

**DESIGN AND PRODUCTION OF SURFACE TEXTILE DESIGNS FOR INTERIOR
FURNISHING: FOCUS ON THE PHILOSOPHIES OF TECHNICAL, VOCATIONAL AND
AGRICULTURAL EDUCATION IN GHANA**

BY
KNUST

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Faculty of Art, College of Art and Social Sciences

CERTIFICATION

I hereby declare that this submission is my own work towards the MFA and that to the best of my knowledge, it contains no materials previously published by another person nor materials which have been accepted for the award of any other degree of the university, except where due reference has been made in the text.

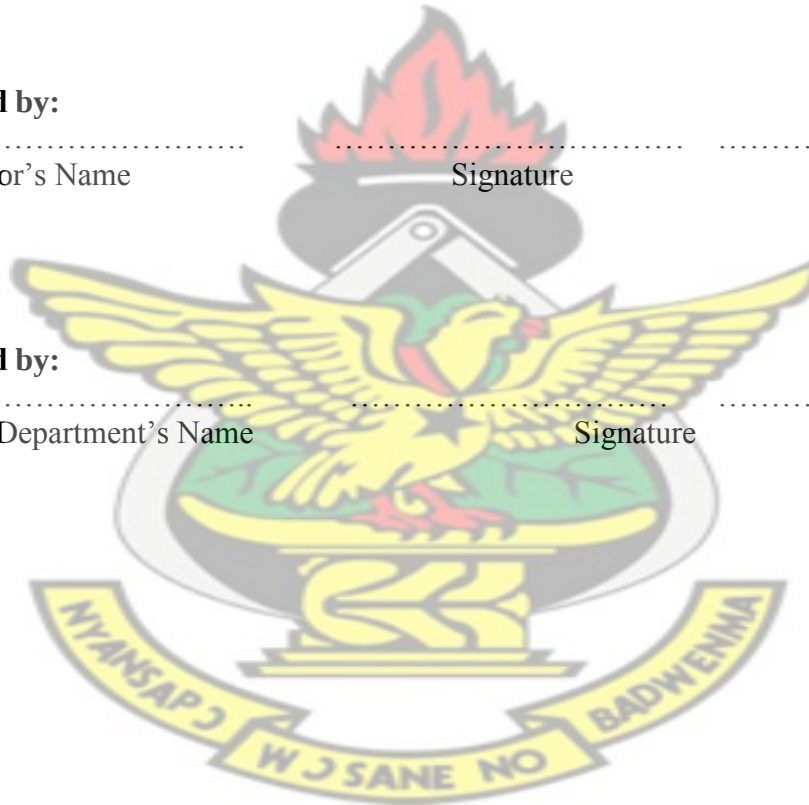
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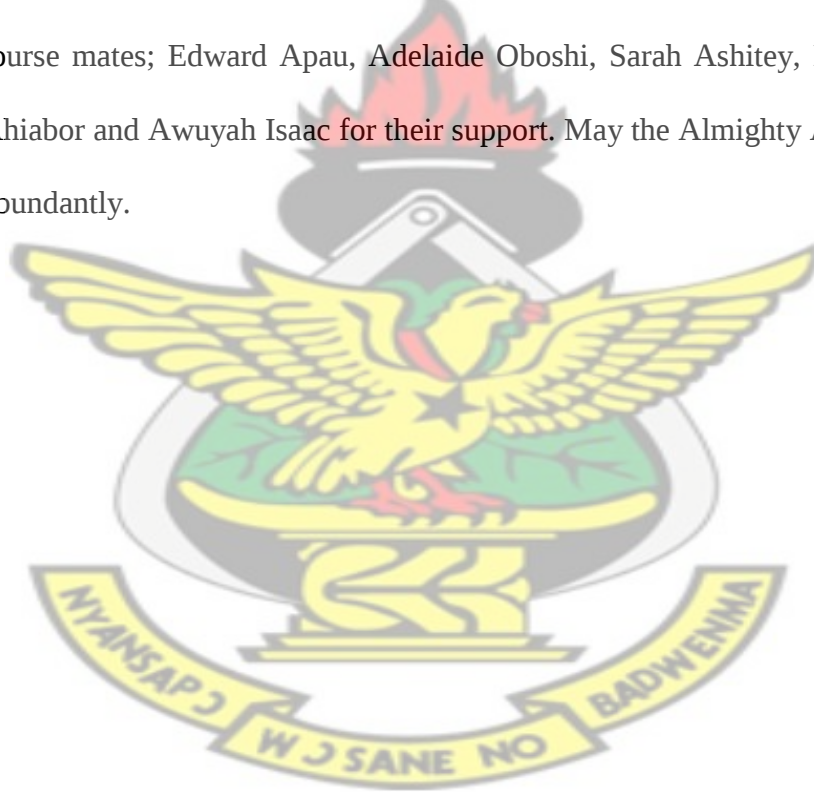


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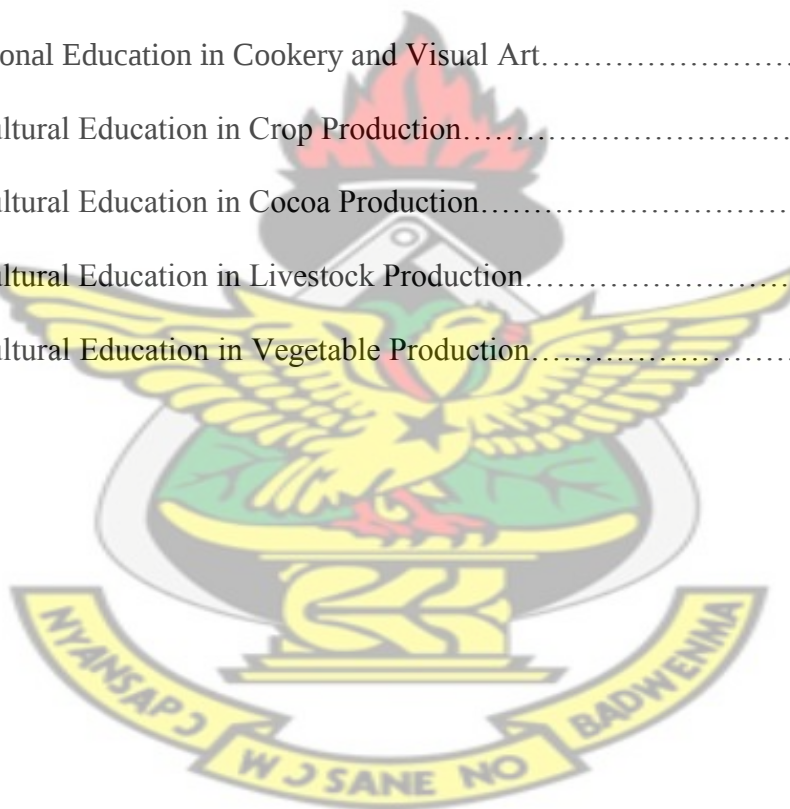
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ABSTRACT

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TITLE: DESIGN AND PRODUCTION OF SUFACE TEXTILES FOR INTERIOR FURNISHING: FOCUS ON THE PHILOSOPHIES TECHNICAL, VOCATIONAL AND AGRICULTURAL EDUCATION IN GHANA

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The purpose of this study is to use theme based motifs from the philosophy of Ghanaian education with special reference to Technical/Vocational and Agricultural education in creating surface textile designs. This is to sensitize Ghanaians on the importance of Technical/Vocational and Agricultural education. The study revealed that public edifices and offices of academic institutions use interior furnishing textiles mainly from floral and geometrical motifs. These motifs have no significant design ideologies engineered towards the institutions or Ghanaian educational philosophies, which remind both the learners and instructors on what is expected of them in order to enhance the teaching and learning process. The study established that most Ghanaians do not understand the philosophies of Technical/Vocational and Agricultural Education (TVA); hence the development of textile designs for interior furnishing from the philosophies of Technical/Vocational and Agricultural Education (TVA).This promotes understanding and appreciation of their significance in National development. As an art-studio base practice, the study employs manual sketches using pencils and Adobe Photoshop 7.0,computer graphics software that aids in easy manipulation of images for textile

designs as a main design tools for generation of the designs. Motifs were developed from various themes under Technical/Vocational and Agricultural Education (TVA) and used to produce a number of textile designs as interior furnishing materials which graphically brings out their philosophical and social significance to the understanding of ordinary person. The study is based on the qualitative research approach and makes use of the art-studio practice and descriptive observational method of research. Purposive sampling technique was used to gather data from student, workers, teachers and lecturers to establish the conceptual background for the study. Observation and unstructured interview guides were the main instruments used for data collection. The study concludes that converting of philosophies of Technical/Vocational and Agricultural Education (TVA) into motifs for surface pattern design is paramount to understanding the importance of such education. The Ghanaian Philosophies of Technical/Vocational and Agricultural Education captured in the form of surface pattern design easily communicate to the public. The study encourages concept generation designs aimed at problem solving in our society by Textile designers, Artist and Students to address societal problems. It recommends Textile designers to explore theme-based motifs for textile designs to bring about innovation and easy identification which provides better understanding for all classes of people to appreciate.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is variously defined by Antwi (1992) however, in essence every aspect of education aims at transmitting the culture, the attitudes and values of a people into its youths and adults. In another Sense, education seeks to equip the citizenry of a society with knowledge, skills and competencies to ensure the survival of the society. Education of all types has often been presented as the bedrock of the development of any nation. Antwi (1992) posits that education is a science that is based on fact and observations. Once a person receives education he develops his knowledge, skills or character; he lives his life by developing his mind and equipping himself to deal with reality. Kuyini (2010) has it that a country is said to be developed when its citizenry have received quality education making them more discerning and contributing more effectively in diverse ways in economy of the country. He adds that a country's level of development is measured by the level of education the country enjoys. Ghana, for that matter, is craving to be a developed nation thence, the need to make education one of its priorities to accelerate development.

Curtis and Boulton (1982) state that education is a right but not a privilege, therefore, every individual in Ghana needs to have easy access to education. Successive Ghanaian governments and other stakeholders in education have intensified the need for all Ghanaians, young and old, to receive good and quality education since that is the only way a country and its citizens can achieve development. As a result, educational campaign had been made through the electronic and print media to sensitize Ghanaians

on the need for education. Because of the high level of illiteracy rate, a large number of Ghanaians cannot read or write the English language which is the medium of instruction and communication by Ghanaian media, schools and colleges (Kuyini, 2010). As clothing, and for that matter local textile prints, which is one of the basic necessity of life and also cherished most by Ghanaians, with its socio-cultural significance, the vision of the study is to create appropriate surface textile designs to intensify Educational campaign on Technical, Vocational and Agricultural education to help foster national development. Education is perceived as the backbone of every economy in the world. All over the world, people are grappling with education because it is through that one can develop himself and his country as a whole. Education is future oriented and is an engine for development and growth. The ability to drive one into the conscious world is through education which involves activities that are intended to stimulate thinking in order to foster teaching and learning (Asante, 2012). It is a well-known fact that the developed countries got to where they are now through implementation of good educational policies. Ghana, as a developing country needs to intensify its educational policies to effect rapid growth and development, hence the essence of this study which seeks to intensify Technical/Vocational and Agricultural education as the main key for national development through the use of surface textile designs for interior furnishings.

1.2 Statement of the Problem

The rapid development of a nation, its self-reliant policies or sustained economic advancement depends mostly on proper Technical, Vocational and Agricultural mass education Ghana's Philosophy on education emphasizes education for development. This entails that educational programmes must be relevant to societal needs. Annoh (1992)

observes that, an appreciable number of Ghanaians are still not educated in spite of the efforts being made by Government and other stakeholders to give education to all. Even though, these media have chalked some successes, a lot more need to be done.

The researcher through preliminary investigation identified the use of surface textile designs as alternative means through which messages can be sent across to the general public to enhance the campaign on the need for education for all. Descriptive observational survey of public edifices and offices of academic institutions such as KNUST, K-Poly, KTI, Anita and Treasure Land Hotels revealed the use of interior furnishing textiles with foreign design concepts with no significant design ideologies engineered towards the institutions or Ghanaian educational philosophies to remind both learners and instructors on what is expected of them in order to enhance the teaching and learning process.

This project therefore, seeks to explore the possibilities of developing theme-based motifs in creating surface designs for interior furnishing to serve as a medium for communicating Ghanaian educational philosophies with specific reference to Technical, Vocational and Agriculture education for acceleration of national development.

1.3 Objectives of the Study

1. To identify and discuss suitable themes that reflects Ghanaian educational philosophies and development.
2. To generate appropriate textile motifs and surface pattern designs based on the identified themes.
3. To produce samples of the designs and discuss their significance in promoting education and development in Ghana.

1.4 Research Questions

1. Which theme-based design sources can be identified and discussed to reflect Ghanaian educational philosophies and development?
2. Can appropriate textile motifs and for that matter surface pattern designs be generated from the themes identified?
3. What significance and projections could be deduced from the newly created surface textile designs toward promotion of education and development in Ghana?

1.5 Importance of the Study

The resultant designs will not only beautify the interiors of the institutions but also serve as a medium of communication to the public and students on the benefits education bring to the individual and the country as a whole. This method of communication by means of surface pattern designs in a form of interior decoration will carry rapid messages to parents, guardians, teachers and the general public. The creation of these kinds of designs will also provide the textile designers and the textile industries a variation of designs that will meet the demand of the market. The study will also provide textile designers with a new design source of inspiration for exploration and creation of innovative and problem solving textile designs.

1.6 Delimitations

The study focuses on selected offices of schools, a university and hotels in Ashanti region of Ghana. It makes use of both manual and Adobe Photoshop (application software) as major tools for the generation of the designs.

The Research is limited to only images or pictures on Technical, Vocational and Agricultural education which explains or carries a particular message on Ghanaian

philosophies related to education and development. The geographical delimitation of the study is K.N.U.S.T, Kumasi Polytechnic, Kumasi Technical Institute, Anita and Treasure Land Hotels all in Kumasi Metropolis.

1.7 Limitations

Too much time was wasted at the entrances and receptions of some hotels and institutions before permission was granted for data collection, due to unavailability of resource persons to conduct the researcher around. This prolonged the time allotted for data collected which affected the time for submission of the thesis. However, most institutions visited willingly paved their way for the researcher to observe their interior furnishings to collect sufficient data to support the study.

1.8 Definition of Terms

Philosophy - The study of the existence of knowledge or a reality.

Education - An information or training given to an individual or group of people in a particular subject area.

Interior decoration – The decoration of the inside of a room or a building using textiles.

Development - An event constituting a new stage in a changing situation.

Motif - A single or recurring image forming a design

Design - The doing or planning of something with a specific purpose in mind.

Furnishing - The use of fabrics for curtains, upholstery, bed sheet etc. for decoration.

Surface textile design - The designing and printing or dyeing of fabrics using pigments or dye stuff.

1.9 Abbreviations

- U E W - University of Education, Winneba.

