UNIVERSITY OF EDUCATION, WINNEBA COLLEGE OF TECHNOLOGY EDUCATION, KUMASI DEPARTMENT OF FASHION DESIGN AND TEXTILE EDUCATION

AN ASSESSMENT OF THE USAGE OF DIRECT CUTTING FOR GARMENT CONSTRUCTION BY TRAINEES IN THE FORMAL AND INFORMAL INSTITUTIONS IN GHANA. A CASE OF WA MUNICIPALITY IN THE UPPER

WEST REGION

ORDER

ATION FOR SERVICE

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A Thesis in the Department of FASHION DESIGN AND TEXTILES

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Graduate Studies, University of Education, Winneba in partial fulfillment of the
requirements for the award of Master of Technology (Fashion Design and Textiles)

degree

DECLARATION

STUDENT'S DECLARATION

I, SCHOLASTICA WESOAMO SOYEH 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 it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE:	DATE:
SCHOLASTICA WESOAMO SOYEH	

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

SIGNATURE...... DATE......

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DEDICATION

This dissertation is dedicated to my lovely daughter and son, Jessica and Jefferson my mum and husband for their support throughout my study.



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ABSTRACT

Most of the fashion design students after completing their programme in their schools are found in the informal sector for practical orientation in the Wa Municipality. It is observed that the trainees in the informal sector are conversant with direct cutting method and seems to be practically inclined than those in the formal training sector in the Municipality. The study therefore assesses the usage of direct cutting for garment construction by trainees in the formal and informal institutions in the Wa Municipality.

The study used data collected from the trainees and trainers in the formal and informal institutions in the Wa Municipality. Two hundred and forty (240) students from the formal institutions, 120 trainees from the informal institutions, 18 formal trainers (teachers) and 60 informal trainers were sampled for the study.

The results of the study show that the teachers and students in the formal institutions are not conversant with the direct cutting method. The trainers and trainees in the informal institutions are conversant with both direct and pattern drafting. The trainees in the formal institutions are faced with inadequate practice periods, teacher reluctance to teach them direct cutting, and lack of textbooks. The general perception among the trainees in the formal institutions is that direct cutting is a 'roadside' method, and also waste fabric and time.

The study recommends that, the Ghana Education Service, and the Ministry of Education should review the TVET curriculum. More periods should be allocated for practical subjects to enable trainees improve their practical knowledge and skills.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Globally, the garment industry plays a major role in the socio-economic development and transformation of countries. The industry has continued to expand providing economic opportunities in many countries (Kaudi, 2014). It makes use of fibre plants such as cotton, plastics such as polyester, or animal skin and hair such as wool for garment construction (Dagg & Harding, 2012).

The quality of garment constructed largely depends on the competency of the designer, the type of fabric, the method of cutting the fabric, the sewing technique and equipment (Abraham, Adablah & Adotey, 2017). It is important that designers and future designers are given the needed competency-based training to make them more constructive in the garment industry to produce quality garments of international standards.

Consequently, Ruppert-Stroescu (2009) indicates that many countries across the globe include fashion design and textile construction in their formal curricular as a way of ensuring standards, sustainability of the industry and enhancing economic transformation of their countries. The informal sector is not left out in many countries. Governments organize competency-based training workshops for the informal sector for all categories of people including the physically challenged to equipped them with self-employable skills to construct garment of acceptable standards. In citing Glock & Kunz (2007), Ruppert-Stroescu (2009) indicates that the garment industry continued to contribute

significantly to the economic development of newly industrialized and developing countries.

In ensuring sustainable garment construction and equipping the youth with self-employable skills to enable them contribute meaningfully to the socio-economic transformation of Ghana, Gavor & Danquah (2018) indicate that, the Ghanaian educational system has established Technical and Vocational Training (TVET) Institutions across the country, where Fashion Design and Textile construction is included in the curricular. The scope of content of the Fashion, Design and Textile programme for the TVET schools has been designed in such a way as to offer skills that are terminal and can be put to immediate use apart from providing the foundation for further studies in areas of fashion design and textile (Ministry of Education, 2010). The Polytechnics established, provide continuous education in fashion design and textile construction and other TVET courses for students from the second cycle schools.

In ensuring standards in the informal sector in Ghana, Abraham, Adablah & Adotey (2017) indicate that successive governments instituted initiatives to coordinate and harmonize the activities of the informal fashion design and textile sector. The initiatives are to develop production capacity and manpower skills of the country to meet the huge market opportunity and empower the youth with self-employable skills to construct garment of international standards. Individual designers have established Fashion Design Enterprises in every corner of the country, employing hundreds of people and training people to gain skills for self-employment, and economic self-reliance.

The trainees from both the formal and informal sector of education are expected to learn many different methods and skills in the construction of quality garments for human wear. Such methods include sewing, and crocheting. Sewing is known to be the major means of producing garments in Ghana. Parts of garments can be obtained either through pattern making or direct cutting and the parts are joined together either by direct (hand) or machine (Ampomah, 2015). All these methods or skills are supposed to be learned by all fashion design and textile trainees either in the formal or informal sector to make them competent and constructive.

According to Shailong & Igbo (2009), the direct cutting method makes trainees very flexible and skillful. It is very convenient, fast, easier to learn, and there is no complicated drafting process. It builds self confidence in dress making, and make trainees, dressmakers and tailors more skillful in the profession.

However, it appears many of the teachers do not teach the students direct method of cutting fabric. They only concentrate on pattern making to the neglect of the direct cutting method. This is because little information however exists on direct cutting of fabric for garment production, though it is very simple, faster and easier to learn for effective production of garment.

1.2 Statement of the problem

Fianu & Zentey (2000) indicate that direct cutting is the most common, simplest, fastest and easy to learn method of cutting fabric for garment construction. This is a technique that everyone can learn (Bally, 2013). Research has shown that direct cutting is the most

common method of cutting fabric for garment construction by the garment industry in Ghana (Fianu & Zentey, 2000).

The TVET syllabus for Technical and Vocational Institutes produced by the Ministry of Education (2010), and the Polytechnic syllabus for Fashion Design indicate that during the teaching and learning of direct cutting, teachers are to demonstrate how to cut a sleeveless top to students and then supervise students to cut a similar top with the method, first using paper and do same on fabric. To make sure students practice direct cutting, the syllabus suggests that each student should complete the garment he/she cuts for evaluation. The theory content relating to freehand in the TVET syllabus (2010) deals with what direct cutting is, its advantages and disadvantages.

In the perspective of Forster (2009), lack of documented information on direct cutting method make the teaching of the concept difficult in the formal training sector. Therefore, many teachers concentrate teaching the students pattern drafting to the neglect of the direct cutting. Foster (2009) noted that the skill of direct cutting is acquired through constant or continuous practice.

It is observed that, students after completing their course of study in the school are found in the informal sector for practical orientation in the Wa Municipality. Also, it is observed that the trainees in the informal sector are conversant with direct cutting method and seems to be practically inclined than those in the formal training sector in the Municipality. It is on this backdrop that this research seeks to make a comparative assessment of the usage of direct cutting method for garment construction by trainees in the formal and informal institutions in the Wa Municipality in the Upper West Region.

1.3 Purpose of the Study

The main purpose of the study is to make a comparative assessment of the usage of direct cutting method for garment construction by trainees in the formal and informal institutions in Wa Municipality in the Upper West Region.

1.4 Objectives

The study specifically aims to:

- 1. Examine the usage of direct cutting method for garment construction by trainees in the formal and informal institutions in the Municipality;
- 2. Identify the challenges facing teachers and students or trainees in the formal and informal institutions in the usage of direct cutting method for garment construction; and
- 3. Examine the perceptions of teachers and trainees in the formal and informal institutions in the Municipality about direct cutting.

1.5 Research Questions

In addressing the objectives of the study, the following questions are very significant:

- 1. Are teachers and trainees in the formal and informal institutions in the Municipality conversant with direct cutting method?
- 2. What are the challenges facing teachers and trainees in the formal and informal institutions in the Municipality in the usage of direct cutting method for garment construction?

