### UNIVERSITY OF EDUCATION, WINNEBA

# CHALLENGES OF GHANAIAN POLYTECHNIC FASHION DESIGN AND TEXTILE STUDENTS IN THE STUDY OF CREATIVE DESIGN AND WORKING DRAWING: A CASE STUDY OF HO POLYTECHNIC



University of Education, Winneba http://ir.uew.edu.gh



#### UNIVERSITY OF EDUCATION, WINNEBA

# CHALLENGES OF GHANAIAN POLYTECHNIC FASHION DESIGN AND TEXTILE STUDENTS IN THE STUDY OF CREATIVE DESIGN AND WORKING DRAWING: A CASE STUDY OF HO POLYTECHNIC



A Dissertation in the Department of FASHION AND TEXTILES, Faculty of ART AND DESIGN, submitted to the School of Graduate Studies, University of Education, Winneba in partial fulfillment of the requirements for award of the Master of Technology (Fashion and Textile Design) Degree

#### **DECLARATION**

#### STUDENT'S DECLARATION

I, Bijou Asemsro Akpene, 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.

GNATURE:		AS.	EDUC	ATT	8
ATE:					2
	33				18
	35				7
	31				
UPERVISO	an's ni	CLAD	A TION		

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.

NAME OF SUPERVISOR: DR. B. K. DUGBE
SIGNATURE:
DATE:

#### **ACKNOWLEDGEMENTS**

I wish to thank all who made various contributions to the successful completion of this project. Special thanks to Dr. B. K. Dogbe whose skills, experience, as well as tact and patience in respect of supervision saw the thesis started and completed. I am grateful to Dr. Danso for his encouragement at the topic selection stage. Many thanks also to the Head, staff and students of Fashion Design and Textiles Department for their assistance, especially during data collection. Thanks also to Mr. Maxwell Budu for his interest in the thesis, a motivating factor, and helping with typing and proof reading.

Furthermore, my appreciation goes to authors whose works I cited in my thesis.



# **DEDICATION**

This work is dedicated to the Two Maxwells and One Hilda in my life.



# **TABLE OF CONTENTS**

DECLARATION	ii
ACKNOWLEDGEMENTS	iii
DEDICATION	iv
LIST OF TABLES	viii
ABSTRACT	x
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background to the study	1
1.2 Problem Statement	
1.3 Research Objectives	3
1.4 Research Questions	4
1.5 Significance of the study	4
1.6 Scope of the study	
1.7 Limitation	
1.8 Organization of the study	5
Salar Marie	
CHAPTER TWO	6
LITERATURE REVIEW	6
2.1 Introduction	6
2.2 What is Fashion?	6
2.3 A history of Creativity	8
2.4 What is Creativity?	9
2.4.1 The Creative Process	11
2.4.2. Creative Process in Design	12

### University of Education, Winneba http://ir.uew.edu.gh

2.4.3 Fashion Design Process
2.5. Elements and Principles of Creative Design
2.5.1 Elements of Design
2.5.2 Line
2.5.3 Shape
2.5.4 Form
2.5.5 Space
2.5.6 Pattern
2.5.7 Color
2.5.8 Value
2.5.9 Texture
2.6 Principles of Design26
2.6.1 Unity
2.6.2 Emphasis
2.6.3 Balance
2.6.4. Proportion
2.6.5 Rhythm
2.7 Student's Attitude towards Creative Design and Working Drawing
2.8 Teacher Quantity: Its Effect in Teaching Creative Design and Working Drawing .36
CHAPTER THREE37
METHODOLOGY37
3.1 Overview
3.2 Research design
3.3 Population
3.4 Sampling
3.5 Data Collection Instruments

3.5.1 Observation	39
3.5.2 Questionnaire	39
3.6 Administration of the Questionnaire	40
3.7 Data Analysis	40
CHAPTER FOUR	41
FINDINGS AND DISCUSSION	41
4.1 Introduction	41
4.2: Demographic background of respondents	42
4.3: The extent to which attitudes of students constitute problems to the teaching of creative design and working drawing	45
4.4: Extent to which teacher quality and quantity cause problems to the teaching of working design and drawing	48
4.5: The Extent to Which Instructional Materials Pose Problems to the Teaching and Learning of Creative Design and Working Drawing	
4.6 Discussion of Findings	
CHAPTER FIVE	63
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	63
5.1 Summary of the main findings of the study	63
5.2 Conclusions	66
5.3 Recommendations	68
REFERENCES	70
APPENDIX ONE	79
PERMISSION LETTER	79
APPENDIX TWO	80
OLIECTIONNIA IDEC	80

# LIST OF TABLES

Title	Page				
Table 4.1: Gender of Respondents (students)	43				
Table 4.2: Gender of Respondents (Lecturers)	43				
Table 4.3: Age of Respondents	44				
Table 4.4: Lecturers' Educational Qualification	44				
Table 4.5: Teaching Experience	45				
Table 4.6: Importance Of Working Drawing For Fashion Programme	45				
Table 4.7: Enjoy Participation in Practicals and Demonstrations	46				
Table 4.8: Money Spent On Practical Projects Is A Waste	46				
Table 4.9: Multiple Responses By Students On Approach To The Learning Of	f Creative				
Design And Working Drawing	47				
Table 4.10: Multiple Responses By Students on Attitudes Among Students	ents That				
Constitute A Setback To The Teaching And Learning of Creative Design And	Working				
Drawing	48				
Table 4.11: Do Lecturers Qualification and Quality of Teaching Affect Teaching of					
Subject	49				
Table 4.12: Satisfaction With Lecturers Method of Teaching	49				
Table 4.13: Multiple Responses by Students on Factors Accounting for Satisfac	ction with				
Teacher's Method of Teaching	30				
Table 4.14: Factors That May Affect The Practical Training of Students	50				
Table 4.15: Multiple Responses By Lecturers on Methods Used In The Te	aching of				
Creative Design And Working Drawing	52				
Table 4.16: Teaching Method and Coverage of Topics	52				
Table 4.17: Support for Professional Development of Lecturers	53				

# University of Education, Winneba http://ir.uew.edu.gh

Title		Page
Table 4.18: Opinion about the Professional Development Courses		54
Table 4.19: Factors That May Militate Against The Teaching And Learn	ing of (	Creative
Design And Working Drawing		54
Table 4.20: Having Practical's Frequently		55
Table 4.21: Having A Laboratory for Practical's	•••	56
Table 4.22: Adequacy of Tools and Equipment in Laboratory		56
Table 4.23: Source of Tools and Equipment		57
Table 4.24: Source of Funding for Practicals		57



#### **ABSTRACT**

The aim of this study was to examine the extent to which attitudes of students, teacher quality and quantity and instructional materials pose problems to the teaching and learning of creative design and working drawing. The research adopted a survey approach. The simple random sampling method was used in sampling out the various subjects. These comprised members from the various levels and include staffs, tertiary and the non-tertiary students who are studying in the Polytechnic. In all, two sets of questionnaire were analysed; one set for students and the other questionnaire was for lecturers. The various data sets have been presented in tables. The findings of the study revealed that there was considerable appreciation of the importance of creative design and working drawing in the polytechnic fashion and textiles curriculum. It was also concluded that the Department of Fashion Design and Textiles had adequate and experienced creative design and working drawing lecturers who are very innovative and resourceful. Furthermore, this study also shows that lack of adequate materials is a challenge. The need for drawing material and equipment cannot be ignored in our schools if quality individuals who could propel our society in industrial advancement are to be produced. It is therefore incumbent on Management and Faculty to put in the necessary effort in providing adequate up-to-date facilities and materials for practical training and a conducive learning atmosphere for the teaching and learning of the course.

.

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background to the study

Today's fashion and textile industry offers exciting and rewarding career opportunities with ever-increasing demands for skilled professionals. The textile industry is an attractive sector that is poised for growth. The industry itself continues to be an extremely dynamic and important sector of the economy, providing enormous scope for well-qualified graduates to make their mark. The industry also enjoys significant strengths and advantages, such as, availability of raw materials, labour, domestic market and supportive government policies. Advances in technology, combined with the ever-evolving needed skilled manpower, are having a strong impact on the textile and clothing sector. The importance of innovation-driven textile programmes research and development are essential elements for the present and future developments in the industry.

In response to the expanding demand for creative fashion and textile products, many technical, vocational and other institutions of higher learning have also enriched their curriculum to train skilled and creative graduates—to lead the industry. Creative design as a course is pivotal in the whole fashion and textile enterprise as it integrates market and trend research, creativity and innovation skills to create new marketable products.

As part of preparing the next generation of creative fashion and textile professionals, all fashion and textile departments of the polytechnics in Ghana offer a course in Creative Design and Working Drawing. The overarching theme of the course is to imbue fashion

and textile students with the elements and principles of design as well as drawing tools. But the questions instructors ask are; how do you teach creativity? How do you teach a student to design a product for the future when that future has not arrived yet? These are some of the challenges that students and lecturers face when it comes to teaching creative design and working drawing in the classroom.

Despite the increasing importance of creative design, many fashion and textile students come to offer the course with negative attitudes and which lead to poor performance. In most cases, creative design courses are not well—resourced with tools and instructors which all militate against students' success in the field. Using the Fashion Design and Textile Department of Ho Polytechnic as a case study, the current study seeks to identify the challenges student face in Creative Design and Working Drawing and propose measures for making the course meaningful and effective.

#### 1.2 Statement of the Problem

The Department of Fashion Design and Textiles is currently the only department under the Faculty of Art and Design of the Ho Polytechnic in the Volta region of Ghana. The Department runs a 3-year programme leading to the award of the Higher National Diploma (HND). It also runs a 2-year non-tertiary Advanced Fashion programme. The courses offered in the Department of Fashion Design and Textiles aim at preparing students to become fashion and textile designers, fashion writers and teachers of fashion. The training is also geared towards producing independent entrepreneurs who can establish small-scale businesses for a start.

One of the cornerstone courses of the HND Fashion Design and Textiles programme is Creative Design and Working Drawing. However, in a discussion with the head of Textiles and Fashion Department of the institution she admitted that some students have no interest in the subject. Attitudes associated with Creative Design and Working drawing appear to affect student's performance in the subject.

The researcher observed that the quantity of lecturers, facilities and studios are grossly inadequate and obsolete. In many cases, management compensates for weakness in content knowledge and teaching competence by organizing remedial courses for new employees at great expense. Where students consistently perform poorly, the implication is that adequate teaching and learning has not taken place in the polytechnic. The purpose of this study therefore, is to identify the underlying factors that impede fashion and textile students in mastering Creative Design and Working Drawing and to suggest remedies to deal with the challenge.

#### 1.3 Research Objectives

The main objective of the research is to assess the challenges of Ghanaian polytechnic fashion and textile students in the study of Creative Design and Working Drawing. The other objectives are to determine:

- i. if students' attitudes constitute problems to the teaching and learning of Creative Design and Working Drawing ,
- ii. whether or not lecturer quality and quantity constitute problems to the teaching and learning Creative Design and Working Drawing,

iii. to what extent instructional materials constitute problems to the teaching and learning of Creative Design and Working Drawing

#### 1.4 Research Questions

The following research questions were formulated to guide the study:

- 1. Do attitudes of fashion and textile students constitute problems to the teaching of creative design and working drawing?
- 2. To what extent do lecturer quality and quantity cause problems to the teaching of Creative Design and Working Drawing?
- 3. How do instructional materials pose problems to the learning of Creative Design and Working Drawing?

#### 1.5 Significance of the study

The research is envisaged to enable lecturers and facilitators of Creative Design and Working Drawing understand the difficulties of their students. Fashion and design students will be motivated to get involved and become responsible for their own learning and mastering creative design elements and principles. Creative design is relevant to the fashion programme since its basic elements and principles of design are the guidelines which must be followed to produce a good design. The study will also equip students with the maximum efficiency in skill development and creativity.

#### 1.6 Scope of the study

The study is expected to cover all Fashion and Textiles students in Ghana however, it is limited to the students of Ho Polytechnic and to creative design and working drawing in the context of fashion and textiles.

#### 1.7 Limitation

The researcher encountered challenges when it came to speaking to lecturers of the course since none of those spoken to pursued creative design and working drawing as a programme of study at any level, other than as a course at the HND level. Also, students' apathy towards the course likely affected their responses.

#### 1.8 Organization of the study

The work is organized and grouped into five main chapters. The first chapter contains introduction of the study including the statement of the problem of the study, research objectives and questions, significance of the study, scope of the study and the limitations associated with the study. Chapter two focuses on review of related literature on the previous works of creative fashion design. The details of research method are captured under Chapter Three while Chapter Four entails data presentation and analysis. The Last chapter covers summary, conclusions and recommendations of the study.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

The chapter undertakes a review of related literature on fashion and creative design. For the purpose of this study, the review is presented in two sub sections: section one deals with the subject matter of creative design, Elements and principles of design. The other section deals with pedagogical issues, that is, the attitude of student in learning and the impact of quantity of teachers in teaching effectiveness.

#### 2.2 What is Fashion?

Fashion has always reflected our society; it is considered an art form which can transform an image, help express a person's identity, or make a social statement. It is about promoting the 'new' and is concerned with constantly changing aesthetics. Fashion is often described as the current style that is followed by a large number at any one time. In its wider sense, fashion portrays the zeitgeist – the spirit of our times (Burke, 2011). According to Frings (2008), the term "fashion" comprises four components: style, change acceptance and taste and considered as the style or styles most popular at a given time.

In a rather simplistic manner, Diamond and Diamond (2002, p.90) describe fashion as a style accepted by the majority of a group. Style is defined as "the combination of design features that give a garment its distinctive appearance" Conway, (1997, p. 202). Fashion, according to Webster's Third New International Dictionary is "the prevailing or accepted style or group of styles in dress or personal decoration established or adopted during a

particular time or season. Recent writings about fashion from outside of the United States focus on the cultural aspects of fashion. Kawamura (2004, 2005) from Japan, Vinken (2005), from Switzerland, and Wilson (2003) from England, contributed to the discussion in distinct, complementary ways. One common characteristic of their work, however, was that each of the authors began with a discussion of the controversial nature of fashion studies, describing ways that the study of fashion has been marginalized in academic circles, criticized in feminist circles and reduced to simple buying and selling in business circles (Kawamura, 2005; Vinken, 2005; Wilson, 2003). Fashion has also been defined in terms of a socio-cultural phenomenon (Workman & Freeburg, 2009). Barbara Vinken of the University of Zurich examined "trends and cycles in the fashion system" (Vinken, 2005) by discussing the socio-cultural divisions fashion reflected during the 18th and early 19<sup>th</sup> centuries, defining the mid-19th to mid-20th century as the era of "One hundred years of fashion", and establishing the present as a period of post-fashion. Vinken's discussion of fashion differed from others in that she focused on the "correlation of three major conceptual articulations: the division of being and mere appearance; the division of the sexes; and – inseparably linked to the latter –division of the classes" (Vinken, 2005, p. 4). Vinken referenced Torstein Veblen who, in the Theory of the Leisure Class (1919), articulated a foundation for discussing gender and class distinction in dress.