- UCC - University of Cape Coast.
- KNUST - Kwame Nkrumah University of Science and Technology.
- APA - American Psychology Association.
- MDG - Millennium Development Goal.
- HIV/AIDS – Human Immune Virus/Acquired Immune Deficiency Syndrome
- GDP - Gross Domestic Product
- CE-Christian Era
- JOPOG - Journal of Polytechnics in Ghana
- UNESCO - United Nation Educational Scientific and Cultural Organization
- ILO - International Labour Organisation
- K, POLY-Kumasi Polytechnic
- KTI-Kumasi Technical Institute

1.10 Organization of the Rest of the Text

Chapter Two deals with review of related literature of the study. The areas reviewed Include: Brief history on education in Ghana, the definitions of education and development, education and national development, general philosophies of education, philosophies of Ghanaian education and textile designs for furnishing.

Chapter Three outlines and discusses the research methodology. It deals with research design based on qualitative research and employs the use of art studio-based practice and descriptive research methods. It also entails population for the study, sampling technique, library research, data collecting instruments, data collection procedure and data analysis plan.

Chapter Four deals with main findings from field research and generation of designs from Ghanaian educational philosophies.

Chapter Five contains the discussions of the design outcomes and makes deductions or projections toward promotion of education and development in Ghana. The Sixth Chapter provides the Summary, Conclusion and Recommendations for the research.

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Overview

In this project, pertinent and relevant Literature on brief Historical overview of education in Ghana, Concept of Development, Education and National development, General Philosophies of education, Philosophies of Ghanaian education, and Textile Designs for Furnishing were reviewed to support the study.

2.1 Historical Overview of Education in Ghana

Nyarko (1988) records that earliest history of formal, western-style education in Ghana is directly associated with the history of European activities on the Gold Coast. The Portuguese were the first Europeans to arrive at the Ghanaian coast in 1471. Their intention to establish schools was expressed in imperial instructions that, in 1529, encouraged the Governor of the Portuguese to build Castle at Elmina to teach reading, writing, and the Catholic religion to the people. While there is no evidence to demonstrate their success, it is amply proven that the Dutch, Danish, and English companies operated schools in the Gold Coast, and that instruction in reading, writing, and religious education took place within the castle walls.

He adds that the best known Castle Schools on the Gold Coast included the one operated by the Dutch at the former Portuguese fortress at Elmina, the British school at Cape Coast Castle, and the Danish school at Christiansburg, Accra. In the late eighteenth century and throughout the Nineteenth century, children of wealthy African merchants on the coast and relatives of some of the important local chiefs were instructed at castle schools. Nyarko referred to the historian C. K. Graham who observed and noted that the

majority of students were mulatto children of the European castle staff and their African women.

Nyarko further adds that while pupils received religious instruction as part of their basic training, the primary purpose for educating young people was to prepare them for employment in the European commercial enterprises on the coast. It was, therefore, not unusual that the schools received some funding from the company secretariats overseas. For example, in his history of the Royal African Company, K.G. Davies presented evidence of company sponsorship of education in 1694 and again in 1794 through 1795. But such funding was irregular and, therefore, contributions from other sources were critical to the survival of the school system. Monthly contributions from the salaries of the European men at the Cape Coast Castle created the "Mulatto Fund," from which some financial support for children was drawn. Also, some of the chaplains who served as teachers of the castle schools experimented with imposing fines on the European staff that missed Sunday religious services without a good excuse for doing so. The Rev. Thomas Thompson, who ministered at Cape Coast from 1752 through 1756, was reported to have depended on such revenue to support his school.

Though irregular, Agyeman (1986) observes that overseas beneficiaries also sponsored the education of some African children who travelled to European centres of learning to be schooled. In a 1788 letter to the Privy Council in London, Mayor John Tarleton of Liverpool talked about the 50 or so odd West African children, chiefly from the Gold Coast and Sierra Leone, whom parents and British traders had sent over to Liverpool to be educated. As much as this was impressive, overseas training for African students was limited to the very few. On the other hand, the castle schools provided only

basic education. Company support was limited, and often times the chaplain-turned-teacher had to resort to innovative means of fund-raising to support themselves and the schools.

In comparison to the years before, the nineteenth century witnessed a redoubled effort to improve education on the Gold Coast. The Company of Merchants that took over the activities of the Royal African Company in 1752 appointed Colonel George Torrane in 1805 as its new president of the Cape Coast Castle. While it is not clear if Torrane made any recommendation for the improvement of castle education on the Gold Coast, there is information that the Company of Merchants voted money to hire one Charles Williams as master of the Cape Coast School. Mr. Williams arrived on the Gold Coast in 1815 and reopened the company school at Cape Coast the following year. Schools were also opened at Anomabo, Accra, and Dixcove, and a total of 70 students were attending classes at these facilities by 1822 (Agyeman, 1986).

Noddings (1995) admits that the 1820s was a period of conflict between the British and the dominant Asante (Ashanti) kingdom to the hinterland. Between 1815 and 1820, all the major European establishments sent emissaries to the Asante capital of Kumasi to negotiate increased commercial relations. However, disagreements between Asante officials and the British led to the war of 1823-1824, in which the newly appointed Governor of the Cape Coast, Castle Sir Charles McCarthy was killed. Later in 1826, the joint forces of the British, the Danes, and their local allies fought the Asante army in the plains of Accra. While trade into the interior certainly suffered from the conflict, historians are not specific on the extent to which the political instability affected the state of education at the castles. In the 1831 treaty that renegotiated relations among

the warring parties, however, two Asante's royal youth - Owusu Ansah and Owusu Nkantabisa - were sent to Cape Coast as a sign of the kingdom's commitment to peace.

The boys were schooled at the castle school and were later sent to England for a Christian education. It is not surprising that the Dutch, who had competed against the British from their post at Elmina, also sent Akwasi Boakye and Kwamina Poku (also from the Asante royal house) to the Netherlands in the mid-1830s to be educated. In fact, by 1841 some 110 students were reported to be attending English schools on the Gold Coast.

Koomson (2000) has it that the effort to provide Christian education on the Gold Coast took a decisive turn with the arrival of Wesleyan and Basel missionaries in 1835. The first Wesleyan (Methodist) school was at the Cape Coast Castle. The Rev Thomas B. Freeman reported that nine Wesleyan mission schools had been opened by 1841; six for boys and three for girls. Despite the achievements on the coast, efforts to open schools in the Asante interior did not succeed. Even though Rev. Freeman returned the two royal youth to Kumasi in 1841, the Europeans were prevented from opening schools in the territory. Apparently, some of the senior Kumasi chiefs expressed fear that western-style education would negatively impact local values. Wesleyan efforts to conduct schools continued to be limited to the coast throughout the Nineteenth Century.

The Wesleyans according to Antwi (1990) contributed immensely towards the progress and development of Education in Ghana. On Vocational and Technical education the missionaries established the Wesley Girls High School in Cape Coast. They placed high premium on girl's education, due to this they saw the need to include Vocational and Technical Education in their Curriculum of even girl's education. This is

one of the focuses of the researcher to encourage and emphasize on Technical, Vocational education to give specific skills and practical training that contributes to the empowerment of Ghanaians, to be entrepreneurs and to provide countless job opportunities for the jobless in the country.

In Agriculture education too, Antwi adds that the Wesleyans made remarkable efforts. They attached model or demonstrational farms to the senior (middle) schools. Cash crop farms were also established at Buela and Dominase, all in the Central Region to cultivate Coffee, Tobacco and Sugar cane. By 1905 Mfantshipim School had its own farm. Like the Basel mission, the Wesleyans introduced new Agricultural crops like cocoa and coffee in the areas they operated. This is also the second focus of the researcher to encourage and emphasize on Agriculture education as asserted by Alhassan (1994) that Ghana's Agriculture sector plays a crucial role in reducing poverty by providing employment food supply and source of livelihood to achieving economic growth.

Unlike the Wesleyan, Antwi (1990) posit that the Basel (Presbyterian) mission headed for the higher and healthier elevations of the Akuampim Ridge while keeping its headquarters at Christiansborg Accra. By the 1850s, the Basel missionaries had boarding schools at Christiansborg and schools on the Akuapem Ridge, including one for girls at Aburi. At their school at Akropong (also on the ridge), the Basel missionaries trained teachers, used the schools as agency for the spread of Christianity, and published an elementary grammar book and dictionary in the local Akan language. To be sure, the popular linkage of western-style education to Christian conversion developed from these experiences

The Basel Missionaries according to Antwi (1992) were considered as the pioneers in the education enterprise because they established themselves permanently in the present day Eastern and Greater Accra regions. They opened the first training college at Akropong Akwapim in 1848. Before then they had opened a Boys school in 1843 and a Girls school all in the same town. They also opened other training colleges at Aburi, Abetifi, Krobo Odumasi and Agogo in Ashanti Akim.

On Vocational and Technical education Antwi explains that, the Basel missionaries placed emphasis on inculcating industrial skills in their educational product. To this end they established Schools and departments to train Carpenters, Blacksmiths, Brick-layers and Bookbinders. In 1877 a three-year course in technical education was started in Accra. A technical education course was also attached to the missionary seminary at Akropong. At Aburi, Pottery, Weaving, Carpentry etc., were taught alongside Home Science for girls. A Vocational institute was opened at Abokobi for girls in the present day Greater Accra Region. This is one of the reasons for which the researcher is emphasizing on Technical, Vocational education training to inculcate industrial skills into Ghanaians to fit into industry, be self-employed and entrepreneurs to provide jobs for others to reduce the rate of unemployment in the country.

Antwi (1992) emphasizes that Agriculture education was also a concerned to the Basel missionary therefore they established farms in all the areas where they opened schools. Agriculture was made a compulsory subject in all Basel institutions starting from Akropong. They opened a model farm at Abokobi and did well in introducing agricultural crops such as cocoa, coffee and pineapple growing. As said before, the second focus of the researcher is emphasizing and encouraging Agriculture education since it is one of the

ways to ensure poverty reduction as indicated by Alhassan (1994) that Agriculture is the main stay of Ghana's economy providing employment and source of livelihood to about 70% of the labour force therefore, there is the need to focus on Agriculture and take it serious to achieve growth and development needed for the Country.

2.1.1 The Administration of Education on the Gold Coast (1840-1957)

Government attempts to increase educational activities on the Gold Coast began with the signing of the Bond of 1844. This was a political, military agreement between the British and a number of coastal Fanti chiefs. In the agreement, the British were allowed to intervene in criminal cases, provide military protection for the region, and, above all, to collaborate with the chiefs to "mould the customs" of the coastal peoples along lines of the "general principles of English law." It was in accordance with the spirit of the bond that Governor Hill proposed his 1852 Ordinance. This recommended that a poll tax be imposed to finance the general improvement of the territories including the provision of education that could lead to the establishment of a better educated class of African (Norregaard,1970).

Following the consolidation of the coastal region as the British Gold Coast Colony, Harry (1981) asserts that the administration became more aggressive in pursuit of its educational policy. He adds that this was precipitated by the British purchase of the Danish property at Christiansburg in 1850 and the Dutch Elmina Castle in 1872. To help redress problems faced by the mission schools such as training local teachers and improving the quality of education the administration made grants to both the Wesleyan and Basel missions in 1874. In the Educational Ordinance of 1882, government grants to denominational schools were made dependent on an assessment of the level of efficiency.

The schools receiving grant-in-aid were defined as "government assisted schools," but their primary funding was to come from the missions themselves and from other private sources. There were also proposals for publicly funded government schools. Industrial schools were identified as important for the Gold Coast, and a Board of Education was recommended to monitor the school system. Rev. Sutter of the respected Fourah Bay College in Sierra Leone was appointed to the position of Inspector of Schools in the Gold Coast Colony.

With reference to Nyarko (1988) the administration's desire in the 1880s to provide funds in support of education was interesting, since at the same time it rejected calls to contribute to the construction of rail lines to the gold mines that made the Gold Coast Colony a worthy territory. The support for education must have received an indirect boost from the General Act of the Berlin Conference on Africa, in which education was described as an important European civilizing mission to Africa. Even more important was the fact that the conference gave international recognition to British colonies in Africa, including the Gold Coast. Like other Europeans that had consolidated parts of the African coast, aggressive expansion into the hinterlands was also defined as natural by the Neutrality Articles of the Berlin agreement. The government's renewed interest in education in the colony should therefore be evaluated in relation to the perceived benefits to be derived from the colony in the future. Thus, in an Education Ordinance of 1887, the government called for improvements in the school curriculum, teacher certification, and practical education for pupils. It also set the standards by which private schools might qualify for assistance. In F. Wright's 1905 essay on the "System of Education in the Gold Coast," a total of 132 mission schools were said to be in existence by 1901.

2.1.2: Improvements in Education

The First Half of the Twentieth Century (Foster, 1967) despite the colonial efforts to assist and regulate schools, the provision of education in the Gold Coast was carried out primarily by Christian denominations. Mostly, the mission schools provided rudimentary teaching at the primary level. In fact, it was still traditional for students seeking higher education to travel to either Europe or the Fourah Bay College in Sierra Leone. It is also significant to note that, because effective colonial authority could not be secured in the Asante interior until after 1904, the provision of education continued to be limited to the coastal areas of the colony and the Akuapem Ridge. Moreover, education for girls and practical training in the field of agriculture and in the crafts continued to be limited in scope. The inadequacies inherent in the system were observed in the post-World War I appeal made by the Foreign Missions Conference of North America to the Phelps-Stokes Funds for a review of the state of education in Africa. The Phelps-Stokes Commission on Africa issued reports in 1922 and 1925 in which educators were criticized for inadequately catering to the social and economic needs of the continent. The commission called for instructions in the mechanical operations necessary for the improvement of the condition of the mass majority of the people. This included science education and character training (Foster, 1967).

Forster continues that certainly, the commission saw the Tuskegee/Hampton program in America as more suitable for Africa than the program that was provided in the castle and mission schools. But the Phelps-Stokes report was not the only source of commentary on education in the colonies. In England, the Education Committee of the Conference of Missionary Societies in Great Britain and Ireland also submitted a

memorandum on African education to the Secretary of State. In 1923, the Secretary of State for the Colonies responded with the appointment of an Advisory Committee to study and report on native education. Despite its advisory status, the committee made several major policy recommendations. Between 1925 and 1948, it issued four reports covering such topics as mass education, citizenship education, and guidelines for the overall development of education. Their list of recommendations included the following: greater government supervision of all educational institutions and the creation of local advisory committees, improved funding for education so as to attract the best calibre of people into the colonial education system, equal emphasis on religious and secular subjects, production and use of vernacular textbooks, technical education for natives, training of native teaching staff adequate in qualification and character needs of the territories, and education for girls. For all of the above to be coordinated, the appointment of an Inspector of Schools was deemed necessary.

On the Gold Coast, Baffour (2000) posits that the appointment of Brigadier General Gordon Guggisberg as governor brought its own advantages. During his tenure from 1919 through 1927, Governor Guggisberg initiated several major developmental programs that included educational improvements as a critical ingredient in his construction of a modern Gold Coast. While the previous administration had seen the provision of elementary schools by the various Christian missions as adequate, Guggisberg was of the conviction that the current system could not sustain future developments. In fact, only a few months after his arrival, the governor presented a 10-year development plan for the Gold Coast. Among other things, funding was aggressively sought for post elementary education for boys and girls. Even though the administration

proposed a technical college for Accra, the Prince of Wales College (now Achimota College) was the real trophy of the administration's educational program.