3. What are the perceptions of the teachers and trainees in the formal and informal institutions in the Municipality about direct cutting?

1.6 Significance of the study

The study assesses the usage of direct cutting method for garment construction by trainees in the formal institutions and informal institutions in Wa Municipality in the Upper West Region of Ghana. This study will be beneficiary to trainers and trainees of the TVET institutions and the Polytechnic in the region, researchers, Fashion Designers and Curriculum Developers.

The results of the study would enable teachers develop their pedagogical skills and have good approaches to teaching students direct cutting as a method of cutting fabric for garment construction and acquaint students with direct cutting skills. The outcome of this study will immensely contribute to theory building in direct cutting of fabric. It will assist students in their knowledge build-up and enable them to establish the difference between pattern cutting and direct cutting. It will provide data for further research.

The results of the study would also educate Fashion Designers on the advantages of direct cutting of fabric for garment construction. It will also identify the lapses and challenges of direct cutting in garment construction. This will enable teachers, trainees, and fashion designer to appreciate and improve their skills in direct cutting. The study would provide substantial data for curriculum developers to revise the curriculum of the formal institutions in the country.

1.7 Scope of the Study

This study is geographically limited in scope to the Wa Municipality with case reference to formal and informal institutions in the Municipality. The study is focused mainly on the core objectives; direct cutting method, challenges of using direct cutting method, and the perception of teachers and students about direct cutting of fabric for garment construction in the Municipality.

1.8 Limitation

Every study has limitations. The outcome of the study is based on the information solicited from the respondents and such might be subjected to human errors, omissions and possibly mis-statements. Also, the students or trainees and teachers of the institutions may not be willing to divulge core information in the name of confidentiality. Besides time constrain will be a hinderance in carrying out the study.

1.9 Organization of the Study

The study has five chapters. Chapter One covers the background of the study, problem, statement, purpose of the study, objectives of the study, research questions, significance of the study, scope of the study, limitations and organization of the study. Chapter Two deals with review of literature covering theoretical and conceptual framework. Chapter Three examines the methodology used and covers the research design, study area and population, sampling and sample size, source of data, data collection instrument and data analysis techniques. Chapter four (4) presents and discusses the analysis of data gathered for the study. Chapter Five summarizes the study, draws conclusions and provides

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recommendations on the usage of direct cutting method in the formal and informal institutions in the Municipality.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter captures a cross section of views and positions on the usage of direct cutting method for garment construction by trainees in the formal and informal institutions on a global perspective. The literature identifies certain fundamental concepts on the topic to help the researcher draw conclusions on the topic. These concepts are as follows:

- 1. Concept of garment design and construction
- 2. History of garment construction;
- 3. Importance of garment;
- 4. Forms of Vocational Training in Ghana;
- 5. Challenges of Fashion Design training in the formal and informal sectors;
- 6. General cutting methods and practices in the formal and informal sector;
- 7. Perceptions of the teachers and students or trainees in the formal and informal institutions about direct cutting; and
- 8. Summary of literature review

2.1 Concept of garment design and construction

2.1.1 Meaning of garment

Collins (2012) explains garment as any article of clothing or an outer covering or outward appearance. The wearing of garment is mostly restricted to human beings and is a feature of nearly all human societies. Ampomah (2015) explains garment as any outer covering put on the body. It is usually worn to cover the upper and lower torso of the human body.

2.1.2 Garment construction methods

According to Ampomah (2015) and Modesta, Iren & Doreen (2014), the methods of garment construction basically are varied. Some of them include crocheting and sewing. In crocheting the construction is made by interlocking as in knitting but only one hook or needle is used. Modesta, Iren & Doreen (2014) indicate that crocheting can be considered as knitting in its simplest form and that only one needle with a hook at the end is used in this method of garment construction.

Sewing is the craft of fastening or attaching objects using stitches made with a needle and thread. Sewing is one of the oldest of the textile arts, arising in the Palaeolithic era (Anawalt, 2007). Basically, there are two types of sewing namely hand and machine sewing. The hand sewing makes use of needle and thread to sew with the hand while machine sewing makes use of machine for stitching.

2.2 History of garment construction

Wayland (1992) indicates that the history of garment construction is quite blur. However, historians and archaeologists have managed to piece together some bits of information from clues found in sculptures and figurines. Wayland (1992) indicates that garment making can be traced back to the Near East, the Indus Valley of Civilization 50,000 years ago, thus the Old Stone age. In the study of Pritchard (2013), early archeological findings suggest that the first body covering that resembled garment or clothing was in the form of sheep fleece, skins, leaves and bark of trees (natural fibers) in the old stone age. During this age, primitive people wrapped or tied bits of these materials around their bodies without thought to changing styles or fashion.

According to Turlings (2002), the tools used during this period were weapons made from stones. There were basically no machines and sophisticated equipment to process and make garments. The materials were used in their raw state. The main method of shaping these materials to fit onto their bodies was purely direct cutting. Pritchard (2013) indicated that the eye-bone needle; a bone with a hollowed-out hole was later developed as the first needle used to sew these materials together to fit onto their bodies. Women painstakingly sewed every stitch by hand.

With the rapid increase in the knowledge of chemistry and the extensive research of scientists, manmade fibre came into being from the natural materials. The first fibre that came into being was the rayon. It is chemically processed from a vegetable base. Later, the pure synthetic fibres also emerged from chemical source. These new fibres are being constantly improved and varied in their processing to produce not only new fabrics with

particular characteristics but fabrics that stimulate the appearance and quality of fabrics of natural fibres (Vulker & Cooper, 1987).

According to Odotei (2008) citing Patience (1990), clothing has been greatly influenced by many factors such as trade, transportation, communication, political ideologies, technology and education in West Africa. The early contact with the foreigners goes as far back as 600BC when the Phoenician and Carthaginian merchants visited West Africa. They stated that the Carthaginians came from the Mediterranean where early civilization (300BC) helped determined and established the basis for western dress. The clothes of the ancient Mediterranean were not cut and fitted, but the cloth was rather draped from one long piece of fabric similar to the traditional male cloth.

In Ghana, the development of garment construction is believed to have started during the colonial period with the introduction of wax prints and "dress" by the Europeans (Turlings, 2002). In the view of Odotei (2008), the Europeans explored and took control of parts of the country during the colonial days with their religion. To make civilization match hand-in-hand with evangelization, the Europeans established schools in the forts and castles where besides reading, writing and arithmetic, workshops were organized for students to acquire practical skills in carpentry, masonry, blacksmithing, shoemaking and sewing (Adu-Boahen, 2008).

With respect to sewing, notable persons, who influenced the development of the craft in Ghana were, Harriet Jarvis, Grant, and Schindler (Forster & Ampong, 2012). From Ghanaians first contact with the Europeans to date, garment construction is done in most parts of the country. Forster & Ampong (2012) stated that during the first two decades of

Ghana's independence, the textile sub-sector was a major key player which contributed significantly to employment and economic growth in Ghana. Presently, most Ghanaian women do not assume the responsibility of sewing for the family as they did during the colonial era. Instead, they take fabric to their local dressmakers and have clothes for all occasions sewn for themselves and their families. This way of clothing the family has been the foundation of the fashion industry in Ghana (Turlings, 2002).

2.3 Importance of garment

According to Abraham, Adablah & Adotey (2017), garment in general is a relevant factor that differentiates humans from animals. It only does not serve as protection from the elements but also as housing for the wearer. In the process, various kinds of garments are used in satisfying ones needs. Garments are used in all stages of life, from the cradle, primary, secondary, university, upon getting a job, marriage and old age. The garment industry plays very prominent role in the socio-economic development of every nation by helping generate income for living and as a means through which people acquire their garment needs.