Globally, the fashion world is a multimillion – dollar industry offering a dazzling array of products in every price range, from luxury goods to the least expensive, mass product goods. The fashion and creative industries supply chain provides employment for millions of people in the areas of fashion and textile design, manufacturing and distribution, the media, sales and marketing, fashion retail and fashion event management. And, of course, education, which is responsible for training students to

acquire the necessary skills, knowledge and competence to enter the fashion and creative industries (Burke, 2011)

#### 2.3 A history of Creativity

A very brief narrative about the origins of the concept of creativity can be strung together from the literature as follows. 'Creativity' as an abstract noun was not recorded in English until 1875 (OED, 2004; Pope, 2005, 1; Weiner, 2000, 89). In the beginning, creation had been the prerogative of the divine, but by the 18<sup>th</sup> century creative imagination was beginning to be discussed as part of debates about the social and political significance of individual freedom (Albert & Runco, 1999; Pope, 2005; Williams, 1988). During this period the category of Fine Arts emerged as a strategic accommodation to new publics, themselves the unintended consequences of the financial revolutions that established capitalism. The development of Fine Arts was part of these 18th century shifts in definition of public, private, genius, individual, citizen and freedom.

From the early 20th century the 'psy disciplines' (Rose, 1996c) began to theorise and represent creativity as a function of behaviour, of personality or of cognitive processes. Psychoanalytic, pragmatic, psychometric, cognitive, and social-personality approaches (Sternberg & Lubart, 1999, 12) began to make up a certain ideal type of person and as the 20th century progressed, creativeness became part of a universal birthright for every healthy, self-actualising, human being (Maslow, 1963). Only since the late 1990s had it become possible to speak about creativity in precisely this manner; an "employment-oriented and economy-based view" of creativity as it was described in one of the latest definitive volumes, Creativity: Theory, History, Practice (Pope, 2005, 27). This new way of thinking was exemplified by The Creative Age: Knowledge and Skills for the New

Economy. The Creative Age provided a scheme for reforms to education policy. Seltzer & Bentley's, (1999) argument was that "in contrast to more traditional notions of what it means to be creative... creativity is not an individual characteristic or innate talent."

#### 2.4 What is Creativity?

In the opinion of some researchers, creativity is not a gift. It is not the signature of God upon human. Creativity cannot be restricted only by the artistic activity; it takes place almost in all human activities such as all arts, science and people's every day practice. John Dewey defines creativity as the "Articulation of inner experiences in response to outer stimuli" (1992). In that sense, gathered knowledge (data) and imaginative thinking of a person must be in perfect balance and unity for production.

Seltzer and Bentley, (1999) also added that, creativity is "the application of knowledge and skills in new ways to achieve a valued goal". In this formulation, creativity is not an innate endowment, a once-and-for-all fixed entity; it is incremental and malleable and can be learned. Thus, in order "to realize the creative potential of all individuals and to boost competitiveness in the knowledge economy, we must make radical changes to the education system "(Pope, 2005, 27; Seltzer and Bentley, 1999).

Jirousek (1995) also said that, creativity is a quality that is highly valued, but not always well understood. Those who have studied and written about it stress the importance of some of flexibility of mind. Studies have shown that creative individuals are more spontaneous, expressive, and less controlled or inhibited. Although open-minded, they also tend to trust their own judgments and ideas; they are daring, not afraid of trying something new. Thus creativity is the ability to see connections and relationships where others have not. The ability to think in intuitive, non-verbal, and visual terms has been

shown to enhance creativity in all disciplines. It has also been shown that the creative process is very similar across all fields.

A common misunderstanding equates creativity with originality. In point of fact, there are very few absolutely original ideas. Most of what seems to be new is simply a bringing together of previously existing concepts in a new way. Psychologist and author Arthur Koestler referred to this merging of apparently unrelated ideas as dissociations. The fact that creative thinking is based on knowledge of previous work in one's field is the justification for teaching the history and foundations of a given field as a resource for future research and creative work. It is possible to develop one's ability to think intuitively and creatively (Jirousek, 1995).

Rather than limiting creativity to the acquisition of knowledge in arts subjects, the 'creative self' needs to be developed across curricula (Joubert, 2001) in order to produce motivated 'can do' individuals, promote social and cultural development through collaborative practices and teamwork, and encourage an entrepreneurial culture (Craft, 2001a, 28).

Teaching creative apparel design is a subject extensively covered in proceedings for the International Textile and Apparel Association Annual meetings. Murray (2005) completed a qualitative study exploring the creative process experienced by fashion design students and found that the students' creative process paralleled the steps defined in literature that describes the creative process. Rudd and Riley (2004) described a course in which they focused on a variety of fashion illustration techniques to generate creative design ideas.

Similarly, Lee (2005) explained a process of generating creative design ideas through integrating a systematic and holistic approach to collection development. Kim & Beck

(2003) worked with students who chose to adopt the Lamb & Kallal (1994) apparel design framework to follow while creating experimental fashion designs. Student evaluation of the process revealed support of the framework as an effective guide in the creative development of fashion design ideas.

#### 2.4.1 The Creative Process

Creativity is only the ability to perform creative process. Problem solving is the common aspect in creative process and also it is the very basics of design.

Creative process contains certain phases. The first phase can be described as data gathering. In any kind of creative activity, the person who deals with a problem must collect information and facts about the current problem. This phase can also be called as preparation. By the help of the knowledge that has been collected, the subject can analyze the problem from different points of view.

The second phase is called subconscious organization. This phase is active in all of us but most of the people are not aware of it. It is not an active phase in other words one must not strive for it to happen. It happens while the subject is not concentrating in the problem, but while doing things other than that. For example while watching television or sleeping.

The third phase can be called as illumination; it can be described as the sudden appearance of the solution, or recognition of the solution. The forth and the last phase is verification, it is detailing the solution by comparison and seeing if it carries all the requirements of the problem.

Within all these phases a strong internal motivation is needed in order to start and perform this process. Of course there must be degree of satisfaction derived from this performance and from the final product or result.

The satisfaction can be different for each person. Internal motivation, in its very basics can be described as the satisfaction derived from success. In psycho-physiological terms, creative process can be understood as production of something new from existing knowledge, experience, memory, observation, everything that the brain stored up to that moment (Erlbaum, 1992).

# 2.4.2. Creative Process in Design

Visual awareness and data gathering are necessary tools for creativity but they are not sufficient for all the times. These notions are necessary for problem solving and necessary for us to make sense of the world that we live in and make sense of the experiences that we had. But we also need to enhance and encourage creativity (Erlbaum, 1992).

A suitable ground for fashion design students must be found for the act of creation. They must both learn to collect knowledge and to develop their level of creativity. It is a fact that human beings are endowed with different degrees of imaginative powers. Nobody is equal to another. But it is also a fact that every person can find a proper way to develop his/her talent. Creativity is a state of mind to be nurtured and exercised. Dealing with various concepts and ideas on a design field is the best way to enforce the creative activity of the average fashion design student.

Sketching, finding new compositions and alternatives including various concepts related to the current problem are direct ways leading to creative designs. In other words, the first possible design is never enough but one has to continue searching for other designs. Also focusing into one point of view must be eliminated. Such an act will only limit the imagination and prevent the student from looking at that problem from different viewpoints. In fact all kinds of limits upon student's imagination must be eliminated (Erlbaum, 1992).

According to Freudian theories, the motivating force of creativity is coming out of a person's need of filling his feeling of imperfection. Every person is building solutions to compensate their losses in their life. They often do it by recreating the lost object in another form. This action begins in the childhood where human being begins his creative activity by playing with toys.

#### 2.4.3 Fashion Design Process

The Creative Design course occupies a certain position in the Fashion Design Process, which to some extent, can be taken to represent what is covered under most courses in the Fashion Design and Textile programme. Researchers and designers have suggested versions of this process with some serving as blueprints for the production of different types of garments; for example, design process for knitwear (Eckert, 1997)

Burke (2011) presents the fashion design process in the form of a sequence of eight logical steps involving interrelated activities performed to generate a particular result. The steps are presented below:

**Step1. Design Brief:** It initiates and outlines the design project and its objectives, and marks the beginning of the fashion design process. According to Jing-Yun Fan et al (2011), the purpose of a project brief is to develop fashion designers' creativity to

respond to a particular set of requirements, the attainment of which should enable designers to measure their progress.

**Step 2. Research and Sourcing:** This entails trend and design research, market research, sourcing and selecting fabrics and colours: Primary and secondary sources. Eckert (1997) also stresses the importance of this stage noting that it defines the range of possibilities for designs within the context of fashion, and that the quality of designs depends, to a large extent, on the quality of their design research.

**Step 3. Design Development:** At this stage, design concepts and themes derived from design inspirations are developed into fashion sketches and 2D design presentations.

**Step 4. Prototype, Samples and Construction:** The 2D designs are translated into 3D realization- pattern making, draping and construction to obtain the initial samples of fashion products.

Step 5. The Final Collection: The prototypes are then refined to create a cohesive collection.

**Step 6. Promotion-Marketing, Branding and Sales:** The collection is introduced on market through promotional activities like fashion shows, trade fairs, marketing portfolio and sales.

**Step 7. Production:** Pre-production, production-manufacture, distribution to retail-merchandise in store.

**Step 8.The Business:** Sales analysis and sales results.

Generally, the Creative Design course encompasses the first three steps: the brief, research and design development, and in particular, the third. Under design development, students are expected to apply knowledge on elements and principles of design to design garments and accessories through sketching, illustrations, technical drawings or digital designs, among others (Burke, 2011).

Briefs are usually provided by the teacher and students select and develop their own version of design process for the task: develop a design for a garment or collection. The work is usually presented on platforms known as design boards (Burke, 2011), and mood/theme/concept board (Mazumder, 2011). There are also colour/fabric, styling and eventually, presentation boards.

The mood board/theme/ concept board tells the design story. It is an inspiration board for the designer (Mazumder 2011). Designers collect variety of photographic images or anything that sparks creativity and imagination as appropriate inspiration material. Concepts or themes related to inspirational source are selected. Whiles Bradley (2010) describes a design concept as the idea behind the design, Eckert (1997) explains themes as ideas tying together a range of garments in the collection to be designed and are expressed by sketches of garments, colour palettes and some topical images which keep the designer focused, throughout the development process, on the collection. A colour board is created separately or as part of the mood board. Colour/Fabric Board: (if colour is not incorporated in the mood board), is where the colours and fabrics in tune with the design themes are presented with colour and fabric swatches (Burke, 2011). The fabric and colour selection is also based on the season, and the look of the garment. Fabrics can be of different weaves, printed, woven or knitted depending on design themes (Mazumder 2011).

**Style Board:** Burke (2011) describes it as presenting in detail a selection of styles based on a specific category of garments and a 'cohesive collection': range of garments connected by a theme or target market. This board could also feature flats (working drawings-front and back), fashion illustrations and colour palettes depicting the print.

The collection: colour, fabrics, prints and silhouette will be inspired by the theme and the mood board.

Presentation Boards: this is more like a storyboard where the student designer organizes the research (inspirational) and design concepts to present a specific theme using pictures and objects such as presented on the preceding design boards (Burke, 2011). In other words, it presents the design effort so far, as in a story, chapter by chapter, to tell a clear cohesive visual story with such an attractive layout that would lead the viewer to appreciate the direction the design theme. To achieve this, the student requires a good level of mastery in combining the design elements and principles to work in harmony with the design concept. It is when this synergy is realized that his/her concept is translated into the design.

#### 2.5 Elements and Principles of Creative Design

The elements and principles of design are sometimes described as the "language" of art; the **elements** serve as the visual pieces, symbols, or structural components (e.g. color, line, shape and form, space, value, texture, pattern), whereas the **principles** are the organizational components (e.g., balance, repetition, emphasis, unity and rhythm contrast, harmony, proportion, gradation, scale) that guide artists to arrange expressive features into a structural whole or a composition in order to achieve certain effects with media.

Design is both a noun and a verb – it describes the thing created as well as the process of creating it. A design is created with elements – line, shape, color, value and texture – that are put together using principles – unity, variety, emphasis, balance and scale (Tersiisky, 2004).

Although design can be divided into elements and principles, it is only when these elements and principles work together to form a whole that a design is considered successful.

Design, like writing, involves problem solving, planning and organizing. In verbal communication, we choose which words to use and how to put them together to best communicate our thoughts and ideas. In visual communication we choose which elements to use and how to put them together to best communicate our thoughts and ideas (Tersiisky, 2004).

#### 2.5.1 Elements of Design

The elements of design are the pieces, the components, the building blocks of design. Elements are like the ingredients in a recipe (Faimon & Weigand, 2004), the parts of a machine (Evans & Thomas, 2004) or the notes in music. On their own, these elements may do little, but put together skillfully, they create a cake, a car or a concerto (Tersiisky, 2004). Using the work of Horace Pippin (Roses with Red Chair-1940), Gilbert (1992) describes elements of design or visual elements as she called them, as "the ingredients an artist has available in making any work of art", adding that time and motion are also included in the list. She also noted that any form of art derives its character from these elements and the way they are organized. With a similar definition, Davies (1996) noted that designers (and Fashion Design students as potential professionals in the industry) need deeper understanding of these elements, their qualities or aspects, variations and concepts; they must appreciate the potentials and limitations of each element. The author further develops a third-order hierarchy which shows the elements as first order, aspects

as second order and the variations as third order. For instance, the element line has an aspect direction which in turn has variations of horizontal, vertical and diagonal.

The elements of design include line, shape, form, space, color, value and texture. Put together skillfully, they create effective visual communication.

#### 2.5.2 Line

In fashion design, a line may refer to the edge or the outline of a garment which can lead the eye and can also be use in apparel to reinforce the theme of a garment (Sharon, 1989). A line is also described as a mark that is longer than it is wide (Brainard, 1998), an infinite number of points (Lauer & Pentak, 1995) and or the moving path of a point (Evans & Thomas, 2004). A line can have different qualities – it can be curved or straight, thin or thick, loose or precise, delicate or bold, expressive or controlled. The qualities of a line will evoke different feelings; a curved line feels natural and organic, while a straight line feels manmade and mechanical. A delicate line feels soft and feminine, while a bold line feels strong and masculine (Tersiisky, 2004).