This nondenominational school catered to students from kindergarten to the pre-university level. Full teacher training and kindergarten programs opened at the school in January of 1928. The other programs came later, but by the outbreak of World War II, the college was offering a great variety of courses. George (1976) admits that Historians have recognized Guggisberg's contributions as a critical government effort in constructing a firm foundation for the future manpower training of the people of the Gold Coast. But the Government College at Achimota was not the only important grammar school to be established before the country's independence in 1957. In fact, schools established by secular as well as the various Christian denominations included many prestigious institutions, such as Adisadel College, Aggrey Memorial College, Mfamtsipim School, Wesley Girls School, St. Augustine College, Prempeh College, Ghana National College, and several Presbyterian institutions in the Akuapem and Kwahu Regions. The Catholic Church started missionary activities in the country's northern territories in 1910. Information from the "Gold Coast Report on Education for the Year 1951" indicated that a total of over 300,000 students were enrolled in schools. There were primary and middle schools, teacher colleges, and at least 60 secondary schools already in place, yet the numbers were still considered to be grossly inadequate for the needs of the country when it gained its independence in 1957.

It can be deduced from the forgoing discussion that, School Education/Formal Education was introduced into Ghana in the 16th century by the early European traders who ran such schools in the castle/ports which were built along the Coast for trading

purposes. The Portuguese who were the first to establish a settlement along the coast opened the first castle school in the Elmina Castle in the 16th Century. The Dutch who ousted the Portuguese also established a school in Elmina Castle in 1644. The English also founded a school in the Cape Coast in 1694 while the Danes opened a similar institution in the Christiansburg Castle in 1722. The medium of instruction in the Castle Schools was a foreign language depending on the one who founded the School. The pupils were largely the sons of the European merchants and local women (mulattoes). The enrolment was supplemented by the admission of children of some wealthier African traders in the Urban Centres.

The development of education in Ghana cannot be complete if we turn a blind eye to the contribution of missionary bodies. Indeed the spread of formal education from the coastal areas into the interior was the work of various missionary bodies. The primary aim for Formal education in Ghana was to educate the pupil for employment in their European commercial enterprises along the Coast. The development of this Western Education in Ghana was further propounded by the Missionary bodies in diverse ways. All the Missionary bodies stressed on the need for Technical, Vocational and Agricultural Education at various levels of education because Technical, Vocational education training inculcates industrial skills into the individual whilst Agricultural being the main stay of the country's economy also provides unlimited opportunities needed to achieve growth and development.

This is the stand of the researcher as he seeks to re-emphasize on the need for Technical, Vocational and Agriculture education and training to be reconstructed and reconstituted into the minds of Ghanaians because of the roles they play in the growth

and development of this country. The history of education is equated to the history of teaching and learning. Each generation, since the beginning of human existence, has sought to pass on cultural and social values, traditions, morality, religion and skills to the next generation. The passing on of culture is known as enculturation and the learning of social values and behaviours is socialization. The history of the curricula of such education reflects human history itself, the history of knowledge, beliefs, skills and cultures of humanity (Encyclopaedia Britannica, 2007). Smith (1980) posits that universal education of all children in literacy has been a recent development, not occurring in many countries until after 1850 CE. Even today, in some parts of the world, literacy rates are below 60 per cent (for example, in Afghanistan, Pakistan, and Bangladesh). Schools, colleges and universities have not been the only methods of formal education and training. Many professions have additional training requirements, and in Europe, from the middle ages until recent times, the skills of a trade were not generally learnt in a classroom, but rather by serving an apprenticeship.

Deducing from this historical data, it is evidence that education took its root from the beginning of man's creation where orders were carried out from God to Adam and Eve and from our cradle to grave. Superiors in ancient civilizations orally and practically transmitted knowledge and skills to their subordinates. It was also given by parent or guardians, extended families, grandparents and experienced persons on a particular job. This form of education does not follow any system or trend. But nowadays, education consists of systematic instruction, teaching and training by professional teachers in class rooms.

2.2 Concept of Education

The word education has a wide meaning. It is not a unitary concept. It will be difficult to pin down the concept of education to a concise all-embracing definition; everybody seems to have his own concept of education which is influenced by his own outlook on life and his past experiences. These suggest therefore that the various meanings of education will differ in length, in phraseology and in degree of clarity (Diane, 2010).

Glenn (2009) posits that definitions of education deal with the central meaning of a concept which etymologically comes from Educare which means to lead out or to bring out. Therefore, there are no much differences in definitions as find in the contexts. The ancient philosopher Plato saw education as a form of conversation. He therefore, defined education as the turning of the eye of the soul from darkness unto light.

Education, according to Porty (1998) is a process of the reconstruction and reconstitution of experiences; given it a more socialized value through the medium of increased individual efficiency. In view of this the researcher focuses on Technical, Vocational and Agricultural education because they are the important developmental areas which require reconstruction and reconstitution. Because of their importance, priorities were given to them since the inception of education in the Gold Coast times because there was the need for food security and practical skills to be able to integrate Ghanaians in to the society they belong to and also give practical experiences that enables the individual to be self-reliant and skillful enough to fit into industry with the requisite input for developments.

White (1982) has it that, education is the acquisition of the art of utilization of Knowledge. Peters (1976) describes education as the developments of desirable qualities of mind in a person and the developments of knowledge and understanding in depth and in breadth. He establishes three criteria in his stipulated definition as follows:

- Education deals with passing down worthwhile or useful values within a society;
- Education must involve some knowledge and understanding;
- Education should involve only practices that are voluntary.

Education is the development of the whole man, intellectually, morally, spiritually and physically (Vernon, 1996). Education in the view of (Nyarko, 1988) is what happens to us from the day we emerge from the womb to the day we enter the tomb. This means education is a process which includes all those experiences we encounter from the day we are born to the day we die. In pre-literate societies, Nyarko stresses that education was achieved orally and through observation and imitation. The young learned informally from their parents, extended family and grandparents. At later stages of their lives, they received instruction of a more structured and formal nature imparted by people not necessarily related, in the context of initiation, religion or ritual. Nyarko further records that, as the customs and knowledge of ancient civilizations became more complex, many skills were learnt from an experienced person on the job, in animal husbandry, agriculture, fishing, preparation and preservation of food, construction, stone work, metal, work, boat building, the making of weapons and defenses, the military skills and many other occupations.

The World Bank Group (2010) has it that the benefits of Technical, Vocational and

Agriculture education to the individual is seen through; Improve health and nutrition, Increase Productivity and Earnings, and Reduction in Inequality. The World Bank Group adds that the Benefits of Technical, Vocational and Agriculture education to society is also seen through; the Drives of Economic Competitiveness, Synergistic Poverty-reduction effect, Contribution to Democratization, Promotion of Peace and Stability and the Promotion of Concern for the environment. Technical, Vocational and Agriculture Education is therefore the upliftments of the human resources by promoting the transmission of political, economic and social ideas and skills needed to improving the condition of the people in the nation.

It can be established that anybody who knows how to use knowledge properly has gone through education. The individual cannot be said to be educated simply by receiving book knowledge. It is only when such knowledge is seen to transform the whole human being and used to improve efficiency that you can say a person is educated. Education in my view is the acquisition of practical and skilful knowledge through Technical, Vocational and Agriculture education and transforming this knowledge into job opportunities.

2.3 Education and National Development

In everyday life, we often hear people complain that their villages, towns or cities have not seen development over a period of time. Development as used in this context (Nelson, 1996) means that there has not been an increase in the size of the village, town or city, or construction of new buildings, roads, or supply of potable water and improvement in general life-style of the people. Nelson adds that, similarly, we hear people asking for either the extension of a road in their area or the construction and

tarring of more of their feeder roads. In other words, the people are asking for a quantitative increase in the road network of their area. Asking for the tarring of their road, means changing the road from one state (gravel, feeder) to another state (tarring). This means a qualitative change of the road from a bad to good state. This implies that, qualitative changes at times include quantitative change or may start from the quantitative.

Boateng (1996) admits that, the word development refers to the qualitative changes that an individual undergoes in the course of his or her life span. It means a progressive series of changes that occur in an orderly, predictable sequence or pattern. Koomson (2000) confirms that, development is a sequence of changes in human, group of society; example nation. He adds that development is an outcome, result or new event. These changes occur as a result of maturation and experience. Hornsby (1995) reiterates that development is the act of being developed or developing. Development is generally accepted to be a process that attempts to improve the living condition of people (Perter, 1986). This is true in the sense that, once people have access to good infrastructures such as good roads, hospitals, potable water supply, schools etc. and can access these facilities to their advantage their living condition is improved because people need good roads for the movements of goods and services, attend to hospitals when their sick, drink good and potable water to prevent diseases and to have education.

The acquisition of these infrastructures can only be possible when we give the needed attention to Technical, Vocational education training since this is the only way that a country can produce proper human resource such as Engineers, Technicians, Labourers and others to fashion out these infrastructures mentioned above. The study

seeks to draw the attention of Ghanaians through Textile prints on the importance of Technical, Vocational education training to bring developments to the country.

The Hutchinson Encyclopaedia (2000) emphasizes that, development in social science is the acquisition by the society the industrial techniques and technology. Development is the understanding of oneself and ones situation, and finding ways to make it better. It is within yourself, the environment and the community (Melanie, 2005). The act of developing or disclosing that which is unknown; a gradual unfolding process by which anything is developed, as a plan or method, gradual advancement or growth through a series of progressive changes; also, the result of developing, or a developed state (Baffour, 2000).

It is evident from the above concept of development that, the term is used to describe new product, an idea and the process of economic and social transformation within villages, towns, cities and countries at large that is aimed at improving the living condition of people. This has been the focal point of the researcher as he is aimed at re-echoing these developmental ideologies through the use of textile medium to emphasize the importance of technical/vocational and agriculture education as the means through which these developments can be reached.

Education is an engine for national development therefore the ability of an individual to go through a process of mental transformation that enhances the learner in thinking and reasoning. This enables him or her to positively impact in to society on resource utilization in a manner that improves the quality of life of its people.

National Development refers to the progress a nation makes using its school education, science and technology and its human and material resources in a manner that

improves the quality of life of its citizens (Antwi, 1992) National development can be considered as a process of improving or changing for the better, the political and socio-economic conditions of the people within a nation (Locke, 2000).

Development of the human resource is most essential for national development (William, 1982). Education and national development is the progress a nation makes in terms of the extent to which it has overcome its complex social, economic and political problems in a manner that improves the quality of life of its citizens. There is relationship between national development and formal education. Education is considered to be the key of national development because (Annoh, 1992):

- Education produces the labour force for a nation's commerce, industry, civil service etc., and so contributes immensely to national development.
- It raises the level of science and technology in a country by producing more scientists and technologists.
- The discovery of new ideas and skills in schools through research for solving social and economic problems contributes to national development.
- Education brings attitudinal changes which promote national development. For example, education has minimized tribalism in Ghana by bringing together people of varied ethnic backgrounds.
- It awakens the political consciousness of individuals through training and in citizenship, patriotism and values in democracy.
- It instills into individuals knowledge about improved scientific and technological approaches to basic economic activities such as farming.

- It helps people to adapt to change by transmitting new attitudes, skills and knowledge or by reinterpreting old ones or by teaching specific information for dealing with specific situations.
- It serves as a vehicle for preserving and transmitting cultural heritage but at the same time, it is a vehicle for innovating the culture to reconcile it with the demand of a changing society (Annoh, 1992).

Education is central to development. It empowers people and strengthens nations. It is a powerful equalizer, opening doors to all to lift themselves out of poverty. It is critical to the world's attainment of the Millennium Development Goals (MDGs). Moreover, education especially girls' education has a direct and proven impact on the goals related to child and reproductive health and environmental sustainability. Education also promotes economic growth, national productivity and innovation, and values of democracy and social cohesion (The World Bank, 2010).

It is obvious from the above assertions that national development is achieved through effective education of a country. It empowers the individual and improves the quality of life of the people and allows the country to overcome its social, economic and political problems. Therefore when an individual receives Technical, Vocational and Agriculture education, the person becomes self-dependent and is empowered with creative and practical skills to create job for people to be employed to earn income. This will improve the life of the employee because he gets income to take care of his families, pay rent and utility fees. This however solves the social problems of unemployment.

2.4 General Philosophies of Education

Locke (1996) mentions that, the word education is used sometimes to signify the activity, process, or enterprise of educating or being educated and sometimes to signify the discipline or field of study taught in schools of education that concerns itself with this activity, process, or enterprise. As an activity or process, education may be formal or informal, private or public, individual or social, but it always consists in cultivating dispositions (abilities, skills, knowledge's, beliefs, attitudes, values, and character traits) by certain methods. As a discipline, education studies or reflects on the activity or enterprise by asking questions about its aims, methods, effects, forms, history, costs, value, and relations to society.

Glenn (2009) describes philosophy of education as either the philosophy of the process of education or the philosophy of the discipline of education. That is, it may be part of the discipline in the sense of being concerned with the aims, forms, methods, or results of the process of educating or being educated; or it may be meta-disciplinary in the sense of being concerned with the concepts, aims, and methods of the discipline. However, even in the latter case it may be thought of as part of the discipline, just as meta-philosophy is thought of as a part of philosophy, although the philosophy of science is not regarded as a part of science. Historically, philosophies of education have usually taken the first form, but under the influence of analytical philosophy, they have sometimes taken the second.

Noddings (1995) explains that, the first form of philosophy of education was traditionally developed by philosophers for example, Aristotle, Augustine, and John Locke as part of their philosophical systems, in the context of their ethical theories.

However, the twentieth century philosophy of education tends to be developed in schools of education in the context of what is called foundations of education, thus linking it with other parts of the discipline of educational history, psychology, and sociology rather than with other parts of philosophy.

In the view of Harry (1995), Philosophy of education does not describe, compare, or explain any enterprises to systems of education, past or present; except insofar as it is concerned with the tracing of its own history, it leaves such inquiries to the history and sociology of education. Analytical philosophy of education is meta to the discipline of education to all the inquiries and thinking about education in the sense that it does not seek to propound substantive propositions, either factual or normative, about education. Harry continues that, it conceives of its task as that of analysis: the definition or elucidation of educational concepts like teaching, indoctrination, ability, and trait, including the concept of education itself; the clarification and criticism of educational slogans like "Teach children, not subjects"; the exploration of models used in thinking about education (for example, growth); and the analysis and evaluation of arguments and methods used in reaching conclusions about education, whether by teachers, administrators, philosophers, scientists, or laymen

It is obvious from the above literature that there are many kinds of philosophies, and many ways of philosophizing, so there are many kinds of educational philosophy and ways of doing it. In a sense, there is no such thing as the philosophy of education; there are only philosophies of education that can be classified in many different ways. Analytical philosophy uses the tools of logic and linguistics as well as techniques of analysis that vary from philosopher to philosopher. Its results may be valued for their

own sake, but they may also be helpful to those who seek more substantive empirical or normative conclusions about education and who try to be careful about how they reach them. This entry is itself an exercise in analytical philosophy of education.

