

# Acquisition of Clothing Production Skills Among Clothing and Textile Senior High School Graduates in Ghana

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## Abstract

*This study investigated the extent to which Clothing and Textiles Senior High School graduates in Ghana have achieved a major aim of the curriculum “develop clothing production skills”. The study answered the research questions 1. What knowledge do senior high school graduates have on clothing production processes? 2. Can senior high school Clothing and Textiles graduates cut and sew garments? The study is evaluation research and the quantitative research approach was adopted. A multistage sampling method was used to sample four hundred and seventy-eight graduates from eighteen schools who just completed their West African Senior Secondary Examination. It was revealed that the graduates had knowledge (theory) on clothing production processes ( $M=3.27$ ) and out of 478 graduates, only 133(28%) could cut and sew simple garments but only 41 can make 3 to 4 simple garments suggesting that, the graduates do not have practical skill in Clothing & Textiles thus the major aim “develop clothing production skills” has not been achieved. It was recommended that, teachers should pay much attention to the skill training aspect of Clothing and Textiles.*

*Key Words: Assessing, Clothing, Production, Skills, Senior High School, Graduates*

## 1. Introduction

The major goal of the Ministry of Education in Ghana states that, the Ministry is to provide relevant and quality education for all Ghanaians, especially the disadvantaged, to enable them acquire skills which will make them functionally literate and productive to facilitate poverty alleviation and promote the rapid socio-economic growth of the country [1]. In order to achieve this major aim of education in Ghana, programmes of study were integrated into the curriculum such as Home Economics which is one component of Technical Vocational Education and Training(TVET). Clothing and Textile is among the three Home Economics components under TVET.

A lot of countries benefit from the Clothing and Textiles sub-sector such as Italy, Saudi Arabia and China. Clothing is ranked in Italy, after engineering

and construction as the third largest industry employing about a million workers. Italy is one of the foremost exporter of clothes and shoes in the world and shows of the world's best-known fashion designer labels such as Valentino, Armani, Versace, Gianfranco and Ferré [2]. In Saudi Arabia 15% of the employment opportunities within the industrial sector is within the textiles and wearing apparel segment [3]. Also, China's apparel manufacturing industry has a total revenue of \$390.2 billion with 19,940 enterprises operating in the industry and employing 4.6 million workers with an estimated payroll of \$44.4 billion [4].

The aim of including C&T in the curriculum of Ghana Education Service is a laudable one. In the current economic situation of Ghana, a professional knowledge in C&T is very important since apparel is one of the eligible products to be exported to the United States of America on duty free and quota free basis under the African Growth and Opportunity Act (AGOA) 2015 [5]. This would earn a lot of foreign exchange for the country which would make Ghanaians more comfortable in their homes and also help achieve the educational goals of the country.

The major rationale for teaching Clothing and Textile (C&T) in the Senior High School (SHS) in Ghana is to train students acquire knowledge and skills in clothing production and management. Consequently, a major aim of the curriculum is to “develop clothing production skills”. This study therefore is to: 1. investigate the knowledge of Senior High School graduates on clothing production skills. 2. find out Senior High School Clothing and Textiles graduates ability to cut and sew garments.

## 2. Research Questions

- i. What theoretical knowledge do Senior High School graduates have on clothing production processes?
- ii. Can Senior High School Clothing and Textiles graduates cut and sew garments?

### 3. Methodology

#### 3.1. Research Design

The study is evaluation research. Evaluation research is defined as a form of disciplined and systematic inquiry that is carried out to arrive at an assessment or appraisal of an object, program, practice, activity, or system with the purpose of providing information that will be of used to make decision [6]. and the quantitative research approach was adopted

#### 3.2. Sampling Procedure

A multi-stage sampling procedure was used. In the first stage, a stratified sampling technique was used to put the national distribution of the population into northern and southern zones. In stage two, purposive and simple random sampling techniques were used to get the regional distribution of population by selecting three regions from each zone. Two regions each were purposively selected (the region with the least and most number of schools offering Clothing and Textiles) and one school each were randomly selected in each zone to add up to three. In the third stage, a purposive and simple random sampling were used. Simple random sampling (lottery method) was used to select eighteen (18) schools from the six regions selected. One school each was chosen from options 1, 2 and 3 according to the school categorization by Ghana Education Service in each region at the time of the study. The respondents were then selected purposively for data collection thus all Clothing and Textiles final year students in the eighteen schools selected in the regions at the time of data collection.

Table 1. Sampling Frame

Regions	Option1	Option2	Option3	Total
G.Accra	22	21	22	65
Western	16	33	29	78
Volta	26	30	18	74
Ashanti	71	19	27	117
B. A	47	24	29	100
Upper East	19	15	10	44
<b>Total</b>	<b>201</b>	<b>142</b>	<b>135</b>	<b>478</b>

Source: West African Examination Council and Ghana Education Service 2017

#### 3.3. Instruments

Questionnaire was used to collect data for the research. The questionnaire for this study contained items that elicited responses on sub themes under the research questions. It enables responses to be gathered in a standardised way, it is more objective, than interview schedules, quick to collect information from a large sample of a group [7].