A horizontal line reminds us of a calm horizon or a person lying down; it implies quiet and rest. A vertical line makes us think of a skyscraper or a person standing straight and tall; it feels strong and aspiring. A vertical line contains potential for activity, and so creates a more energetic feeling than a horizontal line. A diagonal line is like a bolt of lightning or a person leaning forward poised to run; it suggests energy and movement (Lauer & Pentak, 1995; Bevlin, 1994). Diagonal lines are the most dynamic (Lauer & Pentak, 1995).

Not all lines are actual lines; sometimes we perceive lines that are not really there. Implied lines are created by a series of points, such as a dotted line or a group of people standing in a row (Lauer and Pentak, 1995). Psychic lines are those which, though not real at all, are lines we feel; for example when a figure's eyes are looking in a specific direction (Lauer and Pentak, 1995) or when a line or shape is pointing at something (Stewart, 2002).

According to Gilbert (1992), a line has functions in works of art and these include outline and form, movement and emphasis, pattern and texture, and shading and modeling. In Ellsworth Kelly's work (Apples-1949) it is referred to as outline drawing, thin lines were used to describe the shape of apples without shading, interior detail or background, just the outlines. With a few pieces of wire twisted together, Alexander Calder's work (Cow-1929) uses line to create a form that is three-dimensional, with "the wire drawing lines in space".

Gilbert uses Alberto Giacometti's work (Nose) to illustrate movement as a function of line. Here, the sharp lines of the exaggeratingly long nose (projecting outside a cage housing the head and torso) of a Pinocchio figure diverts viewers' focus from the face and compels their gaze to follow the nose.

#### **2.5.3** Shape

Gilbert (1992) defines shape as a two-dimensional area with identifiable boundaries which may be created by lines, colour areas, contrasting textures or by a combination of these. A shape is described as an area created by an enclosing line (Arntson, 1998). Similarly, (Stewart, 2002), described it as a two-dimensional object created by color, value or texture or an area created by surrounding shapes with height and width but no depth. Gilbert (1992) and Stewart (2002) both describe mass or volume as a three-dimensional shape (or perceived as such); it has height, width and at least the appearance

of depth. Straight edges and angular corners create rectilinear shapes. Curves and rounded forms create curvilinear shapes (Lauer & Pentak, 1995; Stewart, 2002).

Geometric shapes such as circles, squares, triangles and rectangles (Zelanski & Fishe1996) are crisp, precise and mathematical with straight edges and consistent curves (Stewart, 2002). Natural, or organic, shapes are found in nature (Brainard, 1998) such as rose flowers, tree branches or bamboo leaves. Abstract, or stylized, shapes are natural shapes that have been altered or simplified to reflect the essence, rather than the actual representation, of an object (Bevlin, 1994). Non-objective, or nonrepresentational, shapes are created with no reference to a subject (Stewart, 2002); they represent nothing other than the pure shapes we see (Lauer & Pentak, 1995).

#### 2.5.4 Form

Davies (1996) defines form as a three-dimensional area enclosed by a surface which portrays its interior as volume and mass if it is hollow and solid respectively whiles Gilbert (1992) describes it as the way a work of art looks or is constituted; its composition, or structure or style.

Form may also be described as any three-dimensional object. Form can be measured, from top to bottom and vice versa (height/depth), and side to side (width). Form is also defined by light and dark. It can be defined by the presence of shadows on surfaces or faces of an object. There are two types of form, geometric (man-made) and natural (organic form). Form may be created by the combining of two or more shapes. It may be enhanced by tone, texture and color. It can be illustrated or constructed.

For the purposes of fashion (clothing), the human form is seen as a solid mass and structural clothing parts are hollow forms whose interior volumes complement the exterior contours of the human body. Together, shape and form provide artists and fashion designers a potential to project their visual illusions and psychological moods. Arnheim (1974) observed that the designer's perception of shape and form influence how he/she uses and relate to them. In his definition which applies to either shape or form, Arnheim defined shape as the external "manifestation of the inner forces that produced the object". He also observes that the distinctive feature of shape is not its contour but its structure; it is the skeletal axis which determines the contour since, for instance, the same contours may be perceived differently when the skeletal axis changes direction or position (as in perceiving a parallelogram as a diamond).

Generally, a garment silhouette derives its main contours from the body structure.

#### **2.5.5 Space**

According to Davies (1996), space is a foundational element because that is what a designer begins with; the blank primary raw material of visual design, that, designers, using other elements, manipulate to compose a work of art or design. It is generally considered to be the area seen between the shapes. On her part, Gilbert (1992) asserts that contrary to generic perception of space as empty, void, it is actually not; describing it as a dynamic visual element that interacts with other elements such as lines, shapes and textures to define them. In fashion design, busy space in clothing becomes distractive and boring to view where an interesting space may go unnoticed or appear monotonous. Space may be two-dimensional or three-dimensional. Two-dimensional space, notes Gilbert (1992), refers to those having only height and width, with no actual depth. Examples are flat arts such as painting, drawing or print. Three-dimensional space on the other hand, refers to all forms with mass. In design, space is concerned with the area

deep within the moment of designated design; the area the design will take place on. For a two-dimensional design space concerns creating the illusion of a third dimension on a flat surface (Saw, 2000). One major method of controlling the illusion of space is overlapping. It is the effect where objects appear to be on top of each other. This illusion makes the top element look closer to the observer. There is no way to determine the depth of the space, only the order of closeness. It is common knowledge that the concept and unique role of space is hardly appreciated by most fashion designers.

Davis (1996) attributes the reason why space is often ignored in analysis of clothing design largely to wrong perspective which draws attention to enclosed space by naming it 'shape'. The confusion is encouraged by the fact that while shapes usually denote objects with meanings such as flower or sleeve, which focus attention on the enclosed space (thereby giving it a name), not assigning any name to the unenclosed space (because is consigned to non-existence) makes it easy to ignore. The complementary relationship between space and shape as well as the distinction between them in a dress, if not properly taught and understood could compromise garment balance in the final product.

#### 2.5.6 Pattern

Pattern has two different meanings in fashion design. One suggests the surface motif and prints on the fabric, the other the dress making pattern which decides the shape and silhouette of the garment. Prints and motifs are discussed here.

Gilbert (1992) defines pattern as "any decorative, repetitive motif." A recognizable motif which is regularly repeated, noted Saw (2000), produces a pattern. Pattern requires repetition -in design as in life (a pattern of behavior). The more regular

the repetition, the stronger the pattern. The most noticeable patterns occur when the group is seen before the individuals - notice the organization first. ). Along with Saw, Gilbert agrees that all of the motifs in a pattern have surfaces, so there is always texture. But there is not always pattern -only when it is noticed.

Davis (1996) suggested that pattern is composed of line, space, shape and colour: it combines their physical and psychological effects to create its own impressions which may reinforce, modify or counter the effects of individual elements. This is achieved through the aspects of pattern: source, interpretation and interpretation

Davis further identifies sources of inspiration for pattern as nature, man-made objects, imagination and symbolism. A pattern may be inspired by more than one source, which may in turn lead to more than one interpretation: realistic, stylized, abstract or geometric. The motif is then arranged or distributed in any of six fashions: all-over, four-way, two-way, one-way, border or spaced, each creating a distinctive effect (Davis, 1996).

Pattern in fabric can be achieved through printing or weaving, and can be woven or non-woven. Printing and embroidery are some techniques that result in surface pattern. Visual effects of pattern enlarge, command attention, and emphasize or camouflage a figure.

#### 2.5.7 Color

Colour is that magnificent aura that envelops us with endless, subtle nuances, elating, depressing and comfort (Davis, 1996), and is a property of light (Lauer & Pentak, 1995). It is Visible when light is emitted or reflected and Determined by the wavelength of light (Bevlin, 1994). Colour creates the most visual impact when seen from a distance (Burke, 2011) and is the first thing that a customer notices about a garment. Colour can present

very different moods and feelings and it cost the manufacturer very little to change as new colour stimulates sales (Sharon, 1989).

Colour schemes, or colour harmonies, have been developed to help designers choose colours that work well together (Stewart, 2002). The colour wheel, a visual representation of the subtractive primary, secondary and tertiary colours, forms the basis for colour schemes. A monochromatic colour scheme involves variations, usually in value, of a single hue (Lauer & Pentak, 1995). Monochromatic schemes are highly unified, but may lack variety (Stewart, 2002). An analogous colour scheme uses adjacent colours on the colour wheel, as well as their tints and shades (Lauer & Pentak, 1995). Analogous colour schemes are also unified, but have more variety than monochromatic schemes (Stewart, 2002). A complementary colour scheme is created with colours that are opposite each other on the colour wheel (known as Complements) (Lauer & Pentak, 1995). When complements are mixed together (mixing yellow and purple paint, for example), they desaturate or neutralize each other, but when they are placed next to each other they increase each other's intensity (Stewart, 2002). A split complementary colour scheme uses the two colours adjacent to the colour's complement for balance (Lauer & Pentak, 1995). A split complementary scheme offers a wider range of possibilities than a complementary scheme (Stewart, 2002). A triadic colour scheme involves using three colours equally spaced on the colour wheel (Lauer & Pentak, 1995). Triadic colours schemes are lively (Lauer & Pentak, 1995) and can be used where a strong impact is needed (Stewart, 2002).

#### 2.5.8 Value

Value according to Zelanski & Fisher, (1996) is relative lightness or darkness of a colour. It is the contrast between light and dark which is used frequently to create effective illusions that disguise figure problem (Sharon, 1989).

Value contrast refers to the degree of variation between light and dark (Lauer & Pentak, 1995). The highest value contrast is obtained using just black and white (Brainard, 1998). The narrower the range of values, the lower the value contrast (Lauer & Pentak, 1995). When the range is limited to light values it is referred to as high key; a limited range of dark values is called low key (Lauer & Pentak, 1995).

Value is often used to add volume to a shape (Brainard, 1998); gradual shading on a circle will make it look like a sphere. Value is also used to create the illusion of space (atmospheric perspective); areas with high value contrast come forward while those with low value contrast recede into the distance (Lauer & Pentak, 1995). Value can add emphasis; areas of high contrast will stand out in areas of low contrast (Lauer & Pentak, 1995).

Value can evoke feelings or moods. Low value contrast creates a subtle, restrained effect that feels calm and quiet (Lauer & Pentak, 1995). High value contrast evokes drama and conflict (Lauer & Pentak, 1995). The light values of high key images convey the sense of happiness and lightness (Zelanski & Fisher, 1996), mid-range values evoke sadness and depression (Zelanski & Fisher, 1996), and the dark values of low key images create feelings of fear and mystery (Lauer & Pentak, 1995). In terms of visual weight, darker values feel heavier than lighter values (Stewart, 2002).

## **2.5.9 Texture**

The surface quality of an object is described as texture (Lauer & Pentak, 1995); roughness or smoothness (Brainard, 1998) or the sensation of a tactile surface (Zelanski & Fisher, 1996). Longman (1992) also defined texture as the surface appearance and feel of a fabric. It is the arrangement of thread during weaving or knotting that produces these characteristics.

Actual, or tactile, texture can actually be felt (Lauer & Pentak, 1995). In two-dimensional design, actual texture is in the feel of the canvas or the surface of the paper. Actual texture can also be created by the thickness of the paint (Lauer & Pentak, 1995) or through collage (Zelanski & Fisher, 1996). Visual textures can be created by reproducing the value and color patterns of actual textures (Lauer & Pentak, 1995); darks and lights can be used to suggest the furrows in bark (Zelanski & Fisher, 1996) or the three-dimensional roughness of a stone surface.

Visual texture can also be created by repeating marks or shapes (Stewart, 2002). Letters and words on a page create a visual texture (Zelanski & Fisher, 1996) and changing the size and spacing of the text changes the look and feel of the texture (Evans & Thomas, 2004). It is therefore very necessary that the designer must consider the subtle differences between fabrics and style them accordingly.

## 2.6 Principles of Design

The principles of design are guidelines used for putting elements together to create effective communication (Brainard, 1998). The elements are the "what" of a design and the principles are the "how" (Faimon & Weigand, 2004, p.25). Using the recipe metaphor - the elements are the ingredients and the principles are the directions.

The principles of design, perhaps even more than the elements, are difficult to separate from one another even for the sake of discussion, as it is only when they are working together that an effective design is created.

## **2.6.1 Unity**

The principle of unity is perhaps the most important of the design principles, yet it is often the most difficult to understand (Brainard, 1998). Unity is the fundamental principle of design and it is supported by all the other principles (Evans & Thomas, 2004). If a design is not unified, it cannot be considered successful (Bevlin, 1994). Unity therefore is the element of design that put together other element to produce a successful visual effect (Sharon, 1989).

Unity creates an integrated image (Lauer & Pentak, 1995) in which all the elements are working together to support the design as a whole (Brainard, 1998). A unified design is greater than the sum of its parts; the design is seen as a whole first, before the individual elements are noticed (Lauer & Pentak, 1995). Unity can be compared to harmony (Lauer & Pentak, 1995), integrity (Bevlin, 1994, p.126) or wholeness (Brainard, 1998). Unity is based on the gestalt theory of visual perception (Lauer & Pentak, 1995), which states that the eye of the viewer seeks a gestalt or unified whole (Arntson, 1998).

This means that the viewer is actually looking for a connection between the elements, for some sort of organization in the design (Lauer & Pentak, 1995). A gestalt is created because the mind simplifies and organizes information. It does this by grouping elements together to create new wholes. Understanding how the mind groups elements (by proximity, similarity, alignment and continuation) helps us understand how unity can be achieved.

**Proximity** is based on grouping by closeness (Lauer & Pentak, 1995); the closer elements are to each other, the more likely we will see them as a group (Arntson, 1998). Proximity is one of the easiest ways to achieve unity (Lauer & Pentak, 1995).

Repetition: Repetition is the use of one more than once, arranged in different places (Davis, 1996). It is based on grouping by similarity (Arntson, 1998); elements that are similar visually are perceived to be related. Any element can be repeated – line, shape, color, value or texture – as well other things such as direction, angle (Lauer & Pentak, 1995) or size (Brainard, 1998). Repetition helps unify a design by creating similar elements and is one of the most effective ways to unify a design. In fashion design, forms, sleeves collars, skirt halves among other sections repeat horizontally while periodic repeats of patterns and its use in several garment parts could draw the eye vertically or diagonally (Davis, 1996).

Alignment consists of arranging elements so that their edges are lined up (Lauer & Pentak, 1995). The common alignment allows the eye to group those elements together. A grid is often used to create unity through alignment, not just in a single design but also between related designs (the pages of a magazine or book, for example) (Lauer & Pentak, 1995). Continuation means that something (a line, an edge, a curve, a direction) continues from one element to another (Lauer & Pentak, 1995). The viewer's eye will follow the continuing line or edge smoothly from one element to other and the mind will group the elements because of this connection (Arntson, 1998).