In the view of Omoavowere & Gloria (2017), the importance of garment cannot be downplayed. Garment is worn for the simple fact that they protect the body against weather conditions, beautify the body and communicate to others about the wearer. Ampomah (2015) says garment serves various purposes that include protection for the body. It can enhance safety during hazardous activities such as hiking and cooking. It protects the wearer from rough surfaces, insect bites, rash-causing plants, splinters, thorns and prickles by providing a barrier between the skin and the environment. According to

Clothing (2009), garment can insulate the body against cold or hot weather conditions, provides a hygienic barrier, keeping infectious and toxic materials away from the body. Garment also provides protection from harmful UV radiation.

In the opinion of Esiowu & Igbo (2008), individual garment tells others whether the wearer is conservative or daring, out-going or reserved, casual or organized, a leader or a follower, confident or unsure. Shailong & Igbo (2009) say that garment acts as means of personal communication by expressing the individual unique personalities for modesty and for attraction, easy identification and for social statues. Ahia (2001) opined that garment serves as a means of group identification, gender stereotyping, ritual distinction and status symbolization and these other functions of garment create serious religious, social and economic pressure which people of the world have to bear.

2.4 Forms of Vocational Training in Ghana

Vocational training is the education that prepares people to work in various jobs, such as a trade, a craft, or a technician. Amedoeme & Fiagbe (2013) described vocational training as the process of teaching or being taught the skills for a particular job or activity. According to Asare (2015), before 2006, the National Board for Professional and Technician Examinations (NABPTEX) was responsible for formulating and administering examinations, certification and standards for skills and syllabus competencies for most non-university institutions. Currently, the Council for Vocational Education and Training (COTVET) is responsible for all technical and vocational education and training matters in Ghana.

The Technical and Vocational education affords an individual the chance to acquire practical knowledge and requisite skill training needed in the job market or for immediate self-employment (Amubode & Folade, 2012). According to Charway (2002) the major objective of the formal system is to equip individuals with employable skills to enable them contribute meaningfully towards the development of the nation. In the study of Amedoeme & Fiagbe (2013), no country can develop without quality Technical and Vocational Education and Training (TVET).

In consequent, three different forms of TVET have evolved in Ghana over the years. These comprise the formal system, the non-formal system and the informal system. Individuals who want to pursue this form of training can opt for any of these systems depending on their goals and aspirations, expenses involved among many other factors (Bortei-Doku, Doh & Andoh, 2011).

2.4.1 The formal system

The formal system of vocational and technical training includes primarily time-bound, institution based, graded, and certified training. It is offered by institutions such as the National Vocational Training Institutes (NVTI), Ghana Education Service (GES) Technical Institutes, Youth Training Institutions and a variety of private Vocational Training Schools (Bortei-Doku et al, 2011). Courses such as motor vehicle mechanics, electrical works, welding and fabrication, carpentry and joinery, block laying and concreting or masonry, plumbing, tailoring and dressmaking or fashion design are mounted to give practical training to students.

In achieving maximum results of this practical training, Bortei-Doku et al (2011) indicate that certain factors should come into play. These include the availability of qualified and competent teachers to teach, availability and adequacy of learning facilities and materials for training students, conducive training environment and students discipline. Acheampong (2002) also added that the supply of vocational workshops and laboratories in all schools with adequate modern equipment for practical lessons are also factors that can bring on board the success of vocational training.

2.4.2 Non-formal system

According to Asare (2015), the non-formal system of training typically has structured learning objectives, learning times and learning support but will normally not lead to certification. Workshops, short courses and seminars are all forms of non-formal learning.

Under this system, both non-governmental agencies and the government of Ghana have developed a number of programme to help train, improve, and support individuals and associations in the technical and vocational sectors. In the study of Asare (2015), some of these programmes among others include:

1. The Local Enterprises and Skills Development programme (LESDEP); a private-public initiative by the Ministry of Local Government and Rural Development in collaboration with the Ministry of Employment and Social Welfare. This programme aims at alleviating poverty, especially among the youth, through training and equipping them to set up their own businesses.

- 2. The skills Training and Entrepreneurship Programme (STEP) which is intended to reduce poverty by providing employable skills and other assistance including micro-finance to the unemployed.
- 3. The Development of Skills for Industry Project (DSIP), an African Development Bank (AfDB) sponsored project, aimed at providing harmonized standards of training for apprentices and to improve their knowledge and skills in the Competency Based Training (CBT) method. This project is implemented by the Project Support Unit of the Council for Technical and Vocational Education and Training (COTVET).

2.4.3 The informal system

This system includes a wide range of flexible programmes and processes by which individuals acquire skills and knowledge from designated training venues outside of the home and, in some cases, at home (Asare, 2015). According to Uwameiye & Iyamu (2010), traditional apprenticeships make up the majority of the informal sector in Ghana. Apprenticeship provides an opportunity for individuals who cannot afford to further their formal education to gain employable skills.

In most cases apprenticeship training progresses in phases. Most apprentices start with an introductory phase during which the beginner is taught and made to do menial jobs such as cleaning the workshop or running errands and also observing the work. The next phase consists of getting to know all tools of the trade and, as appropriate, the materials, the ingredients and the spare parts. Gradually the apprentice is introduced to more complex tasks and given increased responsibility such as supervising other apprentices, dealing

directly with customers, and from time to time, looking after the shop in the absence of the established dressmaker (Abban & Quarshie, 1993).

Asare (2015) citing Ng'ethe & Ndua (1992), indicates that the skills, knowledge and attitudes are normally transmitted through observation, imitation and on-the-job experience. With the present system of apprenticeship, established dressmakers teach their apprentices what they were taught and usually, there is little infusion of new technology and new designs. The masters mostly pass on their skills and knowledge to apprentices, but rarely create new knowledge. There are no formal instructions with this system. This normally limits the theoretical base of apprentices and impacts negatively on productivity.

Patience (1997) citing Adewale (1979) and Ninson (1991) observed that there are two main informal training modes, each having its own characteristics and outcome. The two modes were:

- Fostering apprenticeship;
- Vocational apprenticeship.

Fostering apprenticeship according to Patience (1997) occurred between kin relatives, that is, the Master is related to the family of the apprentice. This type of apprenticeship is typified by very little or no cash payment being required for the training, but rather a relatively long apprenticeship period of five to seven years.

According to Patience (1997) the Vocational apprenticeship required a shorter apprenticeship period. This began usually from late adolescent (17-19 years old). The trainer often called Master is responsible for the training. The apprentices did not live

with the Master and mostly are not related to him. The apprentices pay training fee and provide their own sewing machines, and other basic tools for the training. Patience (1997) further reported that the fees for apprenticeship training is generally lower than the cost of training in formal school system, and as such parents of low income occupations who are unable to pay the high cost of formal training for their children, normally send them into apprenticeship.

In the informal sector, the competency of a trainee is ascertained by the trainer by regularly assessing the trainee's level of progress in skill performance. Patience (1997) and Martha (2014) stated that masters test the proficiency of their apprentices by assigning them specific jobs related to their training needs. When the master or trainer is satisfied with the apprentice's performance at the end of the training period, the trainee is allowed to leave finally. Graduation ceremony which is often referred to as "freeing" is organized for the trainer in recent times where certificate of completion of apprenticeship is presented to the trainee.

2.5 Challenges of Fashion Design training in the formal and informal sectors

According to Arubayi (2004:2006), the Fashion Design training programme in the TVET schools are mostly developed around six central themes. These themes include the study of fabrics, garment construction, clothing maintenance, consumer education, decorative processes and wardrobe planning. All these can all lead to acquisition of skills for jobs in the society.

However, there are challenges confronting the Fashion Design programme in the various TVET institutions which affects these themes from being impacted onto students by

teachers. Studies by Tashie (2016) and Ameleke (2015) show that very few students opt for the subject in developing countries. The research findings by Oketch (2007) showed that TVET education is often portrayed as inferior to general education and as such students are not always willing to pursue TVET courses. Ameleke (2015) pointed out that the teachers trained to teach fashion design or sewing at the pre-tertiary levels of education in Ghana are few and as such many schools do not have fashion design teachers to teach the subject.

