleable skills/competencies for self-employment					
53. Knowledge and practical skills in clothing and textiles vocation					
54. Knowledge and skills of correctly using tools and materials to construct personal clothing					
55. Knowledge and skills of sewing					
56. Knowledge and skills of laundry					
57. Knowledge and skills of purchasing behaviours					
58. Knowledge and skills of wardrobe planning					
59. Knowledge and skills of interior decoration					
60. Knowledge and skills of dressmaking/tailoring					
61. Knowledge and skills of clothing care and maintenance					
62. Knowledge and skills of needlework					
63. Knowledge and skills of embroidery					
64. Knowledge and skills of research					
65. Knowledge and skills of fashion design					
66. Knowledge and skills of cloth merchandizing					
67. Career opportunities in clothing technology					
68. Career computer aided design programmer					
69. Career opportunities in teaching/lecturing					
70. Career opportunities in haberdashery					

71. What other benefits did you or would you derive in the study of Clothing and Textiles in the SHS, polytechnic or university in terms of the following?

a. *Knowledge:*

.....

.....
.....

b) Skills and competencies:

.....
.....
.....

c) Career/vocations and job opportunities:

.....
.....
.....



**SECTION E: ACADEMIC PERFORMANCE IN FASHION DESIGN AND
TEXTILE COURSES**

72. Kindly indicate your scores in the under listed assessment in the last semester:

i) Class tests/quizzes: A [] B+ [] B [] C+ [] C [] D+ [] E []

ii) Class work/assignments: A [] B+ [] B [] C+ [] C [] D+ [] E []

iii) Mid-semester examinations: A [] B+ [] B [] C+ [] C [] D+ [] E []

iv) End of semester examinations: A [] B+ [] B [] C+ [] C [] D+ [] E []

v) Projects: A [] B+ [] B [] C+ [] C [] D+ [] E []

v) Practical examinations: A [] B+ [] B [] C+ [] C [] D+ [] E []



APPENDIX B

Introductory Letter



UNIVERSITY OF EDUCATION, WINNEBA
FACULTY OF SCIENCE EDUCATION
DEPARTMENT OF HOME ECONOMICS EDUCATION

✉ P. O. Box 25, Winneba, Ghana
☎ +233 (03323) 21177

✉ homeecons@uew.edu.gh

HED/A13/VOL.3/164

18th February, 2020

The Head of Department
Fashion Design & Textiles
Accra Technical University

Dear Sir/Madam,

**INTRODUCTORY LETTER
MS. SHIRLEY-ANN SYLVESTER**

We write to introduce, Ms. Shirley-Ann Sylvester, an M.Phil student with index number (8160100007) of the Department of Home Economics Education, University of Education, Winneba, who is conducting a research titled: **“Clothing and Textiles as a Foundation for the Fashion Design and Textiles Programme in Accra Technical University”**.

We would be very grateful if you could give her the assistance required.

Thank you.

Yours faithfully,

**PROF. PHYLLIS FORSTER
HEAD OF DEPARTMENT**