Stone (1979) postulates that, normative philosophies or theories of education may make use of the results of such analytical work and of factual inquiries about human beings and the psychology of learning, but in any case they propound views about what education should be, what dispositions it should cultivate, why it ought to cultivate them, how and in whom it should do so, and what forms it should take. Some such normative theory of education according to stone is implied in every instance of educational endeavour, for whatever education is purposely engaged in, it explicitly or implicitly assumed that certain dispositions are desirable and that certain methods are to be used in acquiring or fostering them, and any view on such matters is a normative theory of philosophy of education. But not all such theories may be regarded as properly philosophical. They may, in fact, be of several sorts. Some simply seek to foster the dispositions regarded as desirable by a society using methods laid down by its culture. Here both the ends and the means of education are defined by the cultural tradition. Others also look to the prevailing culture for the dispositions to be fostered but appeal as well to experience, possibly even to science, for the methods to be used. It is obvious that both the analytical and normative philosophy of education enquires about the individual's disposition and influence of culture over the acquisition of the educational disposition. They also seek to know what, how, why and in whom this education be fostered.

In a more pluralistic society Stone opines that an educational theory of a sort may arise as a compromise between conflicting views about the aids, if not the methods of education, especially in the case of public schools. Then, individuals or groups within the society may have conflicting full-fledged philosophies of education, but the public philosophy of education is a working accommodation between them. More comprehensive theories of education rest their views about the aims and methods of education neither on the prevailing culture nor on compromise but on basic factual premises about humans and their world and on basic normative premises about what are good or right for individuals to seek or do. Proponents of such theories may reach their premises either by reason (including science) and philosophy or by faith and divine authority. Both types of theories are called philosophies of education, but only those based on reason and philosophy are properly philosophical in character; the others might better be called theologies of education. Even those that are purely philosophical may vary in complexity and sophistication (Stone, 1979).

Porty (1993) emphasizes that in such a full-fledged philosophical normative theory of education, besides analysis of the sorts; there will normally be propositions of the following kinds:

1. Basic normative premises about what is good or right;
2. Basic factual premises about humanity and the world;
3. Conclusions, based on these two kinds of premises, about the dispositions education should foster;
4. Further factual premises about such things as the psychology of learning and methods of teaching; and

5. Further conclusions about such things as the methods that education should use.

In view of these propositions the researcher emphasizes on Technical, Vocational and Agriculture education since they provide the basic grounds for humanity to acquire technical and practical know-how, to be independent, self employed and create more job opportunities. This is the best disposition education should foster.

Vernon adds that, Aristotle argues that the good equals happiness equals excellent activity; that for a individual there are two kinds of excellent activity, one intellectual (e.g., doing geometry) and one moral (e.g., doing just actions); therefore everyone who is capable of these types of excellent activity should acquire a knowledge of geometry and a disposition to be just; that a knowledge of geometry can be acquired by instruction and a disposition to be just by practice, by doing just actions; and that the young should be given instruction in geometry and practice in doing just actions. In general, the more properly philosophical part of such a full normative theory of education will be the proposition it asserts in (1), (2), and (3); for the propositions in (4) and hence (5) it will, given those in (3), most appropriately appeal to experience and science. Different philosophers will hold different views about the propositions they use in (1) and (2) and the ways in which these propositions may be established (Vernon, 1996).

Vernon continues further that, although some normative premises are required in (1) as a basis for any line of reasoning leading to conclusions in (3) or (5) about what education should foster or how it should do this, the premises appearing in (2) may be of various sorts empirical, scientific, historical, metaphysical, theological, or epistemological. No one kind of premise is always necessary in (2) in every educational context. Different philosophers of education will, in any case, have different views about

what sorts of premises it is permissible to appeal to in (2). All must agree, however, that normative premises of the kind indicated in (1) must be appealed to. Thus, what is central and crucial in any normative philosophy of education is not epistemology, metaphysics, or theology, as is sometimes thought, but ethics, value theory, and social philosophy (Vernon, 1996).

Inferring from the literature, it is apparent that, philosophy may be analytical, speculative, or narrative and normally goes on in a society in which there is already an educational system. Then, in that instance, philosophy may turn its attention to education, thus generating philosophy of education proper and becoming part of the discipline of education.

2.5 Philosophies of Ghanaian Education with Special Reference to Technical, Vocational and Agriculture Education

The Governments of Ghana accept that education should result in the formation of well balanced individuals with the requisite knowledge, skills, values, attitudes and aptitudes to enable them become functional and productive citizens. In this regard, the educational system should lead to improvement in the quality of life of all Ghanaians by empowering the people themselves to overcome poverty, and create the wealth that is needed for socio-economic transformation of the country. To this end the education reform of 2007 places emphasis on

Technical, Vocational, Agriculture and Information Technology education (Wilson and Joseph, 2008).

Therefore, the general philosophy of Ghanaian education has to do with poverty alleviation and wealth creation. This has been concluded by Mensah (2006) that the

reforms made by previous Government since independence up to recent times have the general philosophy of making Ghanaians self reliance or self actualization. Self reliance or actualization can better be achieved through Technical, Vocational and Agriculture education as these are aimed at equipping one with practical and employable skills.

According to UNESCO and ILO (2000) our young people are shunning the existing Technical, Vocational education programs, which appear to have no meaningful bearing on improving our infrastructure and ways of living. Therefore, very few of our young people have the skills in industry that could be used to directly improve the quality of infrastructure we are building for our future.

It is worthy to note that as part of the philosophy of Ghanaian education, emphases were placed on Vocational, Technical and Agricultural education as indicated in UNESCO and ILO (2002), that Vocational and Technical education is generally presumed to be practical and technical-oriented and primarily geared towards helping the individuals to acquire skills which enable them to earn a living and also develop creative and manipulative skills needed to generate technological innovation. Manjichi and Brouwer (2007) confirm that Vocational, Technical education produce skilled craft men and women who will be self employed and to build a vibrant economy to accelerate national development.

The most important economic sector in Ghana that employs more than half the population on formal and informal basis accounting for almost half of Gross domestic Product (GDP) and export earnings, is agriculture. Ghana produces a variety of crops in various climatic zones. Agricultural crops, such as yams, grains, cocoa, oil palm, kola nuts and timber, form largely the basis of Ghana's economy. Apart from crop production

other aspect of Agriculture such as animal, fruit and vegetables production are also important to the national economy (Boateng, 1996). Reduction of poverty and self sustainability is achieved through agriculture since the sale of agricultural raw materials and foodstuffs may be made available for further investment in industry and agriculture. Thus the more rapidly agriculture productivity can be expanded; the more capital should be available for further investment for the Nation (Seidman, 1989).

Agriculture is the main stay of a country's economy and a country that produces adequate food to feed its citizens at a cheaper cost is on its way to development, because people will spend only a small amount of their income on food and save the rest towards investment for economic growth (Yeboah, 2011). Ghana being an agriculture country has about 70% of its population engaging in agricultural activities therefore, it serves better for government to focus on agriculture education because it is the main stay of a country's economy (Baffour, 2000).

The Ghanaian educational policy emphasizes the teaching of science and information technology, and it is not surprising that the new educational reform seeks to make educational products more employable in the global market. Vocational, Technical education is associated with subjects like Fashion, Catering, Leatherwork, Textiles, Basketry, Jewellery, Science, Woodwork, Metalwork, Building Construction etc (Annoh, 2001) which seek to provide the individual with practical but employable skills to be able to compete in the global market.

Baffour (2000) states that, as part of the accelerated development plan for education in 1951, the government place high importance on Technical, Vocational education hence the introduction of Secondary/Technical schools, polytechnics and

universities, where much more needed technical scholars controlling vital organs of national development and economy were produced. This shows that the Technical, Vocational and Agriculture education are key to Ghanaian education and are important engines in the development of the country. There is therefore the need for a country to produce more food to feed its nationals at a cheaper cost for economic development.

The philosophy of Technical, Vocational education is to equip young graduates with the skills to do productive work using levels of technology that suit their communities (John, 1996), whilst the philosophy of agriculture education has to do with reduction of poverty and self sustainability. This is achieved through the sales of agricultural raw materials and foodstuffs may be made available for further investment in industry and agriculture (Seidman, 1979). Individuals who have received education in Technical, Vocational Agriculture generate incomes for themselves, add to the prosperity in their communities and even safeguard the environment.

Technical, Vocational education also produces technocrats who are self employed to bring creativity and skills in this modern day of information technology to make way for the development of a country (Thompson, 1996).

It is in line with these developmental agenda that the study aims at adopting interior textile design as a means of re-echoing this idea of the Technical, Vocational and Agriculture education to the public, in order that a lot of Ghanaian will enroll into this area of study to achieve the needed development. The justification for using interior textiles is that, there is everyday encounter with these textiles in our homes and offices as our eyes cannot be turned away from these textiles when we walk through the offices and

our rooms. This will sensitize us as we look at these furnishings on the importance of Vocational, Technical and agriculture education for the development of the nation.

2.6 Benefits of Technical, Vocational and Agricultural Education

Investment in Technical, Vocational and Agricultural education benefits the individual, society, and the world as a whole. Broad-based education of good quality is among the most powerful instruments known to reduce poverty and inequality. With proven benefits for personal health, it also strengthens nations' economic health by laying the foundation for sustained economic growth. For individuals and nations, it is key to creating, applying, and spreading knowledge and thus to the development of dynamic, globally competitive economies, and it is fundamental for the construction of democratic societies (Annoh, 1992).

2.7 Textile Designs for Interior Furnishing

Textile for Interior furnishing are designs used mainly for interiors of home and buildings and can be grouped under the following: upholstery, curtain, drapery, carpet and wall coverings (Hatch, 1993).

Variety of designs may be typified by the motifs, or subject matter; the style in which the motifs are rendered; and the arrangement or layout of the motifs combined with the colour look of the pattern to form a textile design (Yates, 1996). Tortora and Merkel (1995) explain textile design as an arrangement of forms or colours or both, to be implemented as ornamentation in or on various textile materials. Textile design can therefore be seen as the creative activity that involves translating ideas that has been conceived in the mind's eye into tangible form using appropriate tools and materials.

New designs are the result of the minds emotional desires to develop new plans and methods to formulate devices and ideas for expressions. The use of fabrics in furnishing rooms is closely related to the need for preserving heat and keeping out cold air in temperate climates. In the churches, painted textile drapery and loosely hung textile covering are fastened to the walls as furnishing (Hatch, 1998).

Furnishing in view of Anne (1998), is a fabric meant for use as curtains or upholstery in rooms or buildings. Tortora and Merkel (2005) confirm that, furnishing fabrics are decorative household fabrics such upholstery and drapery. Majory (1980), states that, furnishings include furniture, carpets, curtains, etc. used in rooms or houses as surface treatment for decoration and for preserving heat and keeping out cold air Hatch (1993) adds that, carpeting, draperies, curtains, upholstery, and wall coverings are the product of interior textiles which are used as surface treatments within homes and commercial buildings.

Textile design for furnishing is said to be the executions of an artwork using motifs, layouts and colour to fashion out design that could be used for curtain, carpet, upholstery, and wall coverings which serves as surface treatment to enhance the interiors of rooms and buildings. The various items used in furnishing with respect to rooms and buildings are interior decoration style and a consistent idea used throughout a room to create a feeling of completeness (Hatch, 1998).

It is evident that every household, public places, offices etc. need some kind of surface treatment in terms of curtain, upholstery, floor covering, wall covering etc. as surface treatment for decoration and for preserving heat and keeping out cold air it is for this reason therefore that the researcher finds these medium which are appropriate

surfaces to create textile designs that communicate the importance of Vocational, Technical and Agriculture education to Ghanaians as a tool for national development.

2.8. Design Layouts for Furnishing Textiles

Textile design types may be categorized by layout as well as by motif or style of pattern. Layout is the placement of the motif relative to another in the framework of the design plane. It takes into account the distance as well as the direction of the second motif in relation to the first motif. Layout and composition have the same meaning in textile design (Storey, 1993).

Yates (1996) has it that any specific motif recurs on the fabric at measured intervals because each motif holds a specific location within the unit repeat. Within the repeat unit itself, the motifs may be of any density; a variety of density is both more natural and more dynamic. The motifs within the unit repeat do not need to be evenly spaced. Whether the motifs are close together or far apart, they must have a consistent relationship with each other. It is the subtle differences in motifs and spacing that makes a textile design interesting.

Adu-Akwaboa (2001) explains that, layout or arrangement of motifs is an important process in textile design as this is the placement of one motif relative to the other taking into consideration the distance between the two motifs and the shape created by the space between the two motifs. He adds that, the direction of the motifs during the arrangement is also important and must be taken into consideration. This phenomenon can enhance or destroy the design since differences in direction create different negative spaces between motifs. The motifs can be arranged in a one-way direction with the right side pointing upwards or downwards or in two-way direction with some of the motifs upwards and

others downwards. The motifs can be tossed or in an all-over pattern where they are distributed in all directions. In this regard, the designer must be careful when dealing with motif directions because some motifs in textile design cannot be turned upside down due to their nature. Some of these motifs include humans and animals, figures, trees, buildings, vehicles and machines among others.

In view of the problems associated with types of motif and their arrangements, the one-way and two-way directions are more appropriate in executing designs for interior furnishing as the motifs run towards one direction or opposite each other in conformity to the drape of the fabric. The overall effect of a textile design according to Adu-Akwaboa is dependent also on the type of motif arrangement used by the designer. These include set layout where the motifs follow a definite plan or pattern, in rows, squares, etc. others are full drops, $\frac{1}{2}$ drops, $\frac{1}{4}$ drops, $\frac{3}{4}$ drops, stripe layouts, plaid layouts and ogee arrangements.

Writing on layout principles for interior furnishing, Yates (1996) asserts that a mode of arrangement for home furnishing has either been a vertical or horizontal, adding that a comfortable large drawing has an additional importance in home furnishing. Layouts for interior textiles are therefore regarded more carefully, but needless to say layout for apparel fabrics must also be thoughtfully designed. Important layout differences that may not be noticeable at first glance may be the precise elements providing the verve in a particular pattern. Such layouts are better appreciated on interior textiles than on apparel. This suggests that their distinctive qualities in interior textiles layout are more obvious when placed on simple and stationary pieces of furniture as opposed to the small shapes that make up a clothing.

Anne (1998) has it that upholstery, drapery, and wall covering have standard repeat sizes; these fabrics are usually designed in repeat. The repeat sizes for these uses are larger than those in apparel, and the motifs also are commonly larger since the fabric is used in large amounts and as simple shapes in the finished product with a repeat size of motif being 27" 27" or even larger.

It can be concluded based on the literature that layouts play a key role in textile designing because they help in enhancing the entire design. They are used effectively by taking into account the nature and size of the motifs to be used in the designing process so as to meet the consumers taste or to satisfy the end result. The layout principles for furnishing differ considerably from that of apparel and that the designer must know and apply the right layout principles to achieve better results.

2.9. Colours for Interior Furnishing

Designing for textiles differs from almost any other product design in that the way a fabric is coloured differs from that of most other designed products. Any textile pattern will be offered on the market in more than one colour combination; a room interior is finished using only one specific group of colours, interior textile designs must be developed in three or four equally appealing colour combinations (Yates, 1996).