Milio, Garnizova & Shkreli (2014) noted that insufficient teaching materials, teaching aids, training laboratories, and computers to support students and teachers to teach fashion design are major setbacks. Akyeampong (2005) added that inadequate logistics and other resources prevent teachers from teaching the subject well. This does not motivate the students to learn which consequently affects their skill development. Milio et al (2014) indicated that the curriculum for fashion design is not prepared and developed in line with quality standards. The teaching methods focus primarily on the theoretical approaches and sometimes their quality is compromised due to inexperienced teachers. These problems with the curriculum and the teaching methodology often affect the skill level of the graduates. Milio et al (2014) also identify inadequate motivation of the teachers and trainers as a notable challenge in TVET institutions. According to them the salary level of the TVET teachers are very low. This does not motivate the teachers to put up their best in teaching the subject.

Forster et al., (2017) contributed by saying that the teacher training colleges lack the necessary logistics and resources to train the teachers in fashion design. They noted that government is not committed to providing the necessary logistics in the TVET schools,

universities and training colleges to enable the teachers to teach well. As a result, most of the teachers lack the skills themselves and therefore are unable to teach the practical component of the subject. They basically concentrate on the theory to the neglect of the practical aspect. As stated by Farrant (2004), an ignorant teacher cannot enlighten students. This has a convoluted effect on students since they graduate without practical orientation.

Uwameiye & Iyamu (2010) have identified lack of capital as the main challenge facing fashion design training in the informal sector. According to them insufficient capital cripples this sector to expand facilities for the training of apprentices. Patience (1997) posits that most of the apprentices have very low education and as such cannot understand some principles in garment construction.

2.6 General cutting methods and practices in the formal and informal sectors

According to Ampomah (2015), fabric cutting for garment construction can be done using scissors or machine. Fabric can be cut with the help of fabric cutting machines suitable for the type of the cloth. These can be band cutters having similar work method like that of band saws; cutters having rotary blades; machines having reciprocal blades which saw up and down; die clickers similar to die or punch press; or computerized machines that use either blades or laser beams to cut the fabric in desired shapes. Both the formal and the informal sector use the scissors or the machine to cut fabric for garment construction depending on the availability of any.

In the study of Martha (2014), garment construction can be done using direct cutting or patternmaking. Direct cutting method is purely based on the designer's imagination and

creativity. The designer pictures the style of the garment to be constructed. He or she cut directly without any laydown guide. Pattern making is the art of designing the outline of the plan or arrangement for sewing a cloth.

Thomas (2009) posits that the first step in garment construction is taking of body measurements. After the measurement, the designer could opt to make pattern or cut directly. Varney (1980) indicates that patterns are needed in dress-making in order "to obtain a better fit and to save material"

Martha (2014) observed that the mainly used method in garment construction in the formal sector is pattern making and that of the informal sector is direct cutting especially in simple set up enterprises. In her study, the traditional set up enterprises more often use direct cutting than any other method. More sophisticated enterprises use both direct cutting and pattern making. Martha (2014) further noted that, apprentices in the informal sector are more practically oriented than those in the formal setting.

2.7 Perceptions of the teachers and trainees in the formal and informal institutions about direct cutting

Perception is the process of recognizing, organizing and interpreting sensory information. It is the process whereby people select, organize, and interpret sensory stimulations into meaningful information about something (National Open University of Nigeria, 2011). Perception normally drives people's behaviour about an event or a thing. Perception involves the way a person sees the world, a thing, an activity or an event (Mary, 2016).

According to Shailong & Igbo (2009), teachers and students, trainers and trainees of the formal and informal sector have varied perception about direct cutting of fabric for garment construction. They indicated that some people have the perception that the direct cutting method used in garment construction most often spoils the garment entirely, thereby wasting the fabric. They went further to say that direct cutting is time consuming and slow, therefore is inconvenient for mass construction of garment. According to Omoavowere & Gloria (2015), a lot of people perceive that the direct cutting method does not produce quality garment and therefore people often prefer ready-to-wear clothes.

2.8 Summary of literature review

Garment is any outer covering put on the body. The methods of garment construction basically include crocheting and sewing. Garment protects the wearer from rough surfaces, insect bites, rash-causing plants, splinters, thorns and prickles by providing a barrier between the skin and the environment. It also insulates the body against cold or hot weather conditions, provides a hygienic barrier, keeping infectious and toxic materials away from the body.

Fashion design is the act and science of garment construction. Fashion design training takes three forms. These include formal, non-formal and informal. The formal system of vocational and technical training includes primarily time-bound, institution based, graded, and certified training. The non-formal system of training typically has structured learning objectives, learning times and learning support but will normally not lead to certification. Workshops, short courses and seminars are all forms of non-formal learning. This system includes a wide range of flexible programmes and processes by

which individuals acquire skills and knowledge from designated training venues outside of the home and, in some cases, at home.

Insufficient teaching materials, teaching aids, training laboratories, and computers to support students and teachers to teach fashion design are major setbacks in the formal sector. Insufficient capital cripples the non-formal and informal sector to expand facilities for the training of apprentices.

Fabric cutting for garment construction can be done using scissors or machine. Garment construction can be done using direct cutting or patternmaking. Direct cutting method is purely based on the designer's imagination and creativity. Pattern making is the art of designing the outline of the plan or arrangement for sewing a cloth. The first step in garment construction is taking of body measurements after which the designer opts to use pattern or direct cutting.

Teachers and students, trainers and trainees of the formal and informal sector have varied perception about direct cutting for garment construction. The perception is that direct cutting method often spoils garment during its construction, thereby wasting the fabric. They perceived direct cutting to be time wasting and slow, therefore is inconvenient for mass construction of garment. Some of them also perceived that, the direct cutting method does not produce quality garment and therefore people often prefer ready-to-wear clothes.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes the research methodology and tools employ to collect and analyze the data for the study. It covers the research design, study area and population, sampling and sample size, sources of data, data collection instruments, and data analysis technique.

3.1 Research Design

It is acknowledged that several methodological options are available in social research. However, the choice of design is dependent largely on the nature and objectives of the study. The study employed the descriptive survey approach to assess the usage of direct cutting method for garment construction by trainees in the formal and informal institutions in Wa Municipality.

Bordens & Abbott (1996) indicates that the descriptive survey enables researchers to discover important but hidden patterns in a subject of study. According to Smith (1991), the descriptive survey is a method which enables researchers to summarize and organize data in an effective and meaningful way. Kusi (2009) also explains that this design is good for investigative study. It describes, explains and assigns reasons for the occurrence of phenomena. It involves procedures and techniques of investigation based on the administration of questionnaire or interview. Leedy & Ormrod (2010) have described the

descriptive survey as a research design which involves the acquisition of information about one or more groups of people by asking questions and tabulating answers that respondents will give through interview and questionnaire. It enables the researchers to collect in-depth information about the population being studied.

3.2 Study Area and Population

The study area is the Wa Municipality. The Wa Municipality constitutes one of the eleven administrative areas (District Assemblies) that make up the Upper West Region of Ghana. It shares administrative boundaries with Nadowli District to the North, the Wa East District to the East and South and the Wa West District to the West and South. It lies within latitudes 1°40'N to 2°45'N and longitudes 9°32' to 10°20'W.

The study focused on the formal and informal institutions with emphasis on TVET institutions, and Fashion Design Enterprises that give training to apprentices in the Municipality. The Municipality has only two (2) Technical and Vocational Institutes and one (1) Polytechnic as TVET institutions (Table 1). The formal institutions considered for the study has a total Fashion Design student population of four hundred (400). This is made up of three hundred and fifty (350) females, and fifty (50) males. The fashion design staff consists of ten (10) females and eight (8) males making a total of eighteen (18).

Table 1: TVET Institutions in the Wa Municipality.

District/ Municipal	Name of School	No. of Fashion Design students		No. of Fashion Design Teachers		
wumeipar		Male	Female	Male	Female	
	1. Wa Technical Institute	25	225	3	4	
Wa	2. Community Development Vocational Institute	20	100	2	4	
	3. Polytechnic	5	25	3	2	
Total		50	350	8	10	

Source: Field Data (2018)

For the informal institutions, the statistics of the Ghana Association of Sewing and Tailoring (2018) indicates that one hundred and fifty (150) Fashion Design Enterprises are registered with the Association in the Municipality, with many of them having 2 - 15 apprentices. Majority of the apprentices are from the rural communities.