#### 2.6.2 Emphasis

Emphasis creates a focal point in a design (Lauer & Pentak, 1995); it is how we bring attention to what is most important (Stewart, 2002). Emphasis is what catches the eye

and makes the viewer stop and look at the image (Bevlin, 1994). Without getting the viewer to look at the image, communication cannot occur. It creates a center of interest by focusing on the viewer's attention on a specific area on a garment (Sharon, 1989). Emphasis can be created by contrast. An element in contrast with something else is more easily seen and understood (Faimon & Weigand, 2004); something different attracts the eye. Contrast can also be created by contrasting orientation in space (horizontal, vertical, diagonal), style (a geometric shape in an otherwise naturalistic image) and size (Lauer & Pentak, 1995).

Emphasis can also be created by placement. Implied lines all directed toward the same place can create a focal point there. Isolating an element from the others by its position in space will also create emphasis (Lauer & Pentak, 1995). An important thing to remember about emphasis is that if everything is emphasized (all text is large and bold, all images are animated or flashing, everything is in bright colors) then nothing will stand out, nothing will be emphasized, nothing will grab the viewer's attention (Stewart, 2002).

#### 2.6.3 Balance

Balance is the equal distribution of visual weight in a design. Visual balance occurs around a vertical axis; when elements are not balanced around a vertical axis, the effect is disturbing and makes us uncomfortable (Faimon & Weigand, 2004).

Symmetrical, or formal balance, is also known as bilateral symmetry. It is created by repeating the reverse of a design on the opposite side of the vertical axis; each side, in essence, becomes the mirror image of the other (Lauer & Pentak, 1995).

Symmetrical balance in fashion design places style lines and details evenly on the garment; Symmetrical balance is considered formal, ordered, stable and quiet. It can also

be boring. Symmetrical balance is often used in architecture (Burke, 2011 & (Bevlin 1994)).

While symmetry achieves balance through repetition, asymmetry achieves balance through contrast (Arntson, 1998). Asymmetrical, or informal balance, involves different elements that have equal visual weight (Lauer & Pentak, 1995); the weight is equal but the elements are not identical (Brainard, 1998).

## 2.6.4 Proportion

Proportion or scale is the relationship of various spaces to the whole shape. This refers to the size of one part of a design in relationship to the rest, a relationship between divisions of space (Longman, 1992). Designers modify proportion to achieve different ideals of beauty. Proportion is simply the pleasing interrelationship of the size of all parts of the garment. When conceiving a style, the designer must consider how the silhouette is to be divided with lines of construction or detail (Sharon, 1989 & Frings, 2008). Traditionally, proportion deals mainly with relationships of line, shape, or areas. However, in clothing these areas contain texture, colour, or patterns in varying or proportionate amount; so every element may be involved (Davies, 1996). Generally, unequal proportion is more interesting than equal proportion. Many mathematical formulas have been proposed as guidelines, but the best results come from practices in observing and analyzing good designs (Frings, 2008). Davies (1996) in her book also said mathematical formulas can guide proportion, but the most pleasing ones seems slightly off mathematical precision. She said equal divisions are usually least interesting; an extremely unequal division invites little comparison. The most pleasing proportion

seems nears 3:5 ratios, which is close to the "golden mean" in which smaller part is to the larger and the larger to the whole.

## **2.6.5 Rhythm**

Rhythm is the feeling of organized motion which may range from a smooth flow to a stiff march. Rhythm is based on repetition and involves the repeated use of line, detail, trims, colour, and patterns. Mazumder (2011) also says that, Rhythm is a sense of movement and is necessary to create interest in a design and carry out the central theme. Rhythm can be achieved by the repetition of lines, shapes and colour to get direction. (Davies, 1996; Burke, 2011).

As a directional principle, rhythm emphasizes the direction of its movement on the body. Psychologically, it can conjure versatile moods. It applies to line, space, shape and patterns and can use all the other linear principles as well as contrast. It contributes to emphasis, balance, proportion and unity in both structural and decorative applications (Davies, 1996).

A successful design is achieved when the design elements and principles come together to produce a cohesive look, visually well presented with the right amount of creativity, innovation and style, with perhaps a new twist (Burke, 2011)

As a designer, once you appreciate the use of and relationship of design element and design principles, you will start to see evidence of these in every garment and in every designer collection. This should help you design anything from the simplest of products to an entire collection.

### 2.7 Student's Attitude towards Creative Design and Working Drawing

Fashion Design as a science of art is one of the pivots in the Ghanaian polytechnics curriculum and, students' success in the programme invariably depend on mastery in, among other courses, creative design and working drawing. The Department of Fashion Design and Textiles of Ho Polytechnic runs Advanced Fashion 1 and 2 programmes which are non-tertiary alongside the traditional Higher National Diploma (HND). Plans are afoot to mount a Bachelor of Technology (BTech) Fashion Design and Textile programme. Among other requirements for graduation, each student is expected to design, produce and mount garments with accessories in year 2 and year 3, for both Advanced Fashion and HND programmes respectively. It is mostly during these periods that the reality of students' challenges with the course is felt by lecturers supervising their projects works.

Black and Cloud (2009) suggested, among other things, that current trends in the industry demand of fashion designers to enhance and advance their design and creative skills as dressmakers. Kozar and Hiller Connell (2014) also maintain that there are concerns regarding fashion designers' professional development relative to prevailing trends in apparel production.

The study of fashion involves pursuit of truth, a process that instills diligent artistic work and creativity in learners. Fashion learning develops the creativity habits in students, which are transferable to other areas in life. Such habits involve non-reliance on superstition, use of critical thinking and respect for other people opinions.

Deboer (1987) points out that students' achievement is influenced by favourable attitudes towards oneself as well as the subject. A student with positive self-concept of ability spends more time and energy in the subject thus gaining mastery of subject resulting in

success. A study on the attitudes of the students towards Mathematics has shown that achievement in Mathematics, or any other subject, is determined by one's attitude towards the subject rather than one's attitudes being determined by one's achievement in the subject (Maritim, 1979).

The theoretical framework based on Ajzen and Fishbein's (1975) theory of reasoned action explains that the beliefs represent the information that is known by an individual about the subject. Thus an individual's attitude towards any subject is a function of that person's beliefs about that object as well as the implicit evaluative responses associated with those beliefs. It could therefore be argued that beliefs affect attitudes and these attitudes affect the intentions and behaviours. The enhancement of positive self-concept of ability of a student in creative design and working drawing will possibly in turn enhance the students' performance by fostering development of favourable attitudes towards the art subject. Again, Deboer (1987) points out that a student with positive self-concept of ability in a subject has a higher probability of developing favourable attitudes towards that subject, a necessary condition for success in that area. Deboer further argues that as a result of this success, the student is reinforced further to continue performing well in the subject, possibly developing stronger favourable attitudes towards the subject, resulting in a vicious cycle.

Mwamwenda (1995) opines that a person's self-concept is a guide to their personality in terms of his or her own feelings, attitudes, psychological health and the way he or she is likely to interact with others in and outside his or her environment. Mwamwenda also agrees that a student with a positive self-concept stands a better chance of performing better than a student who little or no confidence in his/her ability. Thus it can be argued that enhancement of positive self-concept of ability of a student in art will possibly

enhance the students performance by fostering development of favourable attitudes towards creative design and working drawing. However, Mwamwenda notes, care should be taken when interpreting results of a relationship between achievement and attitudes. This is because low achievement does not necessarily mean the students have unfavourable attitudes, towards science or any other subject for that matter.

Although research has further shown that there is a positive correlation between attitudes and achievement; however, neither attitudes nor achievement is dependent on the other; rather they interact with each other in a complex and unpredictable way (Ajzen & Fishbein, 1975). Factors that influence students' attitudes towards a subject vary from one subject and or place to another. Furthermore, there are also other stronger predictor variables outside the school, which influence students' attitude towards a subject. These include parental influence and beliefs from ones culture (Muya, 2000). This may occur, for instance when a parent or guardian directly or indirectly compels the ward to choose a particular programme of study for family prestige, succeed member in a family business or some other consideration. Another study by Kiragu (1988), on factors affecting achievement in Mathematics at secondary school level in Kenya, has established that teachers' qualification, quality of textbooks, frequency of marking and interest among students are significant.

However, a critique by Kiragu (1988) on a similar study conducted earlier by Kathuri and Pals (1993) asserts that the significant relationship between students' attitudes towards a subject and academic achievement is a function of their personal attitudes rather than external factors, which may influence them. Hence the area pertaining to attitudes towards creativity and working drawing needs more research since students' achievement has been observed to be low.

A study was recently conducted by Obinnim and Pongo (2015) on the application of aspects of creative design and working drawing, specifically, the appropriate use of elements and principles of design for garment construction. The study was necessitated by the observation that dressmakers and tailors in the Ho municipality develop and construct garments with concentration on the measurements to fit (not too tight, not too loose) the customer, to the neglect of the combination and effectual use of the elements and principles of design in the process. The result of this challenge was that garments produced by the dressmakers turned to show either over elaborate, avoidance or misuse of the elements and principles of design, a situation the researchers wondered whether was deliberate or precipitated by insufficient grasp of the concept at school.

The study discovered, among other things that, out of 100 respondents, a total of 82% had secondary/technical/vocational and tertiary education- levels at which the research noted, respondents should be able to apply the knowledge of the elements and principles of design in the industry. However, although 84% agreed the correct application of the concept in garment development (or design) and production was essential, the percentages of respondents who faced challenges applying both elements and principles, only elements and only principles of design, were 71%, 94% and 88% respectively. The indication is that one cannot ignore the fact that these challenges could be a culmination of difficulties some of the respondents encountered during training in school.

The purpose of this study is to, among other things, unravel the challenges students face with the Creative Design and Working Drawing course; challenges the researcher, in over four years of handling the course at the Advanced 1 and 2 levels (Non-Tertiary) and at the HND level as a teaching assistant, has observed exist.

### 2.8 Teacher Quantity: Its Effect in Teaching Creative Design and Working Drawing

The entry and exit of teachers into and out of the profession has been characterized as a "revolving door." Ingersoll (2001) argues that this situation is not a result of shortages of teachers or teacher retirements, but rather teacher earnings, defined as departure of teachers from their teaching jobs. Research by Johnson and Birkeland (2003) in the USA indicate that the current teaching force would lose almost half of its professionals in the following few years and one in five new teachers will not remain in teaching long enough to reach their fourth year.

Two important factors which influence teacher turnover are teacher attrition (leaving the profession) and teacher migration (moving from one school to another) (Johnson et al., 2005). And it expected that when schools report a shortage of Art and science teachers, the cause could often be traced both of factors. Ingersoll (2006b) observed that in USA for instance, schools struggle to find replacements for mathematics and science teachers with annual turnover rates for mathematics and science teachers at about 16 percent and 15 percent respectively, compared to 9 percent for social studies and 12 percent for English. A closer examination of turnover for these teachers found that reasons for leaving teaching included moving to other jobs (28%) and retiring (11%). In an earlier research, Ingersoll (2006a) observed that while 40 percent of mathematics and science teachers who leave do so because of dissatisfaction, only 29 percent of all teachers in the general population report leaving teaching because of dissatisfaction with, among other factors, poor salary, and of relevance to this study, poor student motivation, and student discipline problems. The solution, the research concluded, does not lie in the recruitment of more and more teachers but rather educational institutions must design induction and retention plans aimed at creating and or improving school working/learning conditions.

Research on teacher induction shows that when a newly recruited teacher undergoes a full induction experience which include attaching him/her to a mentor in the same subject field for given period, institutional and faculty or departmental orientation seminars with other new teachers, not overloading the new teacher with courses, providing a laboratory/studio and other teaching and learning materials for practical sessions (as is supposed to be in the case of creative design and working drawing), there is a statistically significant impact on the retention of that teacher. However, the study found among others that only one percent of new teachers are given this much needed foundational support (Smith & Ingersoll, 2004). High teacher turnover in many a subject area, including fashion design may come at some cost. Studies have shown that teacher turnover has an effect on student performance (Rivkin et al., 2005). It has also been observed that the highest turnover rates are in the poorest schools where mathematics and science teachers are needed most (Neild, Useem, Travers, & Lesnick, 2003). While there are financial costs to polytechnics in hiring, induction, and professional development (Texas Center for Educational Research, 2000) it is justified by teachers' strong professional/attitudinal disposition.

### **CHAPTER THREE**

#### METHODOLOGY

#### 3.1 Overview

This chapter describes the form of research design used, population of the study and sample size determination as well as sampling techniques and data collecting instruments, administration of instruments, primary and secondary sources of data and data collection procedures. This chapter also describes how the primary data collected were analyzed using the various tools selected.

## 3.2 Research design

The choice of a research approach/design depends on factors such as the level of control the researcher has on the phenomenon to be studied, the focus of the study (whether contemporary, historical, etc.), the purpose of the study, the time available for the study and the type of data needed. Having considered the foregoing, the survey design methodology under qualitative approach was adopted to collect information. The survey design was used because the researcher considered it as the most appropriate design for the study. This afforded the researcher the opportunity to gather information from staff and students of the Ho Polytechnic on the topic.

## 3.3 Population

Population in research is regarded as a group or target group. According to Busha and Harter (1980), population is "...any set of persons or objects that possessed at least one common characteristics". Fraenkel and Wallen (2000) explain population as a group to which the results of the study are intended to apply. An important step in research is the means of selecting the sample of individuals who will participate (be observed or questioned) in the process of the study. Therefore, lecturers and students of the Department of Fashion Design and Textiles who are engaged in the teaching and learning of creative design and working drawing in Ho Polytechnic were targeted as the population for the study.

#### 3.4 Sampling

The simple random sampling method was used in sampling out the various subjects.

These comprised members from the various levels and include staffs, tertiary and the non-tertiary students who are studying in the Polytechnic. The simple random sampling

was used because it enabled the researcher to select a small proportion of the population for observation and analysis with each subject having equal chance of being selected (Best and Kahn, 1998). In this case, 6 staffs, 122 tertiary and non-tertiary students at various levels were selected for the research. These groups were chosen because they would provide relevant information about the usefulness, effectiveness and the challenges of the teaching and learning of creative design and working drawing from a trainee, trainer points of view respectively.

#### 3.5 Data Collection Instruments

The major data collecting tools were observation and questionnaire.

### 3.5.1 Observation

According to Leedy (2005) and Best (1981), certain kinds of information can be acquired best by means of direct examination by the researcher. Observation as a research technique must be logical, directed towards specific purpose, carefully focused and recorded in detail. The observer must identify just what to look for and also be able to differentiate between the significant aspects of the condition and factors that have little or no significance to the investigation. In some situations, the researcher gathered data by observing the subjects as they performed practical exercises in drawing and sketches. She adopted the observation technique because it enabled her to take note of certain details of events and behaviours of the subjects.