Colour is an important consideration when choosing textile and textile item for home furnishing. Modern consumers demand that textiles used for furnishing are attractive, colourful, and resistant to spoilage by wear, sunlight and modern laundering systems. The colour of an article is always the first attribute used to describe it. Colours affect the way people feel; their moods can vary according to the colour scheme of their surroundings (Anne, 1998). Elaborating on significance of colour Jerstorp and Kohlmark

(1995) everyday thousand of colours flow toward us; these colours stimulate us and give us happiness. Colours have become natural elements in our lives that we have hard time imagining an existence without them. Colour is not just an aesthetic issue, but that it also has an effect on our well-being.

People tend to prefer colourful curtain, upholstery, carpet and floor coverings to decorate their rooms. These colours show the moods and emotion of people. Warm flavours of colour arouse excitements from warmth to comfort feelings while cool and soft colours are often labeled as calm offering peace of mind. Colour has been used to produce feelings of snugness or commodiousness, this reflects how people are pretended by different colour stimuli differ from person to person. Research has shown that men prefer cool, light and pleasant colour, while women prefer warm and dark colour. According to several research and studies, cultural background has strong influence on colour (Hitchcock and Johnson, 1992).

It can be said that, there is a wide range of colour for one to choose from. There is also no specific colour set for home furnishing. Since the choices of colour vary from person to person designers have provided designs in a wide array of colour schemes for consumers. The selection of a particular design or colour for home furnishing depends on the individual since colours affect the way people feel, their moods can vary according to the colour scheme of their surroundings. For the purpose of this study the researcher uses colours such as green, blue, yellow or gold and brown due to their influence on Technical, Vocational and Agriculture education in execution of his designs. The Green is associated with vegetation since we are dealing with Agriculture. The green colours

used in the designs symbolize growth and prosperity the country seeks to achieve through Agricultural practices to better the life of Ghanaians (Melissa and Doug, 2007)

The blue is associated with increase in energy and productivity in people. The Technical, Vocational and Agriculture education demands Ghanaians to be energetic and productive in these areas of the economy to create jobs and to able to fit into the Global markets. The blue colours used in the design symbolise responsibility, trustworthiness, integrity, righteousness and good fortune for Ghanaians (Antubam, 1963).

Yellow or gold is associated with egg yolk and precious mineral like gold. The yolk of an egg is the key protein that develops into a chicken. This implies that Ghana is a precious country endowed with uncountable natural and human resources therefore in order for Ghana to achieve the needed developments; attention should be given to Technical, Vocational and Agriculture education. The Yellow or gold colours used in the design symbolizes preciousness, royalty, wealth, prosperity, glory, maturity that Ghana is hoping to achieve in the near future (Asihene, 2004).

Brown is associated with colour of earth and is abundant in nature, wood or leather Ghana is abound with fertile and vase land that could be used for Agriculture purposes and to build the supporting small and large scale Industries in Technical, Vocational and Agriculture to advance the growth of the country. This colour symbolises earth, nature and genuineness and of Ghanaians (Antubam, 1963).

It can be concluded from the entire literature that the philosophy underlying the Ghanaian educational system is to create a well balanced individual who is intellectually, spiritually, emotionally and physically sound with the requisite knowledge, skills, values and aptitudes for self-actualization and for the socio-economic and political

transformation of the nation. It is an undeniable fact that education contributes to improving security, health, prosperity and ecological equilibrium in the world. In the existence of humanity education is indispensable. Technical, Vocational and Agriculture education during colonial times were recognized as essential areas within the Ghanaian economy to aid in achieving growth and development. For this reason, the new educational reform in Ghana has re-stated the need for Technical, Vocational and Agriculture education as one of the important areas for self-actualization and attainments of the socio- economic and political transformation of the nation.

The researcher in view of this aims at complementing the Governments effort by re-echoing the importance of Technical, Vocational and Agriculture education in the achievement of growth and development of Ghana through the use of textiles designs for interior furnishing to communicate these ideologies.

2.10 Working Principles of Adobe Photoshop

2.10.1 Introduction

The main tool used in generating the designs is Adobe Photoshop software. This is a graphic-editing programme developed and published by Adobe systems. It is the current and primary popular bitmap and image manipulation software of Adobe systems. This programme has been described as an industry standard for graphics and image editing professionals. Therefore this programme is best suited for the study since the study implores the use of images and pictures. According to Thomas et al (2002) the following are the general procedure involved in the application of the programme:

2.11 Launching Adobe Photoshop 7.0

- Click on the start menu of the task bar (at the bottom left corner of the screen)
- Move cursor and select Adobe Photoshop.
- Double click on Adobe Photoshop 7.0 to display it.

The Adobe Photoshop 7.0 workspace focuses on creating and editing images.

The workspace features menus, a variety of tools/palettes for viewing, editing, and adding relevant elements to images. Plate 4.10 shows Adobe Photoshop workspace.

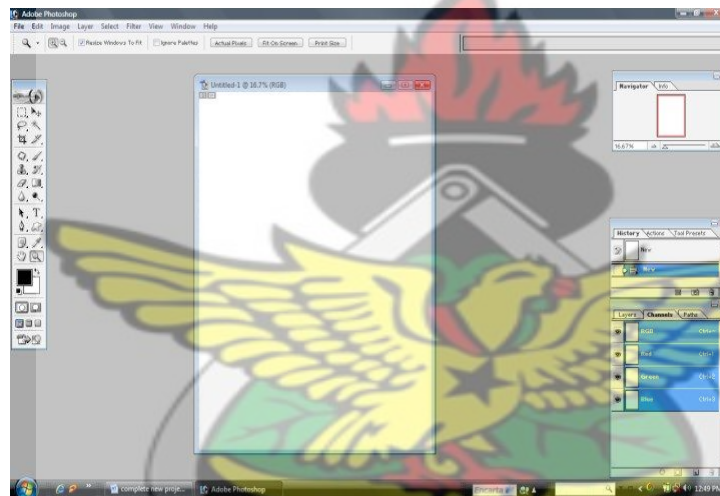


Plate 2.1: An opened Photoshop 7.0 workspace

A workspace is any arrangement of various elements such as panels, bars, and windows which help to create and manipulate documents and files.

- The menu bar across the top organizes commands under menus.
- The tools panel (called the tools palette in Photoshop) contains tools for creating and editing images, artworks, page elements, and so on. Related tools are grouped together.

- The control panel (called the option bar) displays options for the currently selected tool.
- The document window (called the stage in flash) displays the file being worked on. Panels (called pallets) help you monitor and modify the design.

2.11.1 The tool bar

The program contains a set of tools that enables one to achieve any task set for a work. The toolbar can be activated by selecting tools from the view menu. The tool bar is shown in Plate 4.11 with the various features or tools.

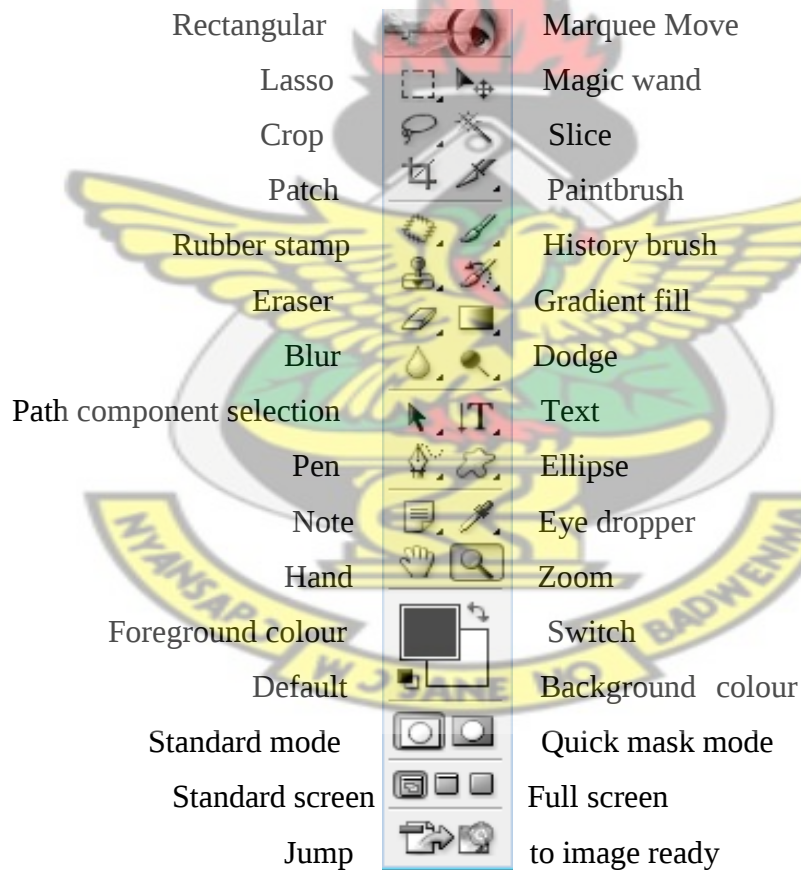


Plate 4.11: The toolbar

2.11.2. Uses of the Tools

Rectangular Marquee: This tool is used for quick selection of wider areas on an image.

Move Tool or Pointer: This tool is used in selecting, moving and resizing images.

Lasso Tool (polygonal/magnetic): These tools are used for creating freehand selections.

Magic Wand: It is used to select pixels that have the same colour brightness or hue.

Cropping Tool: This is used for selecting and trimming of unimportant areas of a picture.

Slice Tool: It is used for trimming and shaping images.

Air Brush Tool: It gives varied subtle colour saturation by working like a spray can.

Stamp Clone Tool: It is used to produce same effect or appearance at one side or another Side of a picture.

Eraser Tool: It is used for erasing unwanted areas of an image.

Blur Tool: It gives a blur effect on an object or picture.

Paint Brush: It works like a real painting brush for colour and gives same effect on a Picture or drawing.

History Brush: This tool gives the designer the opportunity to recap old or same feature on a working object when changes occur in the picture.

Gradient Fill Tool: This tool gives a smooth colour shade or flint on a selected area or object.

Dodge Tool: It is used to alter subtle changes on selected parts of an object.

Zoom/Magnifying Tool: This tool increases the size of objects for clarity.

2.11.3 Loading the Picture in Photoshop

- Select file and click open.
- Photoshop displays contents of a directory on drive C.
- Navigate file system and choose the right image.

2.11.4 Picture Duplication

- The picture is duplicated in order to keep the original picture.
- Duplication is done by clicking on an image in the menu bar.
- Select duplicate from the sub menu.
- Give the new picture a different name and click OK
- After these basic processes, the image or picture in focus is taken through some of the following procedures:

2.11.5 Cropping of the Picture

Cropping is selecting and cutting an interesting part of a picture to work upon.

- To crop an image, the cropping tool is selected.
- A bounding square box (cropping marquee) is displayed on the picture.
- The pointer is moved to a corner of the picture where the cropping is to start.
- The pointer is moved diagonally over the image to make the selection.
- Adjustments can be made by pulling on the bounding square box.

2.11.6 Changing the Mode of the Picture

Thomas et al (2002) is of the view that pictures snapped with cameras are always in the RGB colour mode and this mode is not suitable for textile designing. The mode is changed for easy operation. For this reason, the colour picture is first converted into gray scale mode from RGB. Gray scale converts into different shades of gray and black-and-white. Multichannel mode images contain 256 levels of gray in each channel and are useful for specialized printing.

- This is done by choosing 'Image' on the menu bar.
- Selection of Mode > Gray scale is made.

- When asked to discard colour info, click OK. Photoshop converts the colours in the image to black, white, and shades of gray.
- The picture mode is again changed to multichannel.

This allows the designer to manipulate a separate colour within a different channel for each design. This checks the colour separation of designs made. This is done by selecting 'Image > Mode > Multichannel.

2.11.7 Sketching the Motif

This gives the image a sketchy appearance. These outline effects generally capture the broad mood of the scene and this helps in working out ideas for a finished composition. It is useful for creating a fine-arts or hand-drawn look. To sketch;

- Move to filter on the menu bar.
- Select sketch within the submenu given.

There are several commands categorized under sketch sub menu.

- Choose the appropriate command from the options. The choices to be made can either be stamp or photocopy.

2.11.8 Photocopy and Stamp

Thomas et al (2002) add that photocopy stimulates the effect of photocopying an image. Large dark areas tend to be copied only around their edges, and mid-tones fall away to either solid black or solid white. Stamp simplifies the image so that it appears to be created with a rubber or wood stamp with bold and definite outlines. This filter is best used for black-and-white images. If no dialogue box appears, the filter effect is applied. If a dialogue box or the filter gallery appears, enter values or select options, and then click

OK. Filter gallery provides a preview of many of the special filter effects. When satisfied with the preview, apply to the image.

2.11.9 Checking a repeat out of the Picture

Repeat of a design is always checked in textiles when one end of the picture is joined to the other end. This is done to make sure that during printing the design pattern would be reproduced uniformly across the surface with no overlapping effect or gaps which may distort the design.

In checking the repeat:

- Select Filter > Other > Offset the selection.
- Wrap around option is then selected from the option box. This option joins one end of the design to the other end to check the repeat of the design.

The figure entered within the option box would determine the specified Offset amount moved horizontally or vertically.

2.11.10 Deriving the Repeat out of the Selection

To make a repeat out of the pattern made, the design is pattern defined. This is done by selecting.

- Define Pattern 'under Edit' on the Menu bar'.
- Give a Pattern Name and click Enter to save.

To get these patterns repeated on a worksheet in Photoshop

- Go to Edit > Fill.
- Choose pattern from the contents saved.
- Click OK to effect command on the worksheet.

2.11.11 Deriving Textures from the Pictures

Thomas et al (2002) stipulate that texture is used to create surface appearance, and relates to the physical make-up of a given form. Textures give interesting visual quality to textile design and unify the background colour and the motifs in the design.

Textures in the study were derived from the following:

- Different lines and shapes drawn and repeated in different ways for textures.
- Some textures were also created by repeating the main motif in a reduced size.

2.11.12 Application of Colour

Thomas et al (2002) further add that since each channel can be given a different colour, the number of channels used would determine the number of colours that would be used for any design. After getting the design pattern, colour is the next important element to apply to change colour on any channel.

Surface pattern designs such as printed textile designs serve as a means of communicating activities, identity, religious believers and others to the masses. Surface pattern designs have played a leading role in contributing to consumer satisfaction and admiration due to their meanings and beauty. Consumer's options for fabrics are geared towards a particular end use which is highly reliant on the surface pattern designs of the fabrics. The patterns on fabrics usually communicate effectively when the pattern of the motif is understood by the viewer. This is justified by the use of cloths by people bearing motifs or logos that are understood by the majority of people in the Ghanaian society.

CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter discusses the research design for the study which comprises research methods used, library research and population for the study, sampling technique, data collecting instruments, data collecting procedure and data analysis plan.

3.1 Research design

As a qualitative research, the study employs descriptive observational study and art studio-based practice study of research for data collection and analysis, and also for the generation of the design outcomes.

3.1.1 Art Studio-Based Practice

Practice-based research is a form of research that aims to advance knowledge partly by means of practice. This type of research is an original investigation undertaken in order to gain knowledge and understanding. It includes the invention of ideas, images, performances and artifacts including design, where these lead to new or substantially improved insights in the field of practice. Moreover, practice-based research is also a research where some of the resulting knowledge is embodied in the artifact. Whilst the significance and context of that knowledge is described in words, a full understanding of it can only be obtained with reference to the artifact itself (Candy, 2010).