The Wa Municipality was chosen for the study because of the educational facilities including the Polytechnic. Again, many young men and women from the rural communities migrate into the urban town for the purposes of better economic gains since the Wa Municipality is the largest and central business area in the Upper West Region with the highest registered fashion design enterprises. Majority of the young migrants go there to learn sewing/tailoring in the informal setting.

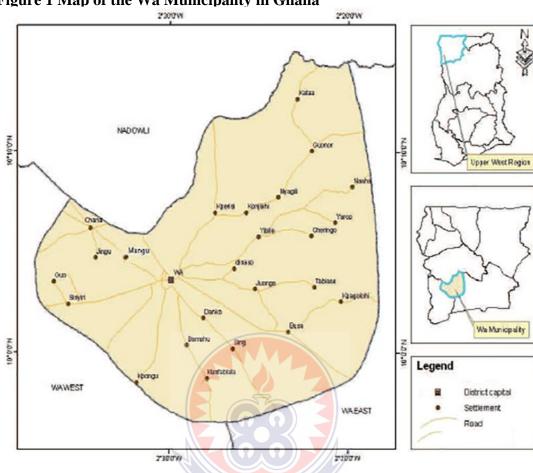


Figure 1 Map of the Wa Municipality in Ghana

Source: Wa Municipal Assembly (2016)

3.3 Sampling and sample size

According to Leedy & Ormrod (2010), sampling is the process of selecting a portion of the population to represent the entire population. Mugenda & Mugenda (2009) view sampling as the process or technique of selecting a suitable smaller size of a population for the purpose of determining parameters or characteristics of the whole population (Mugenda & Mugenda, 2009).

To achieve the objectives of the study, the purposive, stratified and simple random sampling techniques were used to select the sample size. Purposive sampling is mostly used on respondents who are knowledgeable about and can provide in-depth information of a problem under study (Kothari, 2004). The purposive sampling technique targeted only the Fashion Design students in the TVET institutions and the Fashion Design (Sewing and Tailoring) Enterprises in the Municipality.

The stratified sampling technique was used because of the heterogeneous nature of the study population. The population is made of teachers and trainees from the formal institutions, and trainers and trainees (apprentices) from the informal setting. The population was stratified into four:

- 1. Formal:
 - i. Teachers
 - ii. Students
- 2. Informal:
 - i. Trainers
 - ii. Apprentices

For the formal sector, a simple random sampling technique was used to select sixty percent (60%) of the students from each institute for the study. This was done using a randomizer software.

For Wa Technical Institute, a list of the Fashion Design students was obtained and a number assigned to each student name, from 1-250. A randomizer software was set to randomly generate 150 numbers from the 250 numbers which constitute 60% of the

Institute for the study. For Community Development Institute and Wa Polytechnic, the same procedure was followed to sample 72 and 18 students respectively. A sample size of 240 students were obtained from all the formal institutions. All the 18 teachers as indicated in table 3.1 were used for the study. A total sample size of 258 students and teachers was obtained.

For the informal sector, all the registered Fashion Design Enterprises were numbered from 1-150. A randomizer was set to randomly generate sixty (60) of the enterprises for the study. From each of the enterprises, two (2) apprentices and one (1) trainer were randomly selected for the study. This gave a sample size of one hundred and eighty (180).

A total sample size of 438 from both the formal and the informal institutions was obtained for the study.

3.4 Sources of data

The sources of data for the study would come from both primary and secondary sources. The study uses direct observations, interactions, questionnaires and interviews for the primary data collection. The secondary sources of data include magazines, books, journals, and other literature on the subject matter.

3.5 Data collection instruments

The study employed observations, questionnaires, and structured interview to collect the necessary data.

3.5.1 Observation

According to Leedy & Ormrod (2010), observations involve retrieving information, data or impressions on the field of research with the use of the researcher's senses. These senses may include looking, listening, smelling, feeling and any other in the quest to investigate a phenomenon. In view of that, visits and observations would be made to the selected institutions and enterprises in the Municipality. The purpose is to observe the practice of direct cutting of fabric for garment construction and other general practices by the institutions and enterprises.

3.5.2 Questionnaire

The questionnaire was designed to collect data from the teachers, students, enterprise trainers/managers and apprentices. According to Robson (2011), questionnaire is known to be quite valid and reliable if well-constructed. These instruments do not disclose the identity of respondents. Responses are mostly treated as confidential. Less time is also used.

The questionnaire would comprise of both closed –ended and open-ended items. The closed-ended questions give forthright and reliable information for the study because they limit the respondents to particular responses. The open-ended questions allow the

respondents to express their views in detail on a particular subject matter (Robson, 2011; Kumar, 2005).

3.5.3 Interview

According to Kumar (2005), structured interview uses predetermined set of questions (schedule) to collect primary data. It provides uniform information, which assures the comparability of data. Mostly, interview schedule is used on people who cannot read and write, very young or very old population. In consequent, the structured interview would be conducted on some of the apprentices and trainers/managers of the enterprises who cannot read and understand English. The questions would be interpreted in the local dialect to these respondents.

3.6 Data analysis technique

The data that would be collected for the study would be analyzed descriptively. Statistical Package for Service Solution (SPSS) and Microsoft Excel would be used to analyze the questionnaires in the form of descriptive statistics such as graphs, percentages, frequencies, mean and standard deviation.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This chapter provides the results and discussion of the dissertation. The data were gathered from fashion design students, apprentices and trainers in the Wa Municipality of the Upper West Region. The major variables on which the information was gathered are as follows:

- 1. Demographic information of the respondents;
- 2. Direct cutting method for garment construction;
- 3. Challenges facing formal and informal trainees in using direct cutting method for garment construction;
- 4. Perception of trainees in the formal and informal institutions about direct cutting

4.1 Demographic information of the respondents

The study analyses relevant aspects of the respondents' demographic backgrounds. The trainee sample used was 360, consisting of 240 from the formal institutions and 120 from the informal sector. Seventy-eight (78) trainers were also administered questionnaire to confirm on certain issues regarding the responses from the trainees. This comprises of 18 trainers/teachers in the formal institutions and 60 trainers from the informal institutions.

The significance of this is to assess the implications it could have with respects to the key issues in view of the study. These include; the gender distributions, age category, and study levels of the trainees.

4.1.1 Gender of respondents

Out of the three hundred and sixty trainees (formal and informal), 14% were males while 86% were females. This shows that the females are more into fashion design than their male counterparts (Table 2).

Table 2: Gender of respondents

Response	Frequency	Percent (%)
Male	50	14
Female	310	86
Total	360	100.0

Source: Field data, 2018

4.1.2 Age of respondents

Figure 2 provides information on the age distribution of the trainees for both the formal and informal institutions. Out of the 360 trainees, 2.8% were below 15 years, a little above 22% were within the age brackets of 15-18 years. Majority of the respondents representing 38.9% were between the age brackets of 19 and 21 years, 30.6% were also between 22 and 25 years whilst 5.6% were above 25 years.

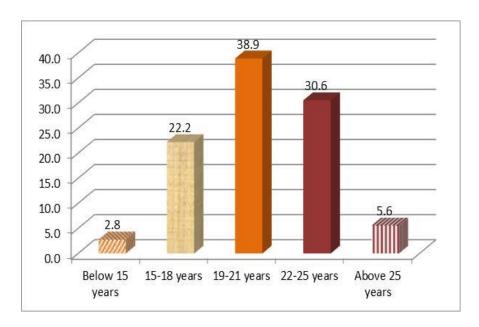


Figure 2: Age of respondents

4.1.3 Study levels of respondents

The trainees were in various levels or stages of training. Out of the 360 trainees, 44% were in form 1 or stage 1, 31% in form 2 or stage 2 and 25% were in their final year of training as shown in figure 3.