### 3.5.2 Questionnaire

Best and Kahn (1998) define questionnaire as a set of written questions designed to elicit information. This means that a questionnaire must contain a planned and organised series of questions that are sent to the population samples. The advantage of using the

questionnaire, among others, is that it enables the researcher to source relevant information that cannot be obtained through direct personal conversation with the subjects while the disadvantageous aspect of the questionnaire is that it can be abused in the sense that it can be poorly administered. To avoid this, however, the researcher administered the questionnaire personally with series of follow-up to collect the answered questionnaire for analysis. Best and Kahn (1998) explain further the various forms of questionnaires to include the structured, non-structured, closed form and open form. The structured contains definite concrete and directed questions, whereas non-structured may consist of partially completed questions or statements. "Restricted" or closed form type of questionnaires are those that call for short check responses. The open form, unrestricted type or open-ended type of questionnaire calls for free response in the respondent's own words.

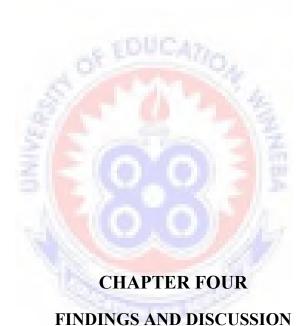
#### 3.6 Administration of the Questionnaire

Before the administration of the questionnaire, the researcher first sought the consent of the respondents by writing letter to the head of Department, Fashion Design and Textiles. This was to pave way for the researcher to get relevant information. So, the researcher administered the questionnaire personally by serving staff and students of the Department. She also made follow-ups to collect the answered questionnaires.

#### 3.7 Data Analysis

The raw data obtained from a research is useless unless it is transformed into information for the purpose of decision making (Emery and Couper, 2003). The data analysis involves reducing the raw data into a manageable size, developing summaries and applying statistical inferences. Consequently, the following steps were taken to analyze the data

for the study. The data was edited to detect and correct, possible errors and omissions that were likely to occur, to ensure consistency across respondents. The data was then coded to enable the respondents to be grouped into limited number of categories. Data collected were analysed and processed using Statistical Package for Social Sciences (SPSS). Tables, frequencies and percentages were used to make the necessary comparisons of the existing data.



#### THINDINGS AND DISCUSSION

## 4.1 Introduction

This chapter concentrates on the actual research findings and discusses data on the challenges facing polytechnic students in the study of creative design and drawing from the viewpoint of students and lecturers of Ho Polytechnic as was obtained from the field survey. Data gathered and presented includes the demographic and social characteristics; the extent to which attitudes of students constitute problems to the teaching of creative design and working drawing; extent to which teacher quality and quantity cause problems

to the teaching of creative design and working drawing; and to what extent instructional materials pose problems to the teaching and learning of creative design and working drawing.

In all, two sets of questionnaire were analysed; one set for students and the other questionnaire was for lecturers. The various data sets have been presented in tables. This chapter therefore, presents data gathered from the field survey which served as inputs for the analysis and responses to the research questions. It would also serve as input in the conclusions and recommendations of the study.

## 4.2: Demographic background of respondents

Samples were selected based on targeted units using a non-probability sampling method, specifically convenience sampling. This method ensured that representative samples of all the known elements of the population occurred in the sample. A sample size of one hundred and twenty-two (122) students and six (6) lecturers of the fashion design and textiles department out of the targeted population responded to the administered questionnaires. The break down is shown in Table 4.1 and Table 4.2 below.

Table 4.1: Gender Of Respondents (Students)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	12	9.8	9.8	9.8
	Female	110	90.2	90.2	100.0
	Total	122	100.0	100.0	

Source: field data; April 2016

Table 4.1 shows the gender distribution of respondents. Out of the total number of one hundred and twenty-two (122) students sampled, twelve (12) of the respondents were male whiles one hundred and ten (110) were female signifying 9.8% and 90.2%

respectively. The ratio is an indication that there are more females pursuing fashion design and textiles in the institution. This situation is because females dominate in this field (fashion) but now males are also participating in the study of the programme.

Table 4.2: Gender Of Respondents (Lecturers)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	4	66.7	66.7	66.7
	Female	2	33.3	33.3	100.0
	Total	6	100.0	100.0	

Source: field data; April 2016

From Table 4.2, the total respondents were six creative design and working drawing lecturers of the fashion department. As displayed succinctly in the Table, 66.7% of the lecturers were males whilst the remaining 33.3% were females. This suggests that there was male dominance with regards to gender distribution among the respondents. This finding does not support the view that male learners are to a large extent not aware of future careers in Fashion. Thus, most of them never aspire to become Fashion teachers [Kobia, 1991; Kaindi et al., 2016].

Table 4.3: Age of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	84	68.9	68.9	68.9
	26-35	29	23.8	23.8	92.6
	36-45	7	5.7	5.7	98.4
	Above 45	2	1.6	1.6	100.0
	Total	122	100.0	100.0	

Source: field data; April 2016

Data from Table 4.3 represent the age distribution of respondents. Respondents above forty-five years were two (1.6%); 18- 25yrs, eighty-four (68.9%); 26-35yrs, twenty nine

(23.8%); and 36 – 45yrs, seven (5.7%). The 18-25 and the 26-35 year groups cumulatively constituted 92.7% of the respondents as shown in Table 4.3.

Table 4.4: Lecturers Educational Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	M.A Fashion	1	16.7	16.7	16.7
	MSc. Clothing And Textiles	1	16.7	16.7	33.3
	BEd. Vocational/ Technical	1	16.7	16.7	50.0
	BA. Industrial Art (Textiles)	1	16.7	16.7	66.7
	Others	2	33.3	33.3	100.0
	Total	6	100.0	100.0	

Source: field data; April 2016

Results in Table 4.4 show that, one each out of the 6 respondents holds a Masters Degree in Fashion Design; MSc. Clothing and Textiles; MPhil Home Economics; BEd Vocational/ Technical; BA Industrial Art (Textiles); and two others hold PhD Fashion design and HND Fashion Design respectively. It is evident that a significant proportion of the respondents had masters' degrees which are the required qualification for appointment as lecturers to teach in the institution. The importance of teacher qualification and training to the output of learners has been amply emphasised. To this end, Pearce (2007:167) echoed the fact that "Teaching is increasingly complex work. It requires the highest standards of professional practice in order to perform it well. Teaching is the core profession, the key agent of change in today's knowledge society".

Table 4.5: Teaching Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 Years	1	16.7	16.7	16.7
	16 And Above	5	83.3	83.3	100.0
	Total	6	100.0	100.0	

Source: field data; April 2016

Table 4.5 shows that 1 (16.7%) of the respondents covered in the study have taught creative design and working drawing for at least 1-5 years. whilst 5 (83.3%) have been teaching for 16 years and above. This suggests that a greater proportion of the respondents have acquired a lot of experience in the teaching field.

# 4.3: The extent to which attitudes of students constitute problems to the teaching of creative design and working drawing

Table 4.6: Importance Of Working Drawing For Fashion Programme

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	119	97.5	97.5	97.5
	Somewhat Important	3	2.5	2.5	100.0
	Total	122	100.0	100.0	

Source: field data; April 2016

The Table above gives an analysis of respondents view on whether they consider working drawing as important for their programme of study. Very important which was mentioned by 97.5% of the respondents constituted the majority option, with just 2.5% indicating it to be somewhat important. The findings therefore reflect the importance of creative design and working drawing in the polytechnic fashion and textiles curriculum.

Table 4.7: Enjoy Participation In Practicals And Demonstrations

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	113	92.6	92.6	92.6
No	9	7.4	7.4	100.0
Total	122	100.0	100.0	

Source: field data; April 2016

Table 4.7, shows that only 9 (7.4%) of the respondents did not enjoy participation in practicals and demonstrations. 113 (92.6%) of the respondents however indicated that they do enjoy participation in practicals and demonstrations.

As per the response result in Table 4.7, it is noted that an overwhelming majority of respondents enjoy participating in creative design and working drawing activities such as doing practical's and demonstrations. From the additional comments made, students who did not enjoy participation in practicals and demonstrations said they felt bored in practicals/demonstrations class, they did not understand what to do in the practicals, and teachers scolding made the classes less enjoyable.

Table 4.8: Money Spent On Practical Projects Is a Waste

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	7.4	7.4	7.4
	No	113	92.6	92.6	100.0
	Total	122	100.0	100.0	

Source: field data; April 2016

Table 4.8 shows respondents perception regarding the issue of whether money spent on practical projects was a waste. Almost 93% (92.6%) of respondents indicated that it was not a waste. An insignificant number of the respondents, 7.4% considered it a waste of money.

Table 4.9: Multiple Responses by Students on Approach to the Learning of Creative

Design and Working Drawing (N=118)

		Frequency	Percent
a.	Volunteer to answer questions during class	36	30.51
b.	Punctual and attentive during classes	98	83.05
c.	Try to discuss subject with friends	57	48.31
d.	Always complete assignments and projects	78	66.10

e.	The subject is very difficult for me	19	16.10
----	--------------------------------------	----	-------

Source: field data; April 2016

Respondents were required by the study to indicate the various strategies that they use in learning creative design and working drawing. According to the study results displayed in Table 4.9 above, majority of the respondents (that is 83.05 percent) state "always punctual and attentive during classes". "Always complete my assignments and projects" also had a 66.1 percent representation. 48.31% also stated "Try hard to discuss creative design and working drawing with my friends"

Research shows that students have varying learning styles, and that no single teaching style accomplishes all students' needs (Downes, 2010)

The effectiveness of students in learning creative design and drawing is determined when students are able to teach other students that do not understand what the teacher has implemented in the course of teaching. More so, the ability of the student to carry out assignments correctly and submit as and when due enables the students possess desirable interest in teaching and learning the subject. For the students answering questions show that the teacher has done well in transferring the required knowledge to the students, thereby the students are encouraged to have more interest in learning creative design and drawing.

Table 4.10: Multiple Responses by Students on Attitudes among Students That Constitute a Setback to the Teaching and Learning of Creative Design and Working Drawing

		Frequency	Percent
a.	Study of subject considered as unimportant	34	30.63
b.	Do not listen attentively during lessons	27	24.32
c.	Do not regularly attend classes	47	42.34
d.	Consider money spent on projects as waste	34	30.63

e.	Do not complete assignment and projects	35	31.53
f.	Feel bored during classes	29	26.13
g.	Do not feel confident they will do well	68	61.26

Source: field data; April 2016

Respondents view on what attitudes among their colleagues constituted a setback to the learning of creative design are summarized in the Table above. This was a multiple item selection question. 61.26% of respondents stated that their colleagues do not feel confident they will score high marks. 42.34% of respondents said their colleagues do not regularly attend creative design and working drawing classes; 31.53% admitted their colleagues do not complete their creative design and working drawing assignments and projects and 26.13% believe students feel bored in creative design and working drawing class.

4.4: Extent to which teacher quality and quantity cause problems to the teaching of working design and drawing

Table 4.11: Do Teachers Qualification And Quality Of Teaching Affect Teaching Of Subject?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not At All	31	25.4	25.4	25.4
	Very Great Extent	74	60.7	60.7	86.1
	Small Extent	17	13.9	13.9	100.0
	Total	122	100.0	100.0	

Source: field data; April 2016

The opinion of respondents was sought on whether their subject teacher's qualification and quality of teaching affected the teaching of the subject. 74 respondents (60.7%)

indicated that it did to a very great extent, 17 (13.9%) thought it did to a small extent, whereas 31(25.4%) thought it did not affect it in any way.

Table 4.12: Satisfaction With Teachers Method Of Teaching

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	110	90.2	90.2	90.2
No	12	9.8	9.8	100.0
Total	122	100.0	100.0	

Source: field data; April 2016

Regarding respondents satisfaction with their creative design and working drawing teacher's method of teaching, the results revealed that 90.2% of the respondents expressed satisfaction with their creative design and working drawing teacher's method of teaching while 9.8% said they were not. These figures clearly indicate the amount of trust students have in their instructors, they believe they are qualified and thus can live up to expectation.

Table 4.13: Multiple Responses by Students on Factors Accounting for Satisfaction with Teacher's Method of Teaching

		Frequency	Percent
A	Have a good personal relationship with the subject	62	60.78
	teacher		
В	The subject teacher is highly motivating	58	56.86
С	The subject teacher plays a role in developing my	66	64.71
	thinking		
D	Working drawing teacher teaches in an enjoyable way	45	44.12

Source: field data; April 2016

When asked to indicate the factors accounting for satisfaction with teacher's method of teaching, 64.71% of the respondents said the subject teacher plays a role in developing their thinking while 60.78% reported they have a good personal relationship with the subject teacher; 58% said the subject teacher is highly motivating. Another 44.12% said their working drawing teacher teaches in an enjoyable way. The emphasis of this section

had been the student-teacher relationship as it affects the teaching and learning of creative design and working drawing. So far from the responses that respondents gave, the relationship had been good and it is hoped that would continue.

Table 4.14: Factors That May Affect the Practical Training of Students

S/	Item Statement	Strongly	Agree	Neutral	Disagree	Strongly
N		Agree %	%	%	%	Disagree
						%
	There are inadequate qualified and					
1	experienced creative design and	9.0	12.3	26.2	29.5	23.0
	working drawing teachers					
	The teachers spend almost all the					
2	class time on the lessons with no	9.0	8.2	22.1	38.5	22.1
	time left for practical work.		8			
3	The teachers mostly do mere	9.0	24.6	27.9	22.1	16.4
3	dictation of notes	9.0	24.0	27.9	22.1	10.4
	Teachers are not concerned that as		- 12			
4	many students as possible	6.6	3.3	24.6	41.0	24.6
	understand the lessons	100	90.5			
5	The teachers' scolding makes	7.4	6.6	21.2	26.0	27.0
3	learning difficult for us in the class	7.4	0.0	21.3	36.9	27.9
6	The teachers avoid questions from	1.6	2.2	12.1	42.6	20.2
6	students	1.6	3.3	13.1	42.6	39.3
	The creative design and working	-775				
7	drawing teachers are not	3.3	7.4	20.5	30.3	38.5
	innovative and resourceful					
L			ı	ı	ı	l

Source: field data; April 2016

A cursory look at Table 4.14 indicate that 7 statements/ propositions which have direct relation with actions teachers normally exhibit in the typical lesson delivery processes have been displayed. The very first statement was that 'There are inadequate qualified and experienced creative design and working drawing teachers'. Apart from the teaching and learning resources, it is logical that, there should be adequate supply of teachers towards this direction, 9% strongly agreed, 12.3% agreed whereas 29.5% disagreed and

23.0% strongly disagreed. The teachers spend almost all the class time on the lessons with no time left for practical work elicited the following responses: 9% strongly agreed, 8.2% agreed, 38.5% disagreed and 22.1% strongly disagreed. "The teachers mostly do mere dictation of notes" (9% strongly agreed, while 24.6% agreed with 22.1% disagreed and 16.4% strongly disagreed), "Teachers are not concerned that as many students as possible understand the lessons." (6.6% strongly agreed while 3.3% agreed, 41.0 disagreed with 24.6 % strongly disagreeing), "The teachers' scolding makes learning difficult for us in the class" (7.4% strongly agreed while 6.6% agreed, 36.9% disagreed with 27.9% strongly disagreeing), "The teachers avoid questions from students" (1.6% strongly agreed while 3.3% agreed, 42.6% disagreed with 39.3 % strongly disagreeing) and "The creative design and working drawing teachers are not innovative and resourceful" (3.3% strongly agreed while 7.4% agreed, 30.3% disagreed with 38.5% strongly disagreeing).