In this design project, conceptualize ideas were developed from the philosophies of Technical, Vocational and Agricultural education as the main sources of motif for creating the interior textile designs. Using the manual design approach (hand) the sketches were captured from items and activities under Technical, Vocational and

Agricultural education to form motifs. These sketches were further manipulated and refined using Adobe Photoshop. The project experimented with relevant visible and conceptual elements. These items include cooking utensils, carpentry tools, building materials, agriculture produce and tools like computers and Educational materials. These items were put together to generate motifs to reflect the various education under consideration. The generated motifs were converted into Textile Designs in the form of Curtains and Carpet using Adobe Photoshop computer software. The resultant designs were then printed using the screen printing technique. Explorations of theme and ideas from the philosophies of Technical, Vocational and Agriculture education, the sketches and motif development, designing and the printing processes were executed solely in the studio. This project by means of practice is considered to be art studio- based practice since the study includes the invention of ideas, images and designs which are all artifact that aims to advance knowledge and understanding.

3.1.2 Descriptive Observational Study

Descriptive research is used when the objective of the research is to provide a systematic description and observation that is factual and accurate as possible. It provides data about population being studied, however it can only describe the “who, what, when, where and how” of an existing situation, not what caused it (Candy, 2010).

In this research project, data, techniques and procedures used were carefully observed and described. The various observations and manipulations made to the pictures in the cause of designing were accurately observed and described so that the process could be easily repeated to produce similar or same results. Observation offered the researcher the

opportunity to look at the type of curtain and carpet materials used in our educational Institutions. This offered the clear picture of the study area.

3.1.3 Library Research

Various libraries were visited by the researcher to obtain relevant secondary data for the study.

These include:

- The Department of Art Education Library – K.N.U.S.T.
- KNUST- main Library.
- Faculty of Art Library, U.E.W main Library and
- U.C.C main Library.

The data collected from these libraries were mainly from documented sources such as Books, Encyclopaedias, Published and unpublished theses, Periodicals and Journals.

3.1.4 Population for the Study

A population, as Leedy and Ormrod (2005) defined, is any group that has one or more characteristics in general that is of interest to a researcher. The populations for this study were on Workers, Lecturers/Teachers and Students, in KNUST, Kumasi Polytechnic and Kumasi Technical Institute all within the Kumasi Metropolis. This is because all Ghanaian Educational Institutions follow the same educational philosophies with few ethnical changes in each region. The Workers, Lecturers and Students were sampled from the Basic, Secondary and Tertiary institutions so as to obtain relevant information pertaining to the Ghanaian educational philosophies.

The researcher also considered the population in terms of objects which are relevant to the project. These include the natural and artificial objects found in the physical

environment that best conveys the message relating to the philosophies of Ghanaian education.

3.1.5 Sampling Technique

In this research, the purposive sampling technique was employed. A sample is a section of the population preferred for observation and analysis. Observing the characteristics of a sample, certain inferences about the characteristics of the population can be drawn. According to Leedy (2002), in purposive sampling, people or other units are chosen for a particular purpose. The procedure in purposive sampling is to ask an expert on the issue being investigated to define the members that should comprise the sample. The accessible population for the study comprises Lecturers, Students and Workers at K.N.U.ST, Kumasi polytechnic and Kumasi Technical Institute with their settings at Ayigya and Amakom. These were chosen as fair representation in the Kumasi metropolis. The purposive sampling technique was employed to sample out One Hundred and thirty (130) respondents. The use of purposive sampling technique helped in the selection of respondents who provided relevant and factual information for discussion (Leedy and Ormrod, 2005).

Table 3.1 Categorization of the population for the study.

INSTITUTIONS	STATUS	FREQUENCY	PERCENTAGES
KNUST	Lecturers	20	16
	Students	10	7.2
	Workers	20	16
K'POLY	Lecturers	20	16
	Students	10	7.2
	Workers	20	16
KTI	Teachers	10	7.2
	Students	10	7.2
	Workers	10	7.2
TOTAL		130	100

3.1.6 Data Collecting Instrument (Research Tools)

The research tool used for data collection was participant observation and formal interview.

3.2.6 Individual Interview

The individual interview with which data was generated for the study were structured between the interviewees and the researcher around the theme, the philosophies of Technical, Vocational and Agricultural Education. The structured format of interview with open-ended questions was used by the researcher which built attitude

with the respondents and ensured a better ground for soliciting useful information. The open-ended format of the interview guide ensured available detailed description and expanded the views of respondents, and this equipped the researcher to understand better, which is not possible with the use of other research instruments.

3.3.6 Observation

Through observation, the researcher physically assessed and examined some furnishings at some of the offices within K.N.U.S.T., K'Poly, K.T.I, and Hotels such as Anita hotel and Treasure land hotels all in Kumasi. This facilitated analytical assessment of the kind of printed designs Ghanaians use for their furnishings at homes, and offices of the institutions. The choices of colour, types of motif and motif arrangements for different furnishing designs were also critically observed.

3.7 Data analysis plan

The data obtained from the primary and secondary sources were analysed and presented descriptively and in the form of figures, pictures, sketches and tables. The sketches or images developed from the philosophies of Ghanaian education in Vocational, Technical and Agriculture were transformed into motifs for the designs, whilst the discussions of the motifs and the field research responses were presented with tables, figures and plates for better understanding.

3.8 Field Research Findings

Using the qualitative research approach for this study, the researcher personally observed the interior furnishing materials of Offices at K.N.U.S.T, Kumasi Polytechnic and Kumasi Technical Institute. The data collected from these sources indicate that all the interior furnishing materials were foreign made basically with colourful floral and

geometrical motifs for aesthetics and carries no message to the on-looker as seen in the Plates 4.1to4.6



Plate 4.1 Curtain fabric at Building Department office K'Poly (Field survey, 2010)

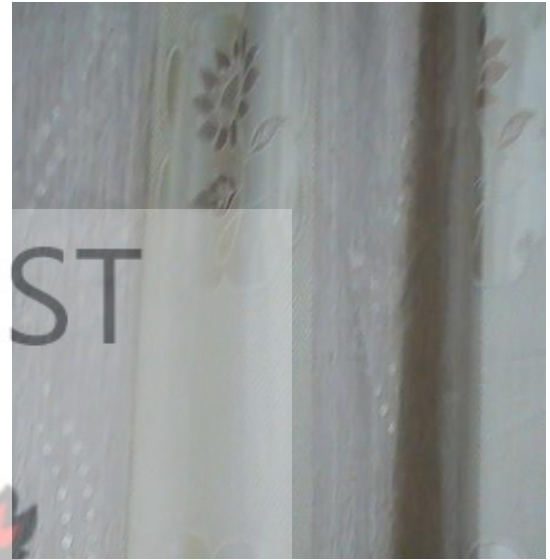


Plate 4.2: Curtain fabric at Department of Agriculture office KNUST (Field survey, 2010)



Plate 4.3: Curtain fabric at Treasure Land Hotel office Kumasi (Field survey 2010)



Plate 4.4: Curtain fabric at Department of Engineering office KTI (Field Survey 2010)



Plate 4.5: Carpet design from the Principals Office KTI (Field survey 2010)



Plate 4.6: Carpet design from the reception at Anita Hotel (Field survey 2011)

Inferring from the Plates from the field survey findings, it is obvious that most Ghanaian institution use foreign based curtain and carpet design made of floral and geometric designs which bear no significance to their programme of study or the philosophies of Ghanaian education, with special reference to Technical, Vocational and Agriculture education. Therefore, the researcher uses themes from the Philosophies of Technical, Vocational and Agriculture education to create designs for Curtain and Carpet for interior furnishing, to sensitize Ghanaians on the importance of Technical, Vocational and Agriculture education in Nation building.

Interactions with lecturers, students and workers within K.N.U.S.T, K.T.I and K'Poly gave the outcome of the interviews and the information generated from the various groups of people as summarized below gave the researcher an idea as to how people understood development of a Country through education.

3.9 Respondents' Views on Education and National Development

Responding to question on the importance of Education to National Development, eighteen (18) out of twenty (20) lecturers in K.N.U.S.T from the College of Art and Socials Sciences (Personal communication, 3rd April, 2010) admitted that, development is not devoid of education and that education is linked to development. These lecturers were of the view that a country without a good educational and moral standing is far from reaching its developmental agenda. All developmental goals are human driven therefore proper national development tapers from a country's, human resource. This is in confirmation to the assertion made by Vernon (1969) that, Education is the development of the whole man, intellectually, morally, spiritually and physically. Responding to the same question on the importance of Education to National Development, all the Twenty (20) lecturers from K, Poly School of Business and Applied Science and ten (10) teachers from K.T.I opined that, development starts from human resource and must be enhanced into positive thinking and self realization through education (i.e. circular education) in order to contribute immensely to the immediate environment to affect the life of people positively. This is in line with Peters (1986) assertion that development is generally accepted to be a process that attempts to improve the living condition of people.

3.10 Respondents' views on the significance of Vocational, Technical and Agriculture

In response to the question on the significance of Vocational/Technical and Agriculture education to National Development eighteen (18) out of twenty (20) lecturers from the College of Art and Socials Sciences and sixteen (16) out of twenty (20) from K'Poly School of Business and Applied Science (Personal communication, 3rd April,

2010) admitted that, Vocational, Technical educations are fundamentals for nation building and that a country without technocrat cannot advance industrially since, the industry plays a leading role in a country's economy. Technological advancement of a country is seen by the provision of technocrat. This affirms the assertion made by Musgrave (1983) that, Vocational/Technical education is generally presumed to be practical and technical-oriented that is needed primarily to generate technological innovation. All the twenty (20) lecturers from the College of Art and Social Sciences, the twenty (20) lecturers from K'Poly School of Business and Applied Science and the ten (10) teachers from K.T.I were of the view that, Ghana is an agricultural base country and abounds with natural resources. Most of the income generating activities in Ghana are agro based and provide jobs and foreign exchange for the country. Therefore there is the serious need to focus on Agriculture as the main means through which poverty can be prevented. In response to the same question on the significance of Vocational, Technical and Agriculture education to National Development, nine (9) out of ten (10) students from K.N.U.S.T, eight (8) out of ten (10) from Kumasi Poly and nine (6) out of ten (10) from KTI agreed that, education and developments move together and through education, a country can harness its potential natural resources such as minerals and agriculture produce for economical activities that can pave the way for development through the provision of social infrastructure as indicated by Nelson (1996) that, education leads to development in the form of the provision of social amenities such as good drinking water, good roads and bridges, hospitals, schools.

3.11 Respondents' knowledge on the philosophies of their programme of study

In response to the question that enquires about their knowledge on the philosophies of Technical, Vocational and Agriculture education to the development of Ghana eight (8) students and eighteen (18) workers responded one after the other (Personal communication, 10th April, 2010) from K.N.U.S.T and K'Poly that; they know of Technical and Vocational educations but do not know the philosophies behind them. What they know is that Technical, Vocational education provides people with the requisite skills or handy-work so as to be self employed and not to depend on central government for employment. This is in support of the view of Manjichi and Brouwer (2007) that, Technical and Vocational education produce skilled craftsmen and women who will be self employed to accelerate development. On the question that enquires about their knowledge on the philosophy of Agriculture education eight (8) students and eighteen(18) workers interviewed one after the other from K'Poly admitted that, they know of agriculture education but not the philosophy behind it. All they know is that, Ghana is an agriculture base country and abounds with natural resources. Most of the income generating activities in Ghana are agro based and provides jobs and foreign exchange to the country.

Evidently, most of the interviewees have no idea as to how agriculture is used in the development of a country. It became obvious that eight (8) of the ten (10) students knew of the production of food and crops such as cocoa and coffee which earns foreign exchange for Ghana. It came out that Technical, Vocational and Agriculture education are fundamentals for nation building and that a country which is not agriculturally base

and has no technocrat cannot advance industrially since industry plays a leading role in a country's economy.

3.12 Respondent's view on the type of textile interior furnishing used in Ghanaian

Educational institutions

Responding to question on the types of textile interior furnishing used in educational institutions in Ghana eight (8) students out of the ten (10) from K.N.U.S.T, K'Poly and K.T.I admitted that the type of interior furnishing such as curtains, carpets and upholstery used in Ghanaian educational institutions are mainly foreign based designs often made from floral and geometrical motifs which have no significance with the programmes offered in the institutions. The students also admitted that the types of fabric used are heavy and; synthetic in nature which retains heat in the environment. Moreover, the colours used are predominantly earth colours.

Responding to the same question on the type of textile interior furnishing used in educational institutions in Ghana sixteen (16) workers out of the twenty (20) from K.N.U.S.T and K'Poly and all the ten (10) workers from K.T.I also admitted that interior furnishing materials used in our educational institution are made from overseas and their designs are mainly from foliage and geometrical shapes. The workers also admitted that the type of fabrics used for curtain from overseas do not suit our climate. Therefore designs meant for Ghanaian consumption should be made from cotton because cotton materials do not retain too much heat as synthetic does. It came out clearly that the type of textile interior furnishing used in Ghanaian educational institution are foreign based with the designs carrying no messages about Ghanaian educational philosophies to the

On-lookers. The fabrics are mainly made from synthetic material that retains so much heat. The design ideas are only meant for aesthetics with a wide array of earth colours.

3.13 Respondents' view on the relevance of the existing interior textile designs to the programmes of the institutions

Responding to question that enquires about the relevance of the existing interior textiles designs to the programmes of the institutions, all the twenty (20) lecturers from K.N.U.S.T College of Art and Social Sciences agreed that the existing interior textile designs have no relevance to the programmes of the institution but the existing interior designs are meant for beautification.

Responding to the same question at Kumasi polytechnic all the twenty (20) lecturers from the School of Business and Applied Science and all the ten (10) teachers from K.T.I opined that the existing interior textile designs have no significance to the programmes of study in the entire institution.

All the students and workers from K.N.U.S.T, K'Poly and K.T.I admitted that the existing interior textile designs have no bases and linkages with the programmes being studied at these institutions but the existing interior textiles are for decoration.

3.14 Respondents' view on the impact of interior furnishings with designs on Ghanaian educational philosophies on both learners and instructors towards National Development

In response to the question that enquires about the impact of interior furnishings with designs on Ghanaian educational philosophies on both learners and instructors towards national development eighteen (18) out of twenty (20) lecturers from K.N.U.S.T College of Art and Social Sciences opined that interior furnishings with designs on

Ghanaian educational philosophies will impact positively on both the learners and instructors towards national development because it will sensitize both the learner and instructors on the philosophies of Ghanaian education as they look at and interact with these furnishings because they are in close contact with these furnishings all the time.

Responding to the same question from Kumasi Polytechnic all the twenty (20) lecturers from the Business School and Applied Science and ten (10) students from the polytechnic admitted that using interior furnishing with design on Ghanaian philosophies of education is a better option to let Ghanaians know the educational philosophies of the country. This will sensitize and move all-and-sundry to work towards achieving national development. Interior furnishing is part of our lives and we use curtains or upholstery in our offices, rooms or buildings as confirmed by Bannet (1998) that furnishing is a fabric meant for use as curtains or upholstery in rooms or buildings. In response to the question that enquires about the impact of interior furnishings with designs on Ghanaian educational philosophies on both learners and instructors, eighteen (18) out of twenty (20) workers from K.N.U.S.T, sixteen (16) out of twenty (20) workers from Kumasi Polytechnic and eight (8) out of ten (10) workers from KTI admitted that interior furnishings with designs on Ghanaian educational philosophies will be effective tool to emphasize the philosophy of Ghanaian education.