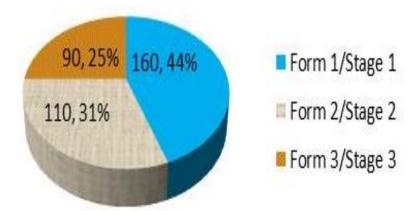


Figure 3: Study levels of respondents

4.2 Direct cutting method for garment construction

The trainees where issued questionnaire in relation to direct cutting method used for garment construction. Various responses to questions under this theme were given.

4.2.1 Interest in fashion design

The researcher wanted to know whether the trainees had interest in fashion design as a programme. Out of the 360 respondents, a little above 97% indicated that they were interested in the fashion design programme and as such have decided to learn it. Almost 3% indicated that they do not have the interest in fashion design with the reason that they were forced by their parents and guardians to learn it in the formal or informal sector (Table 3).

Table 3: Interest in fashion design

Response	Frequency	Percent (%)
Yes	350	97.2
No	10	2.8
Total	360	100.0

Source: Field data, 2018

4.2.2 Type of method used by teachers/trainers to teach during practical lessons

In asking the respondents the type of method their trainers normally used in teaching them, 58.6% trainees in the formal institutions said their teachers normally use pattern drafting to teach them, and 6.9% trainees in the formal institution indicated that their teachers use direct cutting method.

For the informal sector, all the trainees indicated that their trainers normally use both direct and pattern drafting methods in teaching them. A little above 1% of the trainees in both the formal and informal institutions indicated that their trainers use other method in teaching them (Table 4).

Table 4: Type of method used by teachers/trainers to teach during practical lessons

Response	Status	Frequency	Percent
Direct Cutting	Student	25	6.9
Pattern drafting	Student	211	58.6
Both Direct and Pattern	Apprentice	120	33.3
Others	Student/App	4	1.1
Total	66	360	100.0

Source: Field data, 2018

For the trainees in the formal institutions who indicated that their teachers normally use direct method in teaching them, 60% of them further indicated that, they normally use 2-period for practice during practical lesson, 28% use 1- period for practice, 8% use 3-period whilst 4 % use more than 3 periods for practice during practical lessons as shown in figure 4.

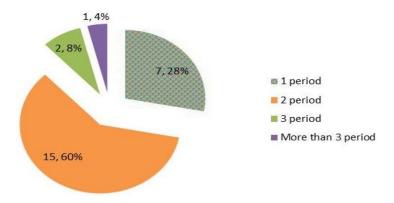


Figure 4: Period spend on direct cutting during practical lessons

The researcher also questioned the trainers/teachers to actually know the type of method used during practical lessons. Out of the 78 teachers/trainers, 6.4% said they use direct cutting, 12.8% said they use pattern drafting, 73.1% said they use both direct and pattern drafting, 5.1% indicated other methods, whilst 2.6% did not indicate any thing. From table 5, those who indicated that they normally use both direct and pattern drafting were from the informal institutions.

Table 5: Type of method used by teachers/trainers

Response	Status	Frequency	Percent
Direct Cutting	Teacher	5	6.4
Pattern drafting	Teacher	10	12.8
Both Direct and Pattern	Trainer	57	73.1
Others	Teacher/Trainer	4	5.1
Missing	Teacher/Trainer	2	2.6
Total		78	100.0

This statistics confirmed the position of Mathar (2014) that direct cutting is mostly practised by the informal sector and also confirmed her assertion that, the traditional set up enterprises more often use direct cutting than any other method. The statistics also confirmed the view of Ofori (2015) that, apprentices in the informal sector are more practically oriented than those in the formal setting using wide range of methods in garment construction.

According to Ampomah (2015), all these methods or skills are supposed to be learned by all fashion design and textile trainees either in the formal or informal sector to make them competent and constructive.

4.2.3 Material used during practical lessons

The respondents were asked to indicate the type of material they normally used during practicals to practise direct cutting. Out of the 360 respondents, 15.3% said they normally use brown paper, 11.1% said fabric, 69.4% indicated that they normally use both brown paper and fabric to practise, 2.8% indicated other materials whilst a little above 1% did not indicate any of the materials (Figure 5).

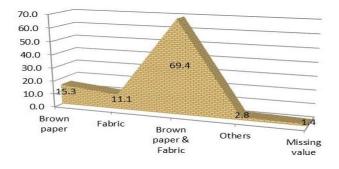


Figure 5: Material used during practical lessons

In confirming the trainees' responses, the trainers/teachers indicated that they normally use some form of materials. Out of the 78 trainers/teachers, 20.5% agreed that they normally use brown paper, 10.3% said they normally use fabric, and 64.1% indicated that they normally use both brown paper and fabric whilst 2.6% indicated other materials as shown in figure 5.

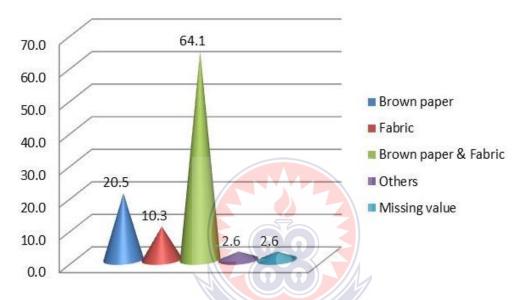


Figure 6: Material used during practical lessons (Trainers/Teachers)

Source: Field data, 2018

4.2.4 Knowledge about direct cutting

Out of the 360 trainees, 40.3% have knowledge in direct cutting with majority in the informal sector, 58.3% made up of the trainees in the formal institutions have no or very little knowledge about direct cutting, whilst 1.4% did not indicate whether they have knowledge about direct cutting or not as shown in table 6.

Table 6: Knowledge about direct cutting

Response	Status	Frequency	Percent
Yes	Student/App	145	40.3
No	Student	210	58.3
Missing value	Student/App	5	1.4
Total		360	100.0

4.2.5 Advantages of direct cutting

The researcher enquired from the respondents the advantages of direct cutting. Though some of the trainees indicated they do not have much knowledge about direct cutting, they however answered the question regarding the advantages of direct cutting. Out of the 360 trainees who answered the questionnaire, 9.7% said direct cutting is very convenient, fast and easier to use, 16.7% said it is very flexible and skillful, 12.5% said direct cutting is not complicated and there is no drafting process, 19.4% said it builds self confidence in dress making whilst 41.7% indicated all the options, meaning direct cutting is very convenient, fast and easier to use, very flexible and skillful, no complication and drafting process, and also builds self confidence in dress making.

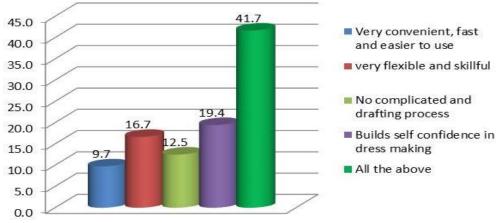


Figure 7: Advantages of direct cutting

4.2.6 Level of satisfaction with direct cutting practice

The respondents were asked their level of satisfaction with direct cutting. Out of the 360 respondents, a little above 11% indicated that they were satisfied with the direct cutting practice, 22.2% indicated they were very satisfied, 58.3% were not satisfied, whilst 8.3% did not indicate their levels of satisfaction. The status in table 7 suggests that all those who indicated either satisfied or very satisfied were trainees or apprentices in the informal sector, whilst those that indicated not satisfied were students in the formal institution.

Table 7: Level of satisfaction with direct cutting practice

Response	Status	Frequency	Percent
Satisfied	Apprentice	40	11.1
Very satisfied	Apprentice	80	22.2
Not satisfied	Student	210	58.3
Missing value	Student	30	8.3
Total		360	100.0

4.3 Challenges facing formal and informal trainees in using direct cutting method for garment construction.

In assessing the challenges trainees faced in using direct cutting, the researcher asked them various questions to ascertain the facts.

4.3.1 Difficulty in using direct cutting

When the respondents were asked whether they have some difficulty in using direct cutting, all of them answered in the affirmative as shown in table 8.