Table 4.15: Multiple Responses by Teachers on Methods Used In the Teaching of

Creative Design and Working Drawing

	100	Frequency	Percent	Valid Percent
valid	Lecture	3	50.00	50.00
	Demonstration	3	50.00	50.00
	Practical	4	66.67	66.67

Source: field data; April 2016

Respondents were required by the study to indicate the various Methods they use in the teaching of creative design and working drawing. Findings in Table 4.15 indicate that 3 lecturers make use of lecture method whiles three lecturers use demonstrations, in addition, 4 involve their students in practical lessons. This confirms the assertion made by Awuku, Baiden, Brese, and Ofosu (1991), that it is not always easy to define good

teaching method. Teachers may appear to be well organized and efficient but this in itself will not guarantee that pupils acquire knowledge.

Table 4.16: Teaching Method and Coverage Of Topics

T.	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somehow	4	66.7	66.7	66.7
	To A Greater Extent	2	33.3	33.3	100.0
	Total	6	100.0	100.0	

Source: field data; April 2016

In Table 4.16, respondents were asked to state whether the teaching method adopted permitted rapid coverage of topics. From the table it can be seen that, majority of the respondents as shown by 66% thought it was just enough while only 33.3% said it did to a great extent. This implied that most of the respondents admitted the teaching method employed was insufficient to adequately cover all the theory and practical subjects contained in the syllabus. Wong (2009) asserts that for students to achieve academically, there is no need to change the way an institution is organised, but there is need to change the way lecturers teach.

Table 4.17: Support For Professional Development Of Teachers

	_	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	3	50.0	50.0	50.0
	NO	3	50.0	50.0	100.0
	Total	6	100.0	100.0	2

Source: field data; April 2016

Respondents were asked if their school management supports the professional development courses of creative design and working drawing teachers e.g. through in service, seminars, fieldtrips e.t.c, the responses in Table 4.17 indicates that 3 of the respondents representing 50% are in agreement that the school management supports the

professional development courses of creative design and working drawing teachers. The remaining 50% on the other hand do not think that the school management supports the professional development courses of creative design and working drawing teachers. This means that whiles some lecturers have benefited from professional development courses others have not or are not aware of the existing opportunities. This situation where majority of the respondents have taught for more than sixteen (16) years with most respondents who have never attended any professional development courses seemed not to be good, since it may directly have negative impact on the way creative design and working drawing practical lessons are organised in the institution.



Table 4.18: Opinion About The Professional Development Courses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very useful	1	16.7	33.3	33.3
	Useful	2	33.3	66.7	100.0
	Total	3	50.0	100.0	
Missing	System	3	50.0		
Total		6	100.0		

Source: field data; April 2016

Respondents were required by the study to indicate the opinion about the usefulness of the professional development courses. According to the study results displayed in Table 4.18, majority of the respondents (that is 66.7%) said it was very useful. Those who said it was useful also had a 33 percent representation.

Table 4.19: Factors That May Militate Against the Teaching and Learning of Creative Design and Working Drawing

S/N	Item Statement	Strongly Agree %	Agree %	Neutral %	Disagree %	Strongly Disagree %
1.	Teacher absenteeism and lateness makes learning of the subject difficult.	40.0	40.0	-	1	20.0
2	Non -scoring status at the advanced fashion levels negatively affects the teaching and learning of the subject	33.33	33.33	33.33	ı	1
3.	Poor remuneration/lack of motivation makes creative design and working drawing unattractive	20.0	20.0	20.0	40.0	ı
4.	Large class size makes the teaching of creative design and working drawing difficult	20.0	80.0	-	ı	ı
5.	Lack of TLM(s) hinders the teaching and learning of the subject	40.0	40.0	20.0	-	-
6.	Lack of interest affects the teaching and learning of the subject	20.0	60.0	-	20.0	-

Source: field data; April 2016

The respondents also were asked to rank 6 factors according to their importance (Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree) as challenges that may militate against the teaching and learning of creative design and working drawing. The greatest difficulties faced by respondents concerned the "Large class size makes the teaching of creative design and working drawing difficult" (20% strongly agreed while 80% agreed), "Lack of TLM (s) hinders the teaching and learning of the subject" (40% strongly agreed, while 40% agreed with 20% being neutral), "Teacher absenteeism and lateness makes learning of the subject difficult." (40% strongly agreed or agreed with 20% strongly disagreeing), "Lack of interest affects the teaching and learning of the subject" (20% strongly agreed and 60% agreed with 20% disagreeing), and "Poor remuneration/lack of

motivation makes creative design and working drawing unattractive" (20% strongly agreed or agreed with 40% disagreeing).

# 4.5: The Extent to Which Instructional Materials Pose Problems to the Teaching and Learning of Creative Design and Working Drawing

Table 4.20: Having Practical's Frequently

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	95	77.9	77.9	77.9
No	27	22.1	22.1	100.0
Total	122	100.0	100.0	

Source: field data; April 2016

The survey data on whether students had creative design and working drawing practical's often as depicted in Table 4.20 revealed that a significant number (77.9%) of respondents agreed that they had creative design and working drawing practical's often whereas 22.1% indicated the opposite.

Table 4.21: Having A Laboratory For Practical's

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	73	59.8	59.8	59.8
No	49	40.2	40.2	100.0
Total	122	100.0	100.0	

Source: field data; April 2016

In Table 4.21, respondents were asked to state whether they had a laboratory for practical lesson. From the table it can be seen that, majority of the respondents as shown by 59.8% admitted they had a laboratory for practical lesson while 40.2% said that they did not have a laboratory for practical lesson. The existence of a laboratory for the department ought to give the students the opportunity to do more practical activities as has been

corroborated by the students' responses in the previous question as to whether they have practicals quite often.

Table 4.22: Adequacy Of Tools And Equipment In Laboratory

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid Y	es	24	19.7	19.7	19.7
N	o	98	80.3	80.3	100.0
To	otal	122	100.0	100.0	

Source: field data; April 2016

Table 4.22 summarizes the responses from respondent on their view concerning the adequacy of tools and equipment in the laboratory. 19.7% of respondents agreed that there were adequate tools and equipment in the laboratory, 80.3% did not agree that there were adequate tools and equipment in the laboratory. This is an indicator that the department experience difficulties in teaching and learning because of inadequate laboratory resources.

Table 4.23: Source Of Tools And Equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Borrow from friends	27	22.1	27.6	27.6
	Bring them from home	50	41.0	51.0	78.6
	Supplied by institution	9	7.4	9.2	87.8
	Share with friends	12	9.8	12.2	100.0
	Total	98	80.3	100.0	
Missing	System	24	19.7		
Total		122	100.0		

Source: field data; April 2016

The responses given to the questionnaire indicates that most students of the fashion department lacked the basic tools and materials for design and drawing. Tools and

materials such as pencils, charcoal, crayon, brushes, etc. were hard to come by. Out of the 98 students who responded to the question on how they get tools and equipment for their practicals as shown in Table 4.23 only nine (9.2%) said it was supplied by the institution. A great majority (51%) brought theirs from home. Twelve students (12.2%) and twenty seven (27.6%) said they shared tools with their friends in class or borrowed from colleagues in other classes respectively.

Table 4.24: Source Of Funding For Practicals

	•	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Collect from parents	91	74.6	74.6	74.6
	Borrow from friends	14	11.5	11.5	86.1
	Others	17	13.9	13.9	100.0
	Total	122	100.0	100.0	

Source: field data; April 2016

The results in Table 4.24 present the findings on how respondents were able to finance their practical lessons. It can be observed from Table 4.24 that the vast majority of respondents (74.6%) depended on their parents to a large extent, 11.5% percent said they borrowed from their friends mostly, 13.9% said they partly borrowed from friends and sometimes from their own chop money.

### 4.6 Discussion of Findings

Attitude as described by Singleton (1992) is a set of reactions, towards an object, derived by the concept and beliefs that one has towards the object predispose him to behave in a certain manner towards the object. Students' attitudes to creative design and working drawing are the students' thoughts, ideas, or emotions that predispose them to take certain actions towards the study of the subject. The manifestation of the right attitudes is likely to promote interest in the subject.

An analysis of respondents view on whether they consider working drawing as important for their programme of study indicated that very important which was mentioned by 97.5% of the respondents constituted the majority option. The findings therefore reflect students' appreciation of the importance of working design and drawing in the polytechnic fashion and textiles curriculum. With regards to whether they enjoyed participating in practical's and demonstrations an overwhelming majority of respondents said they do enjoy participating in creative design and working drawing activities such as doing practical's and demonstrations.

Research shows that students have varying learning styles, and that no single teaching style accomplishes all students needs (Downes, 2010). In light of this, respondents were required by the study to indicate the various strategies that they use in learning creative design and working drawing. According to the study results, majority of the respondents (that is 83.05 percent) mentioned always punctual and attentive during classes. Always complete my assignments and projects also had a 66.1 percent representation. The ability of the student to carry out assignments correctly and submit as and when due enables the student to possess desirable interest in learning creative design and working drawing.

Most researchers opined that most students apply the learning style that seems most appropriate to them at any particular time. Some learn by listening to the lectures, telling anecdotes, and listening to technical education reports, while some examine and handle new tools and equipment in the school workshop during practical lessons.

Respondents view on what attitudes among their colleagues constituted a setback to the learning of creative design elicited some fascinating responses. 61.26% of respondents stated that their colleagues do not feel confident they will score high marks. 42.34% of respondents said their colleagues do not regularly attend creative design and working

drawing classes, 31.53% admitted their colleagues do not complete their creative design and working drawing assignments and projects, 30.63% said their colleagues consider money spent on doing creative design and working drawing projects as a waste and 26.13% believe students feel bored in creative design and working drawing class. Whatever the reasons, the negative attitudes of the students are likely to hinder effective learning of the subject because studies looking into the attitudinal patterns of school learners have established that in schools' classroom instruction, attitudes determine to a great extent, the degree of success to be achieved (Imarhiagbe 2002; Okeke 2006).

The teaching and learning of creative design and working drawing requires special attention from teachers who direct the teaching and learning process. To this end, the research has come out with the problems and challenges posed by teacher quality and quantity to the teaching and learning of creative design and working drawing.

Out of the six teachers surveyed, five of them had taught for more than eleven years. Most were teachers who had acquired the requisite qualification to teach in the polytechnic. It is expected that with such high percentage of qualified teachers they would raise the level of students academic achievements since teachers' level of academic qualification was a strong predictor of students' achievement (Durojaiye, 1974).

The findings also pointed to the fact that most of the teachers in the research had never attended any professional development courses. The fact that only a few of the surveyed teachers benefited from professional development courses creates a potential danger for the study area with respect to the teaching and learning of creative design and working drawing. There is therefore the need to upgrade teachers' knowledge in creative design and working drawing by the school management by supporting the professional

development courses of creative design and working drawing teachers e.g. through inservice training, seminars, fieldtrips e.t.c. The view of respondents on whether their subject teacher's qualification and quality of teaching affected the teaching of the subject saw 60.7% respondents agreeing that it did to a very great extent, 13.9% thought it did to a small extent, whereas 25.4% thought it did not affect it in any way. This supports the view of Anamuah-Mensah (1995) that the quality of education does not lie in handsome ideas but rather depends on the availability of qualified teachers and their preparedness to offer quality teaching.

In general, the Department of Fashion and Textiles is seen as a department with adequate and experienced creative design and working drawing teachers. This is evidenced by the 52.5% positive response in favour of the question as to the adequacy of qualified and experienced creative design and working drawing teachers.

Despite the existence of adequate and experienced creative design and working drawing teachers some teacher/equipment and materials related challenges to the teaching and learning of creative design and working drawing were identified by respondents. It was established by 80% of the teacher respondents that teacher absenteeism and lateness makes teaching and learning of the subject difficult. This indicates some teachers did not exhibit good attitude towards the teaching and learning of creative design and working drawing at the tertiary levels of education. On the other side of the coin, 20% of respondents revealed the teachers exhibited positive attitude towards their work. Poor remuneration/lack of motivation makes creative design and working drawing unattractive also had 40% agreeing and 40% equally disagreeing.

It was also made known by 100% of respondents that large class size makes the teaching of creative design and working drawing difficult, because of the large class sizes, most

of the teachers could not devote sufficient attention to individual students. Another important revelation from the study as established by 80% of respondents was the fact that lack of TLMs hinders the teaching and learning of the subject. The teaching of creative design and working drawing cannot be complete without the use of teaching and learning materials (TLMs). To this end Adeyanju (1997) point out that learning can be reinforced with learning aids of different variety because they stimulate, motivate as well as arrest learner's attention for a while during the instructional process. It was also found out from the study that many students do not have interest in the subject, 80% of respondents affirmed that lack of students interest affects the teaching and learning of the subject. Selmes (1974) maintained that the need for achievement is an internal state of arousal that led to vigorous, persistent goal oriental behaviour. Tamakloe et al. (2005) also indicated that the learning experience which the learner grapples with must be such that he derives self satisfaction from it. This serves to provide the necessary motivation for wishing to undergo the same or similar experiences.

It is also on record that the department had a laboratory as attested to by 59.8% who admitted they had a laboratory for practical lesson while 40.2% said that they did not have a laboratory for practical lesson. The existence of a laboratory for the department ought to give the students the opportunity to do more practical activities as has been corroborated by the students as a significant number (77.9%) of respondents agreed that they had creative design and working drawing practical's often whereas 22.1% indicated they did not in the previous question as to whether they have practicals quite often.

Respondents view concerning the adequacy of tools and equipment in the laboratory shows that 19.7% of respondents were in agreement that there were adequate tools and equipment in the laboratory, 80.3% did not agree that there were adequate tools and

equipment in the laboratory. This is an indicator that the department experiences difficulties in teaching and learning because of inadequate laboratory resources.