The information gathered from the respondents indicates that a country can only develop when its citizenry receive education. The kind of development people want to see and feel is in terms of availability of food, good drinking water; physical structures such as good roads, bridges, school, and hospitals etc. These are all technically oriented products. Therefore, for maximum development of a country to be reached, there is the

need to focus attention on Technical, Vocational and Agriculture education. It is against these backgrounds that the researcher aims at using interior furnishing designs to emphasize and sensitize Ghanaians on the need for education in Technical, Vocational and Agriculture education in order for Ghana to achieve its set developmental agenda.

KNUST



CHAPTER FOUR

GENERATION OF TEXTILE DESIGNS FROM THE PHILOSOPHIES OF TECHNICAL, VOCATIONAL AND AGRICULTURE EDUCATION

4.0 Overview

This chapter focuses on developing conceptual ideas from themes on philosophies of Technical, Vocational and Agriculture education for the production of Interior textile furnishing. The design process began with the concept development to create motifs suitable for the Production of curtain and carpet designs for interior decoration that will effectively emphasize the importance of Vocational, Technical and Agriculture education to the development of Ghana.

4.1 Vocational and Technical Education

Vocational and Technical education is presumed to be practically and technically oriented. They offer one to be specialized in a particular line of work with a view to improving one's skill and tools, thus increasing productivity. An economy based on specialization is capable of attaining higher and higher levels of productivity as it permits the use of more advanced industrial techniques and scientific innovations in each sphere of the economy (Seidman, 1989). The programme is directed towards aiding individuals acquire Vocational and Technical skills which enable them to be self-employed; produce needed labour force for industrialization and creativity so as to generate the needed technological innovations necessary for the utilization of national potentials for development.

4.2: Technical Education

(a) Motif Development for Building Technology Education

Building Technology Education has the philosophy of turning out skilled and practically oriented young graduate Engineers, Technicians and labourers who are self employed in the Building and construction industries to be able to provide good, quality and affordable housing and other infrastructure needed for developments in Ghana (Antwi,1992) These inform the selection of the motif suitable for carpet and curtain designs. The motif is made up of a laid block symbolizing progressive building and construction industry in Ghana, a hood and a roll of certificate symbolising graduates who have graduated from Building and Technology institutions whilst a head pan also symbolises labourers and technicians as indispensable personnel to the building industries as shown in Fig 4.1

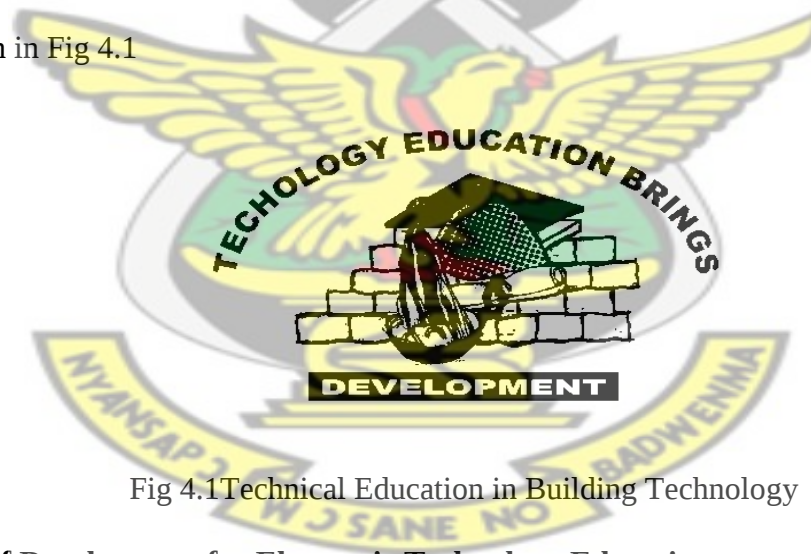


Fig 4.1 Technical Education in Building Technology

(b) Motif Development for Electronic Technology Education

Electronic Technology Education is aimed at giving out skills and practical knowledge to young graduate Engineers and Technicians in the field of electronics to be self employed in Electronic gadgets repair and manufacture (Baffour, 2000). Electronic gadgets such as television and radio have become part of our lives as we watch television

and listen to radio everyday as means of entertainment, information and education. These inform the selection of motif for carpet and curtain designs. The motif is made up of a television and a radio sets, a screw driver, screws and a plier. The television and radio set symbolize sources of information, education and recreation. The screws and the screw-driver symbolize the ability to repair broken gadget whilst the plier symbolizes the ability to create and manufacture simple electronic gadget as shown in Fig.4.2.

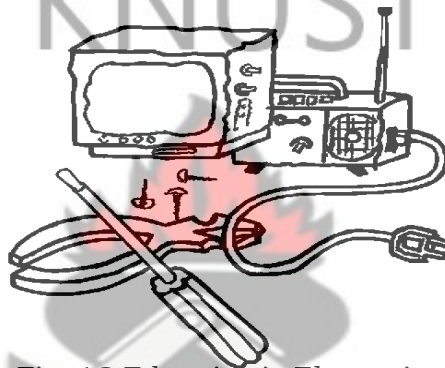


Fig. 4.2 Education in Electronics

(c) Motif Development for Carpentry and Joinery Education

Technical Education in Carpentry and Joinery provides practical and innovative skills to young graduates to become self employed in the field of Carpentry and Joinery. Carpentry and Joinery enable the making of roofs for our buildings, furniture for our homes and offices serving both functional and aesthetic purposes. The increasing number of buildings eventually calls for increasing interior and exterior furnishings. This has become very important to our daily lives providing job opportunities for Carpentry and Joinery graduates to make wealth and reduce redundancy. This necessitated the selection of these motifs for carpet and curtain designs. The Bench and the wood symbolize the basic raw materials used for all Carpentry and Joinery Technology. The saw and the

plane symbolise the basic tools used in Roof and Cabinet making whilst the nails also symbolize the durability of the product of Carpentry and Joinery as seen in Fig.4.3

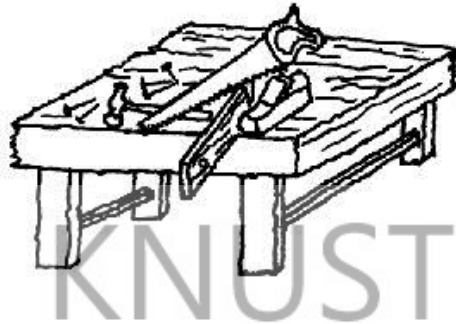


Fig. 4.3 Technical Education in Carpentry and Joinery

(d) Motif Development for Computer/Automobile Engineering Education

Computer and Automobile Engineering Education is aimed at skills acquisition for young graduate Engineers, Technologists and Technicians in the field of Computer and Automobile to alleviate poverty and create wealth for economic development. Education in this field provides the knowledge and practical skills on repair and manufacture of Computer and Automobile. Computers and Vehicles have become integral aspect of our daily lives as we use computers via internet to transact business, educate, entertain, communicate and source for vital educational information on daily bases across the world. Vehicles are also used to cart people, goods and services from one destination to the other. This portion of the economy is very vital to the growth and development of the country. These inform the selection of the motif for carpet and curtain designs. The motif is a composition of a Lap top Computer, a book and a Pen, a threaded- knot and a shaft. The Lap top computer symbolises the world as a global village, the book and the pen symbolise sources of knowledge, information, and education obtained from the use of

computer via internet. The shaft and the threaded knot symbolise essential vehicular moving parts which aid in the conveyance of people, goods and services shown in fig.4.4.



Fig.4.4 Technical Education in Computer and Automobile Engineering

4.3 Vocational Education

(a) Motif Development for Cookery and Visual Art Education

Cookery and Visual Art Education is vocational oriented disciplines which are a human resource development initiative aimed at acquisition of skills and practical knowledge which offer an easy platform for the creation of job and wealth to help the Nation attain its socio-economic developmental policy. Cookery and Visual Art education establish a skilled and productive workforce for Ghana's socio-economic development. It makes the young graduate to be independent and create avenue for jobs to reduce the unemployment problems of the Country.

These influence the selection of the motif for designing of the carpet and the curtain. The motif is made up of a Gas Stove and a Burner, Books, a cooking pot, a ladle and a sieve cup. The Gas Stove and a Burner symbolise cookery and the ability to prepare nutritious and good food, the book symbolises book binding as well as graphics art, the cooking pot and the ladle symbolize Ceramics ware whilst the sieve cup symbolises Metal Art as illustrated in Fig. 4.5

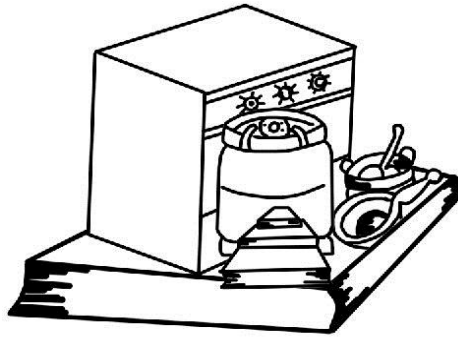


Fig.4.5 Vocational Education in Cookery and Visual Art.

4.4 Agriculture Education

(a) Motif Development for Crop Production Education

The most important economic sector in Ghana that employs more than half the population on formal and informal basis accounting for almost half of Gross domestic Product (G.D.P) and export earnings, is agriculture (Yeboah, 2011). Ghana produces a variety of crops in various climatic zones. Agricultural crops, such as yams, grains, cocoa, oil palm, kola nuts and timber, form largely the basis of Ghana's economy. Apart from crop production other aspect of Agriculture such as animal, fruit and vegetable production are also important to the national economy (Boateng, 1996). Reduction of poverty and self sustainability is achieved through agriculture since the sale of agricultural raw materials and foodstuffs may be made available for further investment in industry and agriculture. The selection of the motif was influenced by some food crops grown in Ghana which serve as the main staple food consumed mainly by Ghanaians to reduce food insecurity and poverty. The motif is made up of a book and a roll of certificate symbolising graduates who have received education from crop production, Stump of cassava, a bunch of plantain, a tuber of yam, a comb of maize all portray some staple food consumed by Ghanaians as illustrated in Fig 4.6.

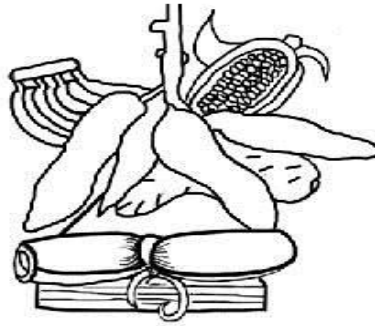


Fig 4.6 Agriculture Education in Crop Production

(b) Motif Development for Cocoa Production Education

The idea was derived from cocoa plantation. This concept portrays an enthusiastic graduate into cocoa plantation. This motif conveys a message to encourage young graduates to be engaged in agriculture production specifically cocoa farming to feed and earn more foreign exchange for the nation which is the basis for the selection of the motif. The motif is made up of a book and a male figure wearing a hood symbolizing graduates who have received education in crop production, a stump of cocoa tree and plantations of cocoa seedlings also symbolizing intensification of cocoa farming as one of the crops that earns more foreign exchange for Ghanaians, as illustrated in Fig 4.7.



Fig 4.7 Agriculture Education in Cocoa Production

(c) Motif Development for Animal Production Education

Livestock farming provides the opportunity for wealth and job creation aiming at poverty reduction. Livestock production does not only provide wealth, job and poverty reduction but also serves as meat for food which is the main source of animal protein to feed the nation. This gave the researcher the grounds to select this motif for the designs. The motif is made up of a book symbolising education in livestock production, a Cow's head, the head of a hen and a fish, all symbolising diversities in livestock production as viable venture for poverty reduction as seen in Fig 4.8.



Fig. 4.8 Agriculture Education in Livestock production

(d) Motif Development for Fruit and Vegetable production Education

Cocoa has been noted as a cash crop, earning much foreign exchange for the Ghanaian economy. But apart from cocoa being a traditional cash crop for Ghana, other farm produce of relative importance that provide an incredible amount of foreign exchange to Ghanaian economy are the fruits and vegetables. The production of fruit and vegetables does not only provide an alternative source of earnings via export but provide job opportunities for Ghanaians and serve as a source of food and vitamins needed for good health. These influence the selection of the motif. The motif is made up of a book

and assorted fruits and vegetables symbolising education in fruit and vegetable production as an alternative venture for poverty reduction as illustrated in Fig 4.9.



Fig 4.9 Agriculture Education in Vegetable Production.

4.5 Generation of the Textile Designs

In this section, the researcher exhibited the creative and innovative processes in producing textile designs based on selected items, activities and some products and produce of Technical, Vocational and Agriculture Education. The creation of the textile designs started with the idea development by sketching, based on the themes on Technical, Vocational and Agriculture Education.

The Adobe Photoshop which is suitable for image editing and manipulation was employed in the production of the textile designs. Basically, the Photoshop environment is suitable for manipulating pictures, creating and modifying images to come up with diverse effects. With Photoshop, it is possible to change the colour, size, and scale of graphics among other things to generate new design ideas.

The researcher considered the philosophies of the various educations which determine the kind of items or activities to employ under Vocational, Technical and Agriculture in the production of the design. The procedures adopted in the execution of the designs are as follows:

1. The Development of the concepts from the theme,
2. Arrangement of the concept to form motifs,
3. Arrangement of the motif on the working area,
4. Application of colour and special effects to enhance the designs and
5. Addition of textures to the designs.

Designing with this software requires the designer to follow specific steps; most of the steps used therefore run through the generation of the various textile designs.

4.5.1 Technical and Vocational Education (Carpet and Curtain Designs) Carpet

Design 1(Technical Education in Building Technology)

The design process began with the importation and centering of the motif on the Photoshop as shown in Plate 4.1.

The centering was achieved by selecting the motif with the polygonal lasso tool in Adobe Photoshop and others such as rectangular marquee tool, elliptical marquee tool and magic wand. Moving the motif on the canvas was done also by the use of Control key + T on the keyboard and then moved about using the mouse.



Plate 4.1: Centering of motif in Photoshop

The second stage of the design process is the incorporation of textures in a form of

blocks laid around the central motif forming a bond between the motif and the background as indicated in Plate 4.2.

This was obtained by the use of the pen tool to draw the rectangular shape in the form of a block and filling it with the brush tool to make it solid. Fewer blocks were arranged linearly and were patterned defined in a form of textures, filled around the motif using the fill command as follows:

1. Select area to be filled with magic wand
2. Select Edit on the menu bar
3. Select Fill
4. Select pattern
5. Select Ok



Plate 4.2: Addition of blocked textures around the motif

Plate 4.3 shows the final design with a background colour. The background colour was added by selecting all the background using Control + A and then choosing new spot channel from the channel menu. The selected channel then lies beneath the channel list rendering the rest invisible.