#### 3.4. Data Analysis

Data was analyzed using quantitative methods. The quantitative data collected was first of all, prepared and organized by editing in order to identify and eliminate errors made by respondents. The answers were recorded, and data tabulated. Data was then analysed with the statistical package of social sciences. Measures of central tendencies and frequencies were the main statistical tools used.

#### 3.5. Ethical Consideration

An official introductory letter was taken from the Dean, Faculty of Humanities and Social Sciences Education of the University of Cape Coast to the various schools and institutions to facilitate data collection. In addition, personal request letters were taken to all the SHS to help collect data for the study and all information needed, e.g. from Ghana Education Service (GES) for the study.

Preliminary contacts were made with the headmasters and heads of Home Economics Department to discuss the purpose of the study and a convenient time for data collection was scheduled. The purpose of the study was communicated to the respondents, and they were assured of anonymity and confidentiality

### 4. Results

Senior High School Clothing and Textiles graduates' theoretical knowledge on clothing production processes was assessed and the following results were obtained.

#### 4.1. What theoretical knowledge do Senior High School graduates have on clothing production processes?

Table 1. Frequency distribution of students' theoretical knowledge on clothing production skills (N=478)

Item	Mean	SD
French seam is an example of an inconspicuous seam.	3.42	.50
Excess fabrics are arranged in garment construction by either shirring, pleating,	3.57	.60

smocking etc.

Edges of garment are finished to prevent fraying and to neaten them.	3.79	.45
Openings in garments help us to wear and remove our garments easily.	3.72	.59
Garment parts are interfaced in order to provide body, strength and bring out the shape of the section it is used on.	3.71	.49
Large patterns are laid before smaller patterns during laying out.	2.15	.91
I am well skilled in producing garments.	2.43	1.02
The subject has helped me to become creative.	3.51	1.11
Pattern markings can be transferred using unthreaded sewing machine.	2.98	.42
A seam is used for joining layers of fabrics together neatly and securely.	3.65	.52
A seam is used for decoration.	3.15	.61
Overlaid seam is an example of a conspicuous seam.	3.41	.53
<b>Means of means</b>	<b>3.27</b>	<b>.65</b>

Source: Field Survey (2018) Range: 1-1.75 (Strongly Disagree), 1.76-2.50 (Disagree), 2.51-3.25 (Agree), 3.26-4.00 (Strongly Agree)

Table 1 shows many students could not agree on whether they were well skilled in producing garments (M=2.43, SD=1.02). Also, many of the students disagreed that pattern markings can be transferred using unthreaded sewing machine (M=2.98, SD=.42) and large patterns are laid before smaller patterns during laying out (M=2.15, SD=.91). However, the respondents agreed that French seam is an example of an inconspicuous seam (M=3.42, SD=.50), excess fabrics are arranged in garment construction by either shirring, pleating, smocking etc. (M=3.57, SD=.60), edges of garment are finished to prevent fraying and to neaten them (M=3.79, SD=.45) and openings in garments help us to wear and remove our garments (M=3.72, SD=.59).

Similarly, the respondents agreed that garment parts are interfaced in order to provide body, strength and bring out the shape of the section it is used on (M=3.71, SD=.49). Many of the respondents also agreed that the course has helped them to become creative (M=3.51, SD=1.11). The respondents have also acquired the needed knowledge in determining that; a seam can be used for joining layers of fabrics together neatly and securely (M=3.65, SD=.52); a seam is used for decoration (M=3.15, SD=.61); and an overlaid seam is an example of a conspicuous seam (M=3.41, SD=.53).

There is a general agreement among students with respect to the development of knowledge on clothing production skills (M=3.27, SD=.65). The respondents were further asked if they could cut and sew simple garments. The results are indicated in Table 2.

#### 4.2. Can Senior High School Clothing and Textiles graduates cut and sew garments?

Table 2. Frequency distribution of students' ability to cut and sew simple garments (N=478)

Question	Yes	No
Can you cut and sew simple garments now that you have completed school?	133(28%)	344(72%)

Source: Field Survey (2018)

The question, "Can you cut and sew simple garments now that you have completed school?" was posed and 133 (28%) of the respondents reported "Yes" while (72%) reported "No". The results suggest that 28% of the respondents can cut and sew simple garments and about 72% of the remaining respondents cannot confidently cut and sew simple garments after experiencing the clothing and textiles curriculum. The students who reported "Yes" were further asked to list the number of garment they can sew. The results are summarized in Table 3.