The responses given to the questionnaire indicates that most students of the fashion department lacked the basic tools and materials for design and drawing. Tools and materials such as pencils, charcoal, crayon, brushes, etc. were hard to come by. Out of the 98 students who responded to the question on how they get tools and equipment for their practicals only nine (9.2%) said it was supplied by the institution. A great majority (51%) brought theirs from home. Twelve students (12.2%) and twenty seven (27.6%) said they shared tools with their friends in class or borrowed from colleagues in other classes respectively. The result is that most of the students do not get the chance of touching materials and equipment which may be due to the large class size coupled with few materials.

It was also observed from the findings that finance to acquire learning resources and materials for practical lessons was a challenge as the vast majority of respondents (74.6%) depended on their parents to a large extent, 11.5% percent said they borrowed money from their friends for the most part, 13.9% said they partly borrowed from friends and sometimes from their own chop money. To encourage students to develop a positive attitude to the study of the subject the words of Ogunyemi (1990) is instructive as he advises "when materials are provided to meet the needs of school system, students will not only have access to reference materials but the individual students will learn at their own pace".

### **CHAPTER FIVE**

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This, being the concluding chapter, consists of a summary of the major findings of the study, the conclusions drawn from the findings and recommendation of ways to deal with the challenges encountered in the study of Creative Design and Working Drawing in our Polytechnics, Ho Polytechnic in particular.

### 5.1 Summary of the main findings of the study

Analysis of the data from the study revealed some major significant findings that have implications for the teaching and learning of creative design and working drawing. The findings are presented according to the objectives of the study.

Specific objective one was used to identify the extent to which attitudes of students constitute problems to the teaching of creative design and working drawing. The results of the study indicated that:

- The importance of creative design and working drawing in the polytechnic fashion and textiles curriculum was attested to by majority of respondents.
- An overwhelming majority of respondents enjoy participating in creative design and working drawing activities such as doing practical's and demonstrations.
- Students have varying learning styles and majority of them mentioned always
  punctual and attentive during classes, always complete my assignments and
  projects, try to discuss subject with friends volunteer to answer questions during
  class in that order as their learning strategy.
- Attitudes among students that constituted a setback to the learning of creative design are students do not feel confident that they will score high marks; they do not regularly attend creative design and working drawing classes; that they do not complete their creative design and working drawing assignments and projects; that they consider money spent on doing creative design and working drawing projects as a waste; and students feel bored in creative design and working drawing class.

Specific objective two elicited views on extent to which teacher quality and quantity cause problems to the teaching of creative design and drawing as:

- the Department of Fashion and Textiles is seen as a department with adequate
   and experienced creative design and working drawing teachers
- It was observed that subject teacher's qualification and quality of teaching affected the teaching of the subject.
- Regarding respondents satisfaction with their creative design and working drawing teacher's method of teaching, the results revealed that most of the

respondents were satisfied with their creative design and working drawing teacher's method of teaching.

- factors accounting for satisfaction with teacher's method of teaching, include, the subject teacher plays a role in developing my thinking, have a good personal relationship with the subject teacher and the subject teacher is highly motivating
- most of the respondents admitted the teaching method employed was insufficient to adequately cover all the theory and practical subjects contained in the syllabus
- It was also made known by respondents that large class size makes the teaching of creative design and working drawing difficult, because of the large class sizes, most of the teachers could not devote sufficient attention to individual students.
- most students of the fashion and textiles programme deem their teachers as very innovative and resourceful

Specific objective three was concerned with the extent to which instructional materials pose problems to the teaching and learning of creative design and working drawing:

- Another important revelation from the study as established by 80% of respondents was the fact that lack of TLMs hinders the teaching and learning of the subject to a great extent.
- It was also observed from the findings that finance to acquire learning resources and materials for practical lessons was a challenge as the vast majority of respondents depended on their parents to a large extent.
- Most students of the fashion department lacked the basic tools and materials for design and drawing as there were inadequate tools and equipment in the laboratory.

 It is also on record that the department had a laboratory. The existence of a laboratory for the department gave the students the opportunity to do more practical activities.

### **5.2 Conclusions**

The findings of the study have revealed that there was considerable appreciation of the importance of creative design and working drawing in the polytechnic fashion and textiles curriculum. Hence students made it a point to be always punctual in class and partake in demonstrations and practicals. Moreover, most students apply the learning style that seems most appropriate to them at any particular time. Despite attesting to the fact that their teachers' teaching method was satisfactory most of the students did not feel confident they will score high marks. It appears that in the context of each situation presented above, the root of the matter lied in the poor background knowledge students brought to the learning situation, as the subject had a non-scoring status at the advanced fashion levels.

From the study it can be concluded that the Department of Fashion Design and Textiles has adequate and experienced creative design and working drawing teachers who are very innovative and resourceful. Therefore it was no surprise that students indicated their satisfaction with their subject lecturers' teaching methods. Factors accounting for satisfaction with teacher's method of teaching include; the subject teacher plays a role in developing my thinking, have a good personal relationship with the subject teacher and

the subject teacher is highly motivating. Teaching method employed most was practical lessons with lectures or demonstration. The teaching method employed however was insufficient to adequately cover all the theory and practical subjects contained in the syllabus due to teacher absenteeism and lateness. It was generally agreed that subject teacher's qualification and quality of teaching affected the teaching and learning of the subject.

Furthermore, this study also shows that lack of adequate materials is a challenge. It is on record that the department had a laboratory, which gave the students the opportunity to do more practical activities. The responses given to the questionnaire indicates that most students of the fashion department lacked the basic tools and materials for design and drawing. The result is that most of the students do not get the chance of touching materials and equipment which may be due to the large class size coupled with few materials. It appears that the school authorities did not have interest in the provision of drawing materials and equipment as students had to bring them from home or borrowed from their friends. The need for drawing material and equipment cannot be ignored in our schools if quality individuals who could propel our society in industrial advancement are to be produced.

### 5.3 Recommendations

In view of the findings and conclusions, the following recommendations are made:

- It is well acknowledged by educationists that students are preoccupied with what constitutes the assessment in their chosen courses. It cannot be downplayed that the anticipation of assessment generally drives student learning. If students allow assessment to define and prioritise what is important to learn, and ultimately how they spend their time learning it, then the lecturers and assessors have to deal with this fact, and react accordingly. The methods and timing of assessments send messages to students. So when creating assessment plans, lecturers need to think about these messages: they need to take care to prioritise the most important areas they want their students to learn from, create clear and upfront learning outcomes, and assess appropriately. Including individual or group presentations as part of the overall assessment would go a long way to improve student confidence in the subject.
- The inadequate time allotted for creative design lessons in the institution did not promote frequent use of practical activity in creative design lessons. Lecturers, are however, expected to do more to stimulate and sustain students' interest in creative

design practical lessons. For them to be able to whip up the interest of students in this direction there is the need to adjust these time slots to favour more practical work.

- More so, the large sizes of creative design classes in the institution had been a major drawback toward the effective use of practical activities in the teaching and learning of creative design. This therefore has become a major cause for concern, which must seriously be looked at. Much success could be attained if such large classes are split into more manageable units by the department.
- Management of the institution needs to put in the necessary effort in providing a wellequipped laboratory for the department. This will enable lecturers and students make
  use of practical work effectively to teach and learn creative design and working
  drawing.

### **REFERENCES**

- Adeyanju, J. L. (1997). The application of educational technology in pre-primary education. *Journal of Educational Media and Technology* (JEMT), 2(1), 73-79.
- Ajzen, I., & Fishbein, M. (1975). *Understanding attitudes and predicting social* behaviour. New Jersey: Prentice Hall.
- Albert, R. S., & Runco, M. A. (1999). A History of Research on Creativity. In R. J. Sternberg (Ed.), *Handbook of Creativity* (pp. 16-31). Cambridge, U.K.; New York: Cambridge University Press.
- Anamuah-Mensah, J. (1995). Some O level chemistry topic: what students find difficult.

  The Oguaa Education, 11 (2), 8 18.
- Arnheim, R. (1974). Art and visual perception: a psychology of the creative eye. The New version. Berkeley: University of California Press
- Arntson, A. (1998). *Graphic design basics*. Fort Worth, TX: Harcourt Brace College Publishers.
- Awuku, K. A., Baiden, S. O., Brese, G. K., & Ofosu, G. K. (1991). Senior secondary school agricultural and environmental studies. London: Evans Brothers Limited.
- Best, J. W. & Khan, J. (1998). *Research in Education* (8<sup>th</sup>ed.). Needham Heights: A Viacom company, 160 Gould Street.

- Best, J.W. (1981). *Research in Education*. Englewood Cliffs, New Jersey: Prentice Hall Inc:
- Bevlin, M. (1994). *Design through discovery, 6th edition*. Fort Worth, TX: Harcourt Brace College Publishers.
- Black, C. & Cloud, R. M. (2009). Development of an Apparel design graduate programme emphasizing creative scholarship". International *Journal of Fashion Design*, Technology and Education, 2(2-3), pp 113-118,
- Bradley, S. (2010). Thoughts on developing a design concept. Accessed from http://www.vanseodesign.com/web-design/design-concept-thoughts on February 8th, 2015.
- Brainard, S. (1998). A design manual, 2nd edition. Upper Saddle River, NY: Prentice-Hall.
- Burke, S. (2011). Fashion Designer: Concept to Collection. UK: Burke Publishing.
- Busha, C. H. & Harter, S. P. (1980). Research methods in librarianship: Techniques and interpretation. London: Academic Press.
- Conway, G. (1997). Garment & Textile Dictionary. New York: Delmar Publishers.
- Craft, A. (2001a). An analysis of research and literature on creativity in education:

  Report prepared for the UK Qualifications and Curriculum Authority.
- Davis, M. L. (1996). Visual Design in Dress 3rd ed. Upper Saddle River. New Jersey: Prentice Hall.
- Deboer, G. E. (1987). Predicting continued participation in college Chemistry for men and women. Journal of research in science Teaching, 24(6): 52-238.
- Dewey, J. (1933). How we think: A restatement of the relations of reflective thinking to the educative process (2nd revised edition). Boston: D.C. Heath.

- Diamond, J. & Diamond, E. (2002). *The World of Fashion*. New York: Fairchild Publications.
- Downes, S. (2010). The role of educator in a PLE world, Stephen's web. Retrieved 10/03/2016 from http://www.downes.ca/post/5431
- Durojaiye, M. (1974). The role of non -cognitive factors in school learning of Uganda Secondary School Pupils. West African Journal of Education and vocational measurement, 2(1), 35-39.
- Eckert, C.M. (1997a). Design Inspiration and Design Performance. *Proceedings of the*78th World Conference of the Textile Institute, vol. 1, pp. 369-387. The Textile
  Institute, Thessaloniki, Greece.
- Erlbaum, L. (1992). Modeling Creativity and Knowledge Based Creative Design.

  Hillsdale, New Jersey.
- Evans, P. & Thomas, M. (2004). Exploring the elements of design. Clinton Park, NY: Delmar Learning.
- Faimon, P. & Weigand, J. (2004). The nature of design. Cincinnati, OH: HOW Design Books.
- Fan, J.Y., Feng, D. P. & Lai, M. H. (2011). The Application of Idea Generating Approach: A Case Study from Fashion Design. International Conference on Social Science and Humanity *IPEDR* vol.5 (2011) IACSIT Press, Singapore.
- Fraenkael, J. R. & Wallen, N. E. (2003). How to Design and Evaluate Research in Education (5<sup>th</sup> Ed.). New York: McGraw-Hill companies.
- Fraenkel, J., & Wallen, N. (2000). How to design and evaluate research in education. Boston, MA: McGraw-Hill Higher Education
- Frings, S. G. (2008). Fashion from Concept to Consumer, 9th ed. Upper Saddle River, New Jersey: Prentice Hall.

- Gilbert, R. (1992). Living with art. (3<sup>rd</sup> ed.) New York: McGraw-Hill, Inc.
- Imarhiagbe K.O. (2002). Redirecting vocational and technical education in Nigeria. In:SO Oriafo, POE Nwaokolo, GC Igborbor (Eds.): *Refocusing Education in Nigeria*. Benin-City: DaSylva Influence, pp. 232-238.
- Ingersoll, R. (2001). Teacher Turnover and Teacher Shortages: An Organizational Analysis. Retrieved 10/02/2015 from http://repository.upenn.edu/gse pubs/94.
- Ingersoll, R. M. (2006a). Is there really a shortage of mathematics and science teachers?

  Retrieved 08/07/2015 from http://hub.mspnet.org/index.cfm/12703 *Journal of Educational Research & Policy Studies*.
- Ingersoll, R. M. (2006b). Understanding supply and demand among mathematics and science teachers. In J. Rhoton & P. Shane (Eds.), Teaching Science in the 21st Century, (pp.197-211). Arlington, VA: NSTA Press.
- Jirousek, C. (1995). Art, Design and Visual Thinking. Retrieved February 6th, 2015from http://www.char.txa.cornell.edu/langusge/creative.htm.
- Johnson, C.R., S.D. Ling, D.J. Ross, S. Shepherd & Miller, K.J. (2005). Establishment of the long-spined sea urchin (Centrostephanus rodgersii) in Tasmania: first assessment of potential threats to fisheries, last modified 30 Jun 2008, http://eprints.utas.edu.au/6290/, accessed 30 Jun 2008
- Johnson, S. M., Berg, J. H., & Donaldson, M. L. (2005). Who stays in teaching and why?

  A review of the literature on teacher retention. Cambridge, MA: Harvard Graduate School of Education.
- Johnson, S.M., & Birkeland, S.E. (2003). The schools that teachers choose. Educational Leadership, 60(8), 20-24.
- Joubert, M. M. (2001). The Art of Creative Teaching: NACCCE and Beyond. In A. Craft,B. Jeffrey & M. Leibling (Eds.), *Creativity in Education*. London: Continuum.

- Kaindi, I. J., Mburugu K., Nguku E. & Obere, A. (2016). The Competencies of Fashion
  Design Teachers in Public Institutions of Higher Learning in Nairobi County,
  Kenya, *International Journal of Sciences: Basic and Applied Research (IJSBAR)*Volume 26, No 1, pp 278-291
- Kathuri, N. J., & Pals, D. A. (1993). Introduction to Education Research. Njoro: Egerton University
- Kawamura, Y. (2004). *The Japanese revolution in Paris fashion*. Oxford [England]: Berg.
- Kawamura, Y. (2005). Fashion-ology. An introduction to Fashion Studies. New York: USA: Berg Publication.
- Kim, J. & Farrell-Beck, J. (2003). Application of Apparel Design Process in an Experimental Design Course. *ITAA Proceedings*, 60, Tea 30.
- Kiragu, J. (1988). Mathematics and science. BER Kenyatta University.
- Kobia, M. (1991). "A study of standard seven pupils' attitudes towards the learning of Home Science in some primary schools in Makadara Division, Nairobi."