Table 8: Difficulty in using direct cutting

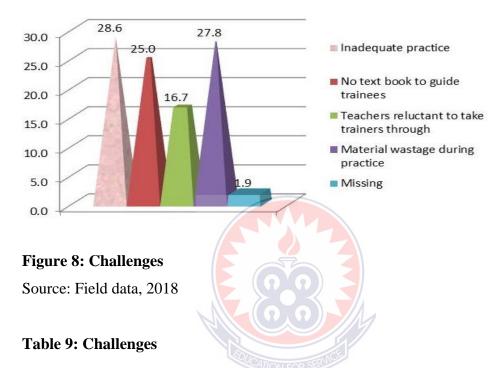
Response	Status	Frequency	Percent	
Yes	Students/Apprentice	360	100.0	
No	Students/Apprentice	0	0.0	
Total		360	100.0	

Source: Field data, 2018

4.3.2 Challenges

When the trainees were asked to state some of the challenges they faced during direct cutting practice, 28.6% mentioned inadequate practice as a challenge, 25% said inadequate or no text book to serve as a guide, 16.7% of the trainees said teachers feel reluctant to take them through direct cutting practice, an 27.8% indicated material wastage as a challenge during direct cutting practice (Figure 8). Almost 2% of the trainees could not indicate the challenges they face during direct cutting practice.

It could be noted in table 9 that almost all those who indicated inadequate practice, teacher reluctance, and lack of textbooks were trainees from the formal institution. Majority of the trainees in the informal institution indicated material wastage as a challenge during practice.



Percent Response **Status Frequency** Inadequate practice Student 103 28.6 No text book to guide trainees Student/Students 90 25.0 Teachers reluctant to take Students trainers through 60 16.7 Material wastage during practice Apprentice/Students 100 27.8 7 Missing Apprentice/Students 1.9 **Total 360** 100.0

All the 18 teachers in the formal institution stated that there are virtually no text books outlining the principles of direct cutting. They also confirmed that periods allocated for practicals are inadequate and as such students do not practice much using direct cutting.

The 60 trainers in the informal sector indicated that the apprentices mostly waste materials during the direct cutting process. However, the apprentices get conversant with the method as they progress to the next stage of apprenticeship.

4.3.3 Recommending direct cutting during practicals

The trainees were asked whether they will recommend direct cutting to be taught regularly during practicals. All of them answered in the affirmative as shown in figure 9.



Figure 9: Recommending direct cutting during practicals

4.4 Perceptions of trainees in the formal and informal institutions about direct cutting

Perception normally drives people's behaviour about an event or a thing. Perception involves the way a person sees the world, a thing, an activity or an event (Mary, 2016). This is very important when investigating into an issue. The research inquired from the trainees their perceptions about direct cutting. Various questions were asked to ascertain certain facts on the trainees' perceptions.

The researcher investigates to establish the notion that direct cutting is a 'roadside' method. Out of the 360 trainees, 65.8% said it is a 'roadside' method, 32.8% indicated it is not a 'roadside' method. Those who indicated it is a 'roadside' method were from the formal institution whilst those who said it is not a 'roadside' method were from the informal institutions.

Table 10: Direct cutting is a 'roadside' method

Response	Status	Frequency	Percent
Yes	Students	237	65.8
No	Apprentice	118	32.8
Missing value	Student/Apprentices	5	1.4
Total		360	100.0

Source: Field data, 2018

As to whether direct cutting waste fabric and time, 64% trainees from the formal institutions said YES whilst 32% in the informal institutions said NO. Four Percent of the trainees left the question unanswered as shown in figure 10.

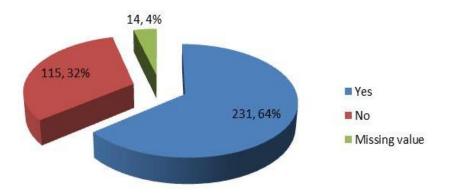


Figure 10: Direct cutting waste fabric and time

Again, 33.3% representing all the trainees in the informal institutions indicated that direct cutting improves fashion design skills whilst 64.2% from the formal institutions said direct cutting does not improve fashion design skills (Table 11).

Table 11: Direct cutting improves fashion design skills

Response	Status	Frequency	Percent
Yes	Students	231	64.2
No	Apprentice	120	33.3
Missing value	Student/Apprentices	9	2.5
Total		360	100.0

Source: Field data, 2018

As to whether direct cutting is practiced by people with advanced knowledge and skills, 73.3% answered in the affirmative whilst 25.6% did not agree as indicated in figure 11

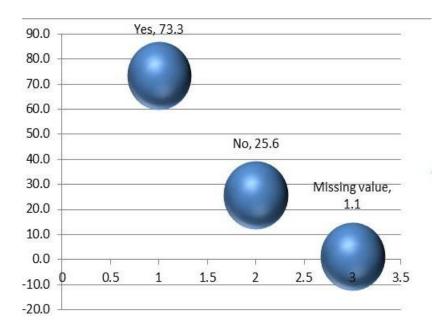


Figure 11: Direct cutting is practiced by people with advanced knowledge and skills

This statistics supports the views of Shailong & Igbo (2009) that, teachers/trainers, and students/trainees of the formal and informal sector have varied perception about direct cutting of fabric for garment construction. It is obvious that majority of the respondents in the formal institutions see direct cutting as a roadside method and also as a method that waste fabric and time.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents a summary of the findings, conclusions drawn from these findings and recommendations made based on the research findings.

5.1 Summary

The study assessed the usage of direct cutting method for garment construction by trainees in the formal and informal institutions in the Wa Municipality of Upper West Region. It employed the descriptive survey as the research design. Questionnaires and interviews were used to collect data from the respondents.

The summary of the key findings of the research are as follows:

- 1. There are more females in the fashion design institutions either formal or informal than males
- 2. Majority of the trainees are within the age brackets of 19 to 25 years
- 3. More trainees were admitted into form 1/stage 1 in all the training institutions (both formal and informal) in 2018.
- 4. Majority of the trainees are interested in the fashion design programme

- 5. In the formal institutions, pattern drafting is mostly used during practical lessons whilst both direct cutting and pattern drafting are used widely in the informal institutions.
- 6. The period allocated for practicals in the formal institutions is inadequate whilst in the informal institutions every aspect is purely practical. There is enough practical period.
- 7. Both brown paper and fabric are mostly used in practising direct cutting.
- 8. Trainees in the formal institutions have little or no knowledge about direct cutting.
- 9. Majority of the trainees agreed that direct cutting is very convenient, fast and easier to use, very flexible and skillful, no complication and drafting process, and it also builds self confidence in dress making.
- 10. The trainees in the informal institutions are more satisfied with direct cutting method than those in the formal institutions.
- 11. There are challenges in using direct cutting method. These include inadequate practice periods, teacher reluctance, and lack of textbooks for trainees in the formal institution. Material wastage during practice is common among the stage 1 trainees in the informal institutions.
- 12. Majority of the trainees in the formal institutions have the perception that direct cutting is a 'roadside' method, and also waste fabric and time.

5.2 Conclusions

From the above findings, the following conclusions could be drawn:

- Teachers and students in the formal institutions are not conversant with the direct cutting method. They mostly practise pattern drafting during their practical lessons. The trainers and trainees in the informal institutions are conversant with both direct and pattern drafting. They practice these methods in their everyday practical activities.
- 2. The trainees in the formal institutions are faced with some challenges in the usage of direct cutting. These include inadequate practice periods, teacher reluctance to teach the trainees direct cutting, and lack of textbooks for trainees. Material wastage during practice is common among the stage 1 trainees in the informal institutions.
- 3. The general perception among the trainees in the formal institutions is that direct cutting is a 'roadside' method, and also waste fabric and time. Among the trainees in the informal institutions, direct cutting improves fashion design skills and mostly is for the experienced trainers and trainees.