Table 3. Frequency Distribution on Number of Garments Students can Sew (N=133)

No. of Garments	Frequency	Percentage (%)
1 Type of garments	49	36.9
2 types of garments	43	32.0
3 types of garments	31	23.6
4 types of garments	10	7.5
<b>Total</b>	<b>133</b>	<b>100</b>

Source: Field Survey (2018)

As shown in Table 3, a total of 49(36.6%) of the respondents reported that they sew 1 type of garments, 43(32%) reported that they can sew 2 types of garments, 31(23.6%) said they can sew 3 types of garments and 10(7.5%) said they can sew 4 types of garments. The results suggest that many students do not have practical skills in C&T and only a few can cut and sew between 3 to 4 types of garments after experiencing the C&T curriculum.

#### 5. Discussions

Generally, it was revealed that the graduates had theoretical knowledge on clothing production processes (M=3.27) and out of 478 graduates, only 133(28%) could cut and sew simple garments but only 41 can make 3 to 4 simple garments after completion of SHS. The main rationale for teaching

C&T in the SHS is to train students to acquire knowledge and skills in clothing production and management which corresponds with a major objective of the Ghanaian educational system which is to equip individuals with employable skills to enable them to contribute meaningfully towards the development of the nation [8].

Unfortunately, this major objective of the national educational system and the main rationale for teaching C&T cannot be said to have been met. This may be said to be due to inputs (resources) factor of our school systems which affirms [9] study that, Clothing and Textile classroom environments at the Senior High Schools in Ghana are not conducive since a finding by [10] noted that schools who learn in a positive environment receives a month and a half more instruction than those in poor learning environment which can lower teacher turnover by 25 percent and [11] also stated that, some teachers teaching Clothing and Textile lacked the necessary expertise (background) in the subject and cannot teach the technicalities and the practical aspects. This may be the cause of the graduates' inability to develop practical clothing production skills. The extent to which the teacher is motivated is limited, he cannot motivate and teach the students beyond his own motivation and limitation which affirms [12] view that if a teacher is unmotivated or negative, it makes a direct impact on the students within the classroom.

Ghana as a country has an advantage because Clothing and Textiles is part of its educational curriculum, and the fashion industry is a lucrative area for business in the world. The clothing business is one that does not need much capital to start but when managed well, you will get much profit to buy more machinery and improve upon production.

The United Nations' sustainable development goal one (1) states that there should be 'no poverty', goal four 'quality education' and goal nine industry, innovation and infrastructure' by the year 2030 [13]. These SDGs can easily be met in Ghana if Clothing and Textile education is taken seriously. It is an area that can generate a lot of income for the country if we have the right expertise which can be achieved through education. With the right expertise, the youth and the elderly can be trained on the job which will in turn create enough jobs to reduce poverty thereby meeting SDG goal one by the year 2030.

SDG goal four aims at providing quality education by 2030. As cited earlier, the Clothing and Textiles classroom environment is not conducive, thus poor ventilation, hanging wires, poor teacher expertise thereby reducing the amount of motivation needed to encourage learners and would be learners to take the subject and may be the reason why majority of Senior High School students who completed their West African Examination at the

time of this study could not cut and sew simple garments in spite of the major aim "*develop clothing production skills*" in the Clothing and Textiles syllabus (curriculum). A good road map to providing quality Clothing and Textiles education will help improve upon the teaching and learning of the subject which will be to the advantage of the country Ghana. For instance, a good Clothing and Textiles classroom environment, thus state of the art laboratories with new technologies to enable students have hands on practice rather than learning skills theoretically without practice; employing teachers with the requisite knowledge in skills and theory in Clothing and Textiles to impact both theory and practical knowledge very well; admitting qualified and students who are interested in Clothing and Textiles to take the subject; good supervision; teachers teaching both theory and practical concepts in the schools; allotting enough time for the subject and using the time well and many more will help improve the quality of Clothing and Textiles education by 2030.

A quality education in Clothing and Textiles Education will promote innovation and industry in that, graduates with the requisite skills will set up their own industry and with the urge to excel, innovative and creative measures will be used and practiced to keep up with fashion trends in the industry thereby improving productivity and which will translate into bringing in more foreign exchange and infrastructure will be improved upon thus the Sustainable Development Goal (SDG) goal nine 'industry, innovation and infrastructure' can be realised as well through Clothing and Textiles education. These will reduce the burden on government and improve the quality of life of the citizenry.

The ongoing discussions implies that, when clothing production skills is acquired by Clothing and Textiles students of Senior High School in Ghana it will benefit the individual, community and the nation as a whole.

## 6. Conclusion

Senior High School Clothing and Textiles graduates at the time of the study do not have practical clothing production skills thus the major aim "*develop clothing production skills*" has not been achieved.

## 7. Recommendation

It was recommended that teacher training universities responsible for training Clothing and Textiles teachers for the SHS should pay attention to empowering the teacher trainees with practical skills. Teachers should pay much attention to the skill training aspect of Clothing and Textiles.

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