  Master's Thesis, Kenyatta University, Nairobi, Kenya.
- Kozar, J. M., & Hiller C. K. Y. (2014). "The fashion internship experience: identifying learning outcomes in preparing students for the real world". International *Journal of Fashion Design, Technology and Education*, 8(1), pp 3-11.
- Lamb, J. M. & Kallal, M. J. (1992). A Conceptual Framework for Apparel Design.

  Clothing and Textiles Research Journal. 10(2), 42-47.
- Lauer, D. & Pentak, S. (1995). Design basics, 4th edition. Ft. Worth, TX: Harcourt Brace College Publishers.

- Lee, Y. (2005). Preparing Students as Holistic Designers: Knowledge Integration in Apparel Design Studio Courses. *International Textile and Apparel Association Proceedings*, 62, Tea 98.
- Leedy, P. D. (2005). Practical Research, Planning and Design. Carlisle Communications, Ltd. United States of America.
- Maritim, E. K. (1979). Academics Concept Self Concept and Teacher Perception. Their Relationship to Pupils Grade Attainment in Rural Kenya (Unpublished Ph.D Thesis). Harvard University.
- Maslow, A. H. (1963). The Creative Attitude. *The Structurist*, 3 (Conflict / Creativity /Evolution in Art).
- Mazumder, P. S. (2011). How does a fashion designer work? (Fashion design classroom).

  Retrieved 2/8/2015 from: http://www.fashiondesignscope.com.
- Murray, B. (2005). Student's Perception of the Creative Process in a Design Course.

  International Textile and Apparel Association Proceedings, 62, Res 452.
- Muya, W. (2000). KCPE Results. Daily Nation. Nairobi: NMG.
- Mwamwendwa, T. S. (1995). Educational Psychology. An African Perspective. London: Heinemann Butterworth Publishers Ltd.
- Neild, R., Useem, E., Travers, E., & Lesnick, J. (2003). *Once and for all: Placing a highly qualified teacher in every Philadelphia classroom*. Philadelphia: Research for Action.
- Obinnim, E. and Pongo, N. A. (2015). The appropriate use of elements and principles of design in garment construction by dressmakers and tailors in the Ho Municipality of Ghana. International Journal of Innovative Research in Science, Engineering and Technology. Vol 4.

- OED. (2004). Oxford English Dictionary Online. Retrieved August 5th, 2015 from http://80-dictionary.oed.com
- Ogunyemi, B. (1990). The relationship between instructional resources and socio economic status in selected population of high school. *Dissertation Abstract International*, 25 (2), 120-126
- Okeke, B.C. (2006). Enhancing enrolment in vocational programmes in College of Education in Delta State of Nigeria: Perception of academic staff. *Internal Journal of Educational Research and Development*, 1(1): 72-89.
- Pearce, J. M. (2007). "Physics Using Appropriate Technology Projects", *The Physics Teacher*, 45, 164-167.
- Pope, R. (2005). Creativity: Theory, History, Practice. London, New York: Routledge.
- Richards, J. C., Platt, J. T., Platt, H. & Candlin, C. N. (1992). Longman dictionary of applied linguistics. Longman. Harlow, Essex, England.
- Rivkin, S. G., Hanushek E.A. & Kain J. F. (2005). Teachers, schools, and academic achievement. *Econometrica* 73:417–58
- Rose, N. (1996c). *Inventing our selves: psychology, power and personhood*. Cambridge: Cambridge University Press.
- Rudd, N. A. & Reilly, A. (2004). Keeping the Energy Flowing in Apparel Product Development. *International Textile and Apparel Association Proceedings*, 61, Tea 107–108.
- Saw, J. T. (2002). Design Notes –Design and Composition. Palomar College.

  Retrieved 31<sup>st</sup> July, 2015 from http://daphne.paloma.edu.designnotes.
- Selmes, C. S. G. (1974). New movements in the study and teaching of Biology.

  Cambridge: Cambridge University Press.

- Seltzer, K. & Bentley, T. (1999). *The creative age: knowledge and skills for the new economy*. London: Demos.
- Silverman, D. (1993). Qualitative data: Methods for analysing Talk, Text and Interaction.

  Sage publications.
- Singleton, R. A. (1992). Approaches to Social Research. New York: Oxford University Press.
- Smith, T. M. & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681–714.
- Sternberg, R. J. & Lubart, T. I. (1999). The Concept of Creativity: Prospects and Paradigms. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 3 15). Cambridge, U.K.; New York: Cambridge University Press.
- Stewart, M. (2002). Launching the imagination. New York: McGraw-Hill.
- Tamakloe, E. K., Amedahe, F. K. & Atta, E. T. (2005). *Principle and methods of teaching*. Accra: Ghana Universities Press.
- Tersiisky, D. (2004). The elements and principles of design. Accessed at http://nwrain.net/tersiisky/design/design.html on March 10th, 2015.
- Texas Center for Educational Research. (2000). The Cost of Teacher Turnover. Austin, Texas.
- Vinken, B. (2005). Fashion zeitgeist: Trends and cycles in the fashion system. English ed. Oxford New York: Berg Publishers
- Weiner, R. P. (2000). *Creativity and Beyond: Culture, Values, and Change*. Albany: State University of New York Press.
- Williams, R. (1988). *Keywords: a vocabulary of culture and society*. London: Fontana Press.

- Wilson, E. (2003). *Adorned in dreams: Fashion and modernity*. New Brunswick, N.J.: Rutgers University Press.
- Wong, H. (2009). "Teachers are the Greatest Assets." Teachers Net Gazette. May 2009.
- Workman, J. E. & Freeburg, B. W. (2009). Dress and Society. New York: Fairchild Books.
- Zelanski, P. & Fisher, M. (1996). Design principles and problems, 2nd edition. Fort Worth, TX: Harcourt Brace College Publishers.



### APPENDIX ONE

### **PERMISSION LETTER**

TT	T 1		- 1		•
$H \cap$	$\nu_{\Delta}$	X710	$\sim 1$	าท	10
11()		lyte	u	111	ı
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			

P. O. Box HP 217

Но

21st March, 2016

The Head of Department

Fashion Design and Textiles

Ho Polytechnic

Но

Dear Madam,

## PERMISSION TO ADMINISTER QUESTIONNAIRE IN YOUR DEPARTMENT

I am a student of the University of Education, Winneba- Kumasi campus, pursuing MTech. Fashion and Textile Design, writing a thesis on the topic: Challenges of Ghanaian Polytechnic Fashion Design and Textiles students in the Study of Creative Design and Working Drawing-A case of Ho Polytechnic.

As part of the research, questionnaires are to be administered to a cross-section of students and teaching staff in your department to obtain data for the research.

I shall be grateful if I am permitted to carry out this exercise in your department.

Thank you.

Yours faithfully,

MS. BIJOU ASEMSRO AKPENE

### **APPENDIX TWO**

### **QUESTIONNAIRES**

# UNIVERSITY OF EDUCATION, WINNEBA COLLEGE OF TECHNOLOGY EDUCATION-KUMASI FACULTY OF ART AND DESIGN RESEARCH QUESTIONNAIRE FOR STUDENTS

Dear Respondent, You have been randomly selected to participate in this research. The information being collected is purely for Academic purposes. Your participation is very important to this research if the results are to be accurate. Attached is a brief questionnaire, which should only take about 10 to 15 minutes to complete. Your answers will be completely anonymous and confidential.

### **INSTRUCTION TO RESPONDENTS**

Tick the appropriate answer in the spaces provided ( $\sqrt{}$ ) and write a brief statement where necessary.

### **SECTION A**

1.	Gender of respondent	
	a. Male [	b. Female [ ]
2.	Age of respondent	
	a. 18-25 years [ ]	b. 26-35 years [ ] c. 36-45 years [ ]
	d. Above 45 years [	
3. To	· ·	sider the study of creative design and working drawing as e (Fashion Design and Textiles)?
a. Ver	ry Important [ ]	b. Somewhat Important [ ] c. Not Important [ ]
	you enjoy participating practical's and demonst a. Yes [ ]	

### University of Education, Winneba http://ir.uew.edu.gh

4b. If yes, state reasons why
4c. If no, why not
5. Do you believe that money spent on doing creative design and working drawing projects is a waste? a. Yes [ ] b. No [ ]
6. Which of the following best describes your approach to the learning of creative design and working drawing? (You can select more than one)
a. I volunteer to answer questions during creative design and working drawing class [ ]
b. I am always punctual an <mark>d atten</mark> tive during classes [ ]
c. I try hard to discuss creative design and working drawing with my friends [ ]
d. I always complete my assignments and projects []
e. Creative design and working drawing is a very difficult subject for me [ ]
7. Which of the following attitudes among your colleagues constitute a setback to the teaching and learning of creative design and working drawing? (You can select more than one)
a. Students do not consider the study of creative design and working drawing as important
b. Students do not listen attentively to creative design and working drawing lessons [ ]
c. Students do not regularly attend creative design and working drawing classes [
d. Students consider money spent on doing creative design and working drawing projects as a waste []
e. Students do not complete their creative design and working drawing assignments and projects [ ]
f. Students feel bored in creative design and working drawing class [ ]
g. Students do not feel confident that they will do well in the subject [ ]

### **SECTION C**

8. To what extent do the lecturers' qualifications and quality of teaching affect the teaching of creative design and working drawing?
a. Not At All [ ] b. Very Great Extent [ ] c. A Small Extent [ ]
9. Are you satisfied with your creative design and working drawing teacher's method of teaching?
a. Yes [ ] b. No [ ]
9b. If "Yes" which of the following factors account for your satisfaction? (You can select more than one)
a. I have a good personal relationship with my creative design and working drawing teacher [ ]
b. My creative design and working drawing teacher is highly motivating while teaching  [ ]
c. My creative design and working drawing teacher plays a role in developing my thinking [ ]
d. My creative design and working drawing teacher teaches in an enjoyable way [ ]
9c. If "No", which of the following factors account for your dissatisfaction?
a. My creative design and working drawing teacher does not make use of teaching aids while teaching [ ]
b. Teaching skills of my creative design and working drawing teacher are obsolete [
c. Creative design and working drawing is too abstract due to the way the teacher teaches it [ ]
10. The Statements below represent the factors that may affect the practical training of
students. Please TICK the column that most accurately reflects how strongly you agree
or disagree with each statement.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
There are inadequate qualified					
and experienced creative design					
and working drawing lecturers					
The lecturers spend almost all					
the class time on the lessons					
with no time left for practical					
work.					
The lecturers mostly do mere					
dictation of notes					
Lecturers are not concerned that					
as many students as possible					
understand the lessons					
The lecturers' scolding makes					
learning difficult for us in the					
class					
The lecturers avoid questions	OUC	20			
from students		TYO.			
The creative design and		77			
working drawing lecturers are			42		
not innovative and resourceful			1.50		

SECTION D
11. Do you have creative design and working drawing practicals often?
a. Yes [ ] b. No [ ]
12. Do you have a laboratory for practical lesson?
a. Yes [ ] b. No [ ]
13. Do you have enough tools and equipment in the laboratory?
a. Yes [ ] b. No [ ]
14. If no, how do you get tools and equipment for your practicals?
a. Borrow from friends [ ]
b. Bring them from the house [ ]
c. Supplied by the institution [ ]
d. Never had any, shared with friends [ ]

15.	How d	lo you get money for your practical lesson?
	a.	Collect from parents [ ]
	b.	Borrow from friends [ ]
	c.	Others (please specify
16. In	your op	vinion what can be done to improve the teaching and learning of creative
design	and wo	orking drawing in your school?
		40.
		2/5 0 -1 %
• • • • • • •	• • • • • • • • •	<u> </u>
• • • • • • •		

Thank you very much for your valuable assistance in this research

### UNIVERSITY OF EDUCATION, WINNEBA COLLEGE OF TECHNOLOGY EDUCATION-KUMASI FACULTY OF ART AND DESIGN RESEARCH QUESTIONNAIRE FOR LECTURERS

Dear Respondent, You have been randomly selected to participate in this research. The information being collected is purely for Academic purposes. Your participation is very important to this research if the results are to be accurate. Attached is a brief questionnaire, which should only take about 10 to 15 minutes to complete. Your answers will be completely anonymous and confidential.

### **INSTRUCTION TO RESPONDENTS**

topics?

Tick the appropriate answer in the spaces provided ( $\sqrt{}$ ) and write a brief statement where necessary.

### **SECTION A** b. Female [ ] 1. Gender of respondent a. Male [ 2. Educational Qualification a. M.A. Fashion [ ] b. MSc. Textiles Technology [ ] c. MSc. Clothing and Textiles [ ] d. MPhil Home Economics [ e. BEd. Vocational/Technical [ ] f. BEd. Home Economics [ g. MA Art Education [ ] h. BA Industrial Art (Textiles) i. others..... 3. Teaching experience (b) 6 – 10 years [ ] (c) 11 – 15 years [ ] (d) 16 and above (a) 0 -5 years [ ] 1 **SECTION B** 5. What are some of the Methods you use in the teaching of creative design and working drawing? a. Lecture [ b. Field trip [ c. Demonstration [ ] d. Practical (Experiment and laboratory work) e. Discussion [ 6. Does the teaching method used in question 5 above permit adequate coverage of

a. not at all [ ] b. to a small extent [ ] c. somenow [ ] d. to a great
extent [ ]
7. Does the school management support the professional development courses of
creative design and working drawing lecturers e.g. through in-service, seminars,
fieldtrips e.t.c?
a. Yes [ ] b. No [ ]
7. (b) If yes, how often?
7. (b) If yes, now often.
a. Semester [ ] b. Yearly [ ] c. After two years [ ] d. Others (specify)
7. (c) What is your opinion about the professional development courses?
a) Very useful [ ] b) Useful [ ] c) Not useful [ ]

8. The Statements below represent the factors that may militate against the teaching and learning of creative design and working drawing. Please TICK the column that most accurately reflects how strongly you agree or disagree with each statement

	Strongly	Agree	Neutral	Disagree	Strongly
- Al 7 ( C	Agree		4		Disagree
1. Teacher absenteeism and lateness	<b>7</b>	100			
makes teaching and learning of the			9		
subject difficult.	-	300			
2. Non-scoring status at the					
Advanced Fashion levels negatively					
affects the teaching and learning of					
the subject					
3. Poor remuneration/lack of					
motivation makes creative design and					
working drawing unattractive					
4. Large class size makes the teaching					
of creative design and working					
drawing					
difficult					

### University of Education, Winneba http://ir.uew.edu.gh

5. Lack of TLM(s) hinders the						
teaching and learning of the subject						
6. Lack of students' interest affects the						
teaching and learning of the subject						
7. Creative Design and Working						
Drawing is perceived by other						
lecturers as irrelevant to Fashion						
Design and Textiles programme						
9. In your opinion what can be done to improve the teaching and learning of creative design and working drawing in your institution?						
a gDUCay						
				• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	

Thank you very much for your valuable assistance in this research