5.3 Recommendations

Based on the key findings and the conclusions drawn, the following recommendations are offered:

- Curriculum developers, the Ghana Education Service, and the ministry of
 Education should review the TVET curriculum. More periods should be allocated
 for practical subjects to enable trainees improve and expand their practical
 knowledge and skills.
- 2. The trainers/teachers should employ direct cutting method during practical lessons so that students can be more conversant with the practices and improve on their flexibility and skills in handing direct cutting tools.
- 3. The trainees in the TVET schools should be allowed to undertake industrial attachment for at least two months during holidays and be assessed.



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APPENDIX I

SAMPLE QUESTIONNAIRE

Students

This questionnaire is for educational purposes. It is intended to assess the usage of direct cutting method for garment construction by trainees in the formal and informal institutions in the Wa Municipality in the Upper West Region. The researcher is a final year M.Tech student of University of Education, Winneba (Kumasi campus).

Your consent and help is being sought to enable the researcher carry out this exercise for the betterment of the Fashion Design and Technology Industry in the country. All information provided by you in this exercise will be **strictly confidential** and used for academic purposes only, and no information will be disclosed without your consent.

INSTRUCTION: Please tick ($\sqrt{}$) the responses that are applicable.

PART A: DEMOGRAPHIC INFORMATION

1.	Gender of respondent	Mal	le []	Femal	e []		
2.	Age of respondent								
Ве	low 15 years [] 15-18 year	s []	19-	-21 ye	ars []	22	-25 yea	rs []
Ab	ove 25 years []								
3.	Level of respondent Form	1[]	F	Form 2	1	Fo	rm 3 [1	

PART B: DIRECT CUTTING METHOD FOR GARMENT CONSTRUCTION

4.	Do you have the interest in fashion design as a programme of study?
	Yes [] No []
5.	In garment construction, what methods do your teachers normally used to teach
	you? Direct cutting [] Pattern drafting []
	Others (specify)
6.	Do you have any knowledge about direct cutting? Yes [] No []
7.	If yes, what is direct cutting in your own opinion?
8.	Do you practise direct cutting during your practical lessons?
	Yes [] No []
9.	If yes, what material do you use for the practice?
	Brown paper [] Fabric []
10.	If yes how many periods do you spent on direct cutting?
	1 period [] 2 periods [] 3periods [] more than 3periods []
11.	How often do you use direct cutting during practical lessons?
	Always [] Most of the time [] Sometimes [] Rarely []
12.	Are you allowed to use direct cutting during your final examination?
	Yes [] No []

13. Which of the following do your teachers use most during practical lessons
Direct cutting [] pattern drafting []
14. What are the advantages of direct cutting?
It is very flexible and skillful []
Very convenient, fast and easier to learn []
There is no complicated drafting process []
It builds self confidence in dress making []
All the above []
15. What is your level of satisfactions with direct cutting practice?
Satisfied [] Very satisfied [] Not satisfied []
PART C: CHALLENGES FACING FORMAL TRAINEES IN USING
DIRECT CUTTING METHOD FOR GARMENT CONSTRUCTION
16. Do you have difficulty using the direct cutting method?
Yes [] No []
17. What are some of the challenges you face in using direct cutting?
18. Do teachers feel reluctant in teaching the direct cutting during practical lessons?
Yes [] No []
19. Are there enough text books that teaches direct cutting? Yes [] No []

20. Will you be happy if direct cutting practice is allowed in your final examination?
Yes [] No []
21. Will you recommend that the teachers teach direct cutting as well as pattern
making? Yes [] No []
PART D: PERCEPTIONS OF TRAINEES IN THE FORMAL AND
INFORMAL INSTITUTIONS ABOUT DIRECT CUTTING.
22. Direct cutting is a "roadside" method of garment construction.
Yes [] No []
23. Direct cutting waste fabric and time. Yes [] No []
24. Direct cutting improves fashion design skills. Yes [] No []
25. Direct cutting is practiced by people with advanced knowledge and skills in
fashion design. Yes [] No []
26. Direct cutting is for beginners. Yes [] No []

Apprentices

This questionnaire is for educational purposes. It is intended to assess the usage of direct cutting method for garment construction by trainees in the formal and informal institutions in the Wa Municipality in the Upper West Region. The researcher is a final year M.Tech student of University of Education, Winneba (Kumasi campus).

Your consent and help is being sought to enable the researcher carry out this exercise for the betterment of the Fashion Design and Technology Industry in the country. All information provided by you in this exercise will be **strictly confidential** and used for academic purposes only, and no information will be disclosed without your consent.

INSTRUCTION: Please tick ($\sqrt{ }$) the responses that are applicable.

PART A: DEMOGRAPHIC INFORMATION

1.	Gender of respondent Male [] Female []
2.	Age of respondent
	Below 15 years [] 15-18 years [] 19-21 years [] 22-25 years
]
	Above 25 years []
3.	Academic qualification, None [] JHS [] SHS/VOC [] others
	specify
4.	Level of respondent Beginner [] above beginner [] Mastering []

PARTB: DIRECT CUTTING METHOD FOR GARMENT CONSTRUCTION

5. Do you have any knowledge about direct cutting? Yes [] No []

	6.	If yes, what is direct cutting in your own opinion?
	7.	Apart from direct cutting, what method does your master use?
	8.	Do you practise direct cutting during your practical lessons?
		Yes [] No []
	9.	How often do you use pattern drafting in your shop?
		Always [] Most of the time [] Sometimes [] Rarely []
	10.	Which of the following do your masters use most in the shop?
		Direct cutting [] pattern drafting []
ΡΔΊ	RТ	C: CHALLENGES FACING INFORMAL TRAINEES IN USING DIRECT
		TING METHOD FOR GARMENT CONSTRUCTION
	11.	Do you have difficulty using the direct cutting method?
		Yes [] No []
	12.	What are some of the challenges you face in using direct cutting?
	••••	

13. Do masters feel reluctant in teaching the direct cutting during practical lessons?
Yes [] No []
PART D: PERCEPTIONS OF TRAINEES IN THE FORMAL ANI
INFORMAL INSTITUTIONS ABOUT DIRECT CUTTING.
14. Direct cutting waste fabric and time. Yes [] No []
15. Direct cutting improves your fashion design skills. Yes [] No []
16. Direct cutting is practiced by people with advanced knowledge and skills i
fashion design. Yes [] No []
17. Direct cutting is for beginners. Yes [] No []

Trainers

This questionnaire is for educational purposes. It is intended to assess the usage of direct cutting method for garment construction by trainees in the formal and informal institutions in the Wa Municipality in the Upper West Region. The researcher is a final year M.Tech student of University of Education, Winneba (Kumasi campus).

Your consent and help is being sought to enable the researcher carry out this exercise for the betterment of the Fashion Design and Technology Industry in the country. All information provided by you in this exercise will be **strictly confidential** and used for academic purposes only, and no information will be disclosed without your consent.

INSTRUCTION: Please tick ($\sqrt{ }$) the responses that are applicable.

PART A: DEMOGRAPHIC INFORMATION

1.	Gender of respondent Male [] Female []
2.	Age of respondent
	15-19 years [] 20-29 years [] 30-39 years [] 40-49 years
] 50-59 years [] 60 and above []
3.	Academic qualification, None [] JHS [] SHS/VOC [] Advanced level []
	HND [] 1 st degree [] Master degree [] PhD []
	Others (specify)

PART B: DIRECT CUTTING METHOD FOR GARMENT CONSTRUCTION

4. Is direct cutting part of your curriculum? Yes [] No []

5.	How often do you use direct cutting to teach your trainees?
	Always [] Most of the time [] Sometimes [] Rarely []
6.	Which of the following do you use most during practical lessons?
	Direct cutting [] pattern drafting []
PART	C: CHALLENGES FACING TRAINEES IN USING DIRECT
CUT	TING METHOD FOR GARMENT CONSTRUCTION
7.	Do you have difficulty using the direct cutting method?
	Yes [] No []
8.	What are some of the challenges you face in using direct cutting?
•••	
PART	TD: PERCEPTIONS OF TRAINEES IN THE FORMAL AND
INFO	RMAL INSTITUTIONS ABOUT DIRECT CUTTING.
9.	In your opinion, what are the disadvantages of Direct cutting?
10	. What is your perception about direct cutting?