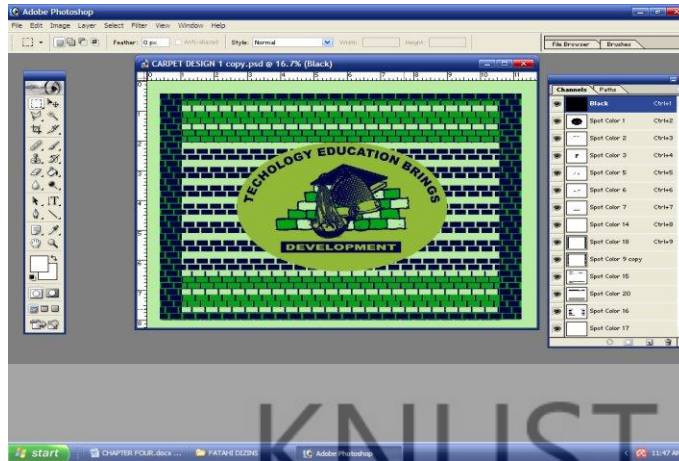


Plate 4.3: The final Carpet design portraying Technical Education



Plate 4.4: The final Carpet design in three colour scheme

4.5.2 Carpet Design 2 (Technical Education in Computer and Automobile)

The design was created by first importing the motif in figure 5.4 onto the Photoshop working area. This was followed by arranging the motifs according to the intended design layout for carpet design. This arrangement was achieved by selecting the motif with the selection tools like the polygonal lasso tool. Control key + T on the key board was used to transform the motif on the working area and then positioned with the help of the mouse and the arrow keys as seen in Plate 4.5.

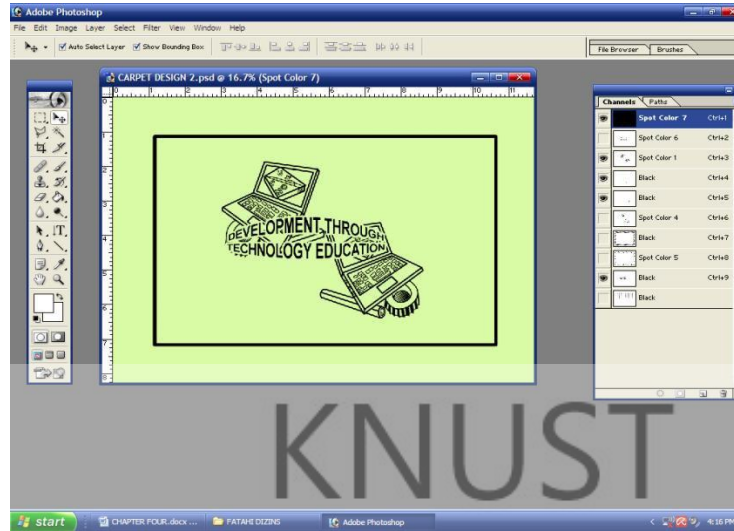


Plate 4.5: Positioning of Motif in Photoshop

The second stage of this design process is the inclusion of textures and a thick rectangular line to form a bond between the motif and the background as in Plate 4.6. The filling of the textures was done by highlighting the areas and assigning them to a particular channel. The textures at the background were created by the use of the pen tool and filled by using the command fill. The procedure used in filling the textures followed this sequence:

1. Select area to be filled with magic wand
2. Select Edit on the menu bar
3. Select Fill
4. Choose pattern
5. Select Ok

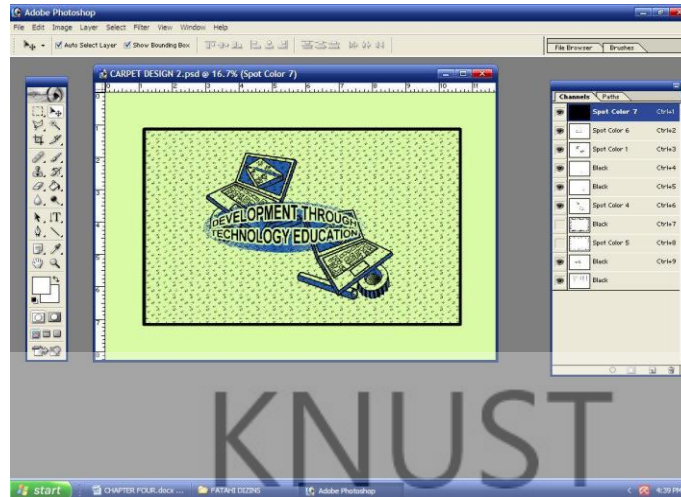


Plate 4.6: Rectangular line and textures around the motif

The third stage of this design process involved the inclusion of boarder designs around the rectangular shape to enhance the design onto a separate channel. The boarder design was achieved by selecting the motif to be used as boarder design with magic wand > Control + T on the keyboard to resize the motif > Control + C to copy>and Control V to paste. This order was followed to arrange the motif around the rectangular shape boarder line to enhance the design as the final design as shown in Plate 4.7.

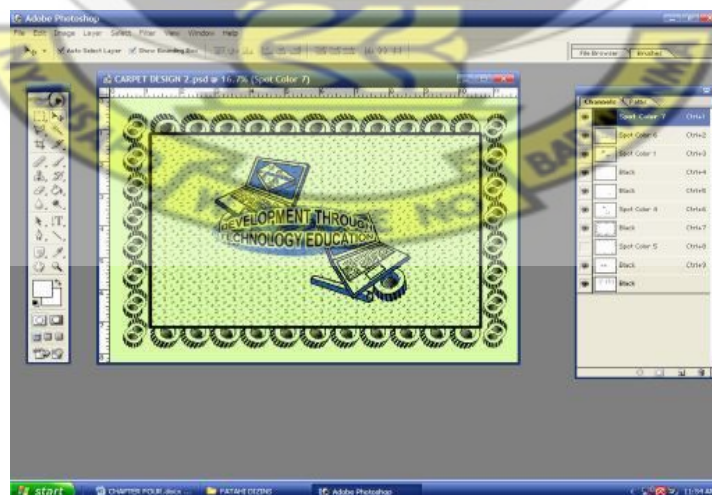


Plate 4.7: The final design

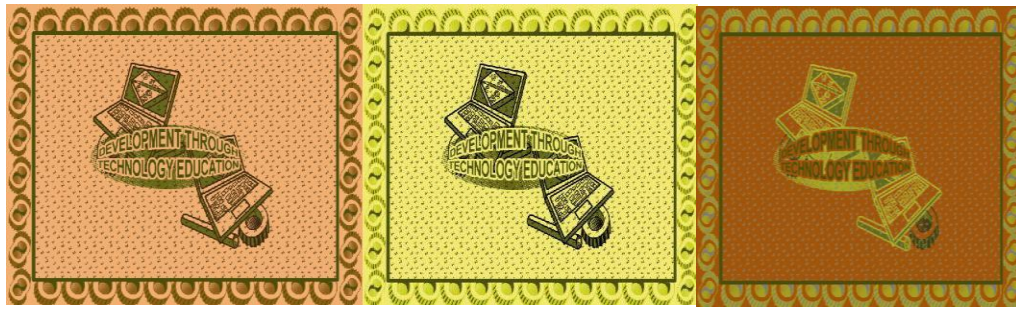


Plate 4.8: The final carpet design in three colour schemes

4.5.3 Design process for Carpet Design 3 (Technology Education)

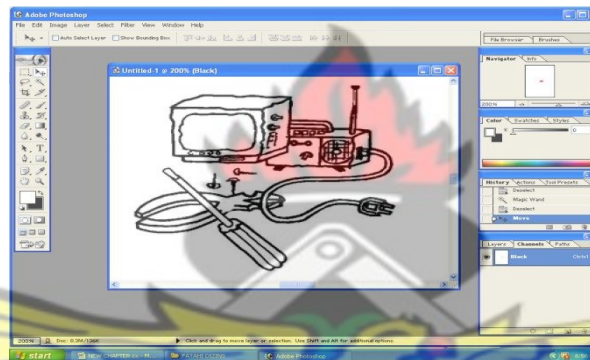


Plate 4.9: Motif of Technical education in photoshop

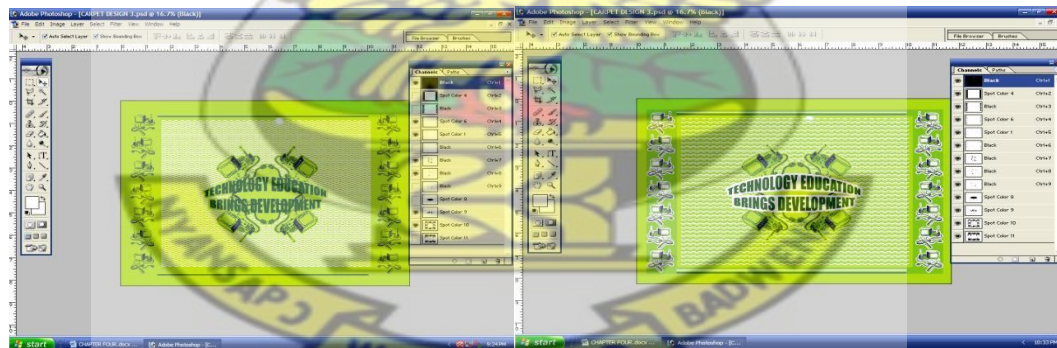


Plate 4.10: Addition of textures and text

Plate 4.11: The final carpet design



Plate 4.12: The final Carpet design in three different colour schemes

- The first stage: The motif was opened in Photoshop as shown in Plate 4.9.
- The second stage: The motif was flattened by clicking image > mode > grey.
- The third stage: The motif was copied and arranged with the inclusion of text using vertical type tool. The textures at the background were created by the use of the pen tool and filled by using command fill as seen in plate 4.10.
- The final stage involves the application of shadows to the textures, text and motifs onto a separate channel to enhance the design. The shadow effect was achieved by selecting the motif and textures with polygonal lasso tool > Select on menu bar> click on modify > expand > type required dimension > Ok as seen in plate 4.11.
- The final design was rendered in three colour schemes as shown in plate 4.12.

4.5.4 Carpet Design 4 (Technical Education in Carpentry and Joinery)

Design process for Carpet Design 4 on Technical Education



Plate 4.13: Motif of Technical education in Photoshop

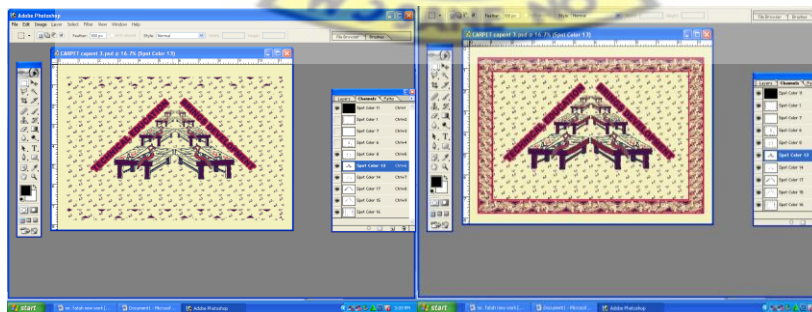


Plate 4.14: Addition of textures and text Plate 4.15 The final design with border design



Plate 4.16: The final Carpet design in three colour ways

- The motif was opened in Adobe Photoshop as shown in plate 4.13
- The motif was copied and pasted and arranged using Control key + T.
- This was followed by clicking vertical type tool to type the text and flipped to have the text positioned as seen in plate 4.14.
- The edges of the borders were designed using some aspect of the motif in a condensed form by using Control key + T > to resize, Control + C to copy and Control + P to paste and arranged at the borders as in plate 4.15.
- Textures were given to the background to create bond between the motif and the background by Selecting area to be filled with magic wand > select Edit on the menu bar> select Fill > Choose a pattern and Ok to fill the textures as shown in plate 4.15 as the final design. The final design was rendered in three colour schemes as shown in plate 4.16.

4.5.5 Carpet Design 5 (Vocational Education)

Design process for Carpet Design on Vocational and Visual Art Education

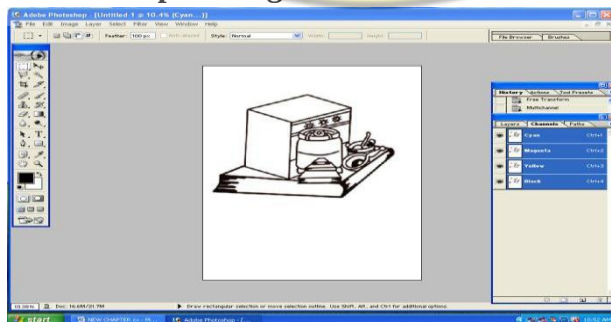


Plate 4.17: Placement of motif in Photoshop

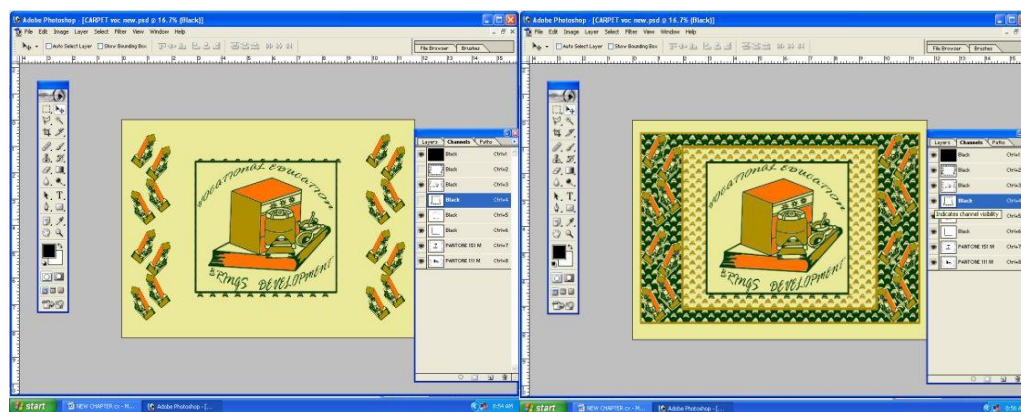


Plate 4.18: Arrangement of Motifs

Plate 4.19: Final Carpet design



Plate 4.20: The final design in three ways of colour

- The motif was opened and arranged in Adobe Photoshop as shown in plate 4.17
- The motif was copied, pasted and arranged using Control key + T.
- This was followed by clicking vertical type tool to type the text and warp text to flip and have the text positioned as seen in plate 4.18.
- The edges of the borders were designed using the motifs in a condensed form by using Control key + T > to resize, Control+ C copy and Control + P to paste. The result is seen at the borders as in plate 4.19.
- Textures were given to the background to create bond between the motifs and the background by Selecting the area to be filled with magic wand > Edit on the menu Bar > select Fill > Choose a pattern and Ok, the result is shown in plate 4.19 as the final design. The final design was rendered in three colour schemes to show the effect of colour of the same design as in Plate 4.20.

4.5.6 Curtain Design 1(Technical Education)

Curtain designs have peculiar arrangements i.e. vertical, horizontal and diagonal (Yates, 1996). This design process employs these arrangements in executing the curtain designs. The design process began with the placement and arrangements of the motifs in a vertical order in Photoshop. The vertical arrangement was achieved by selecting the motif with polygonal lasso tool > Control + T to alter the motif > Control+ C to copy and Control +V to paste as seen in plate 4.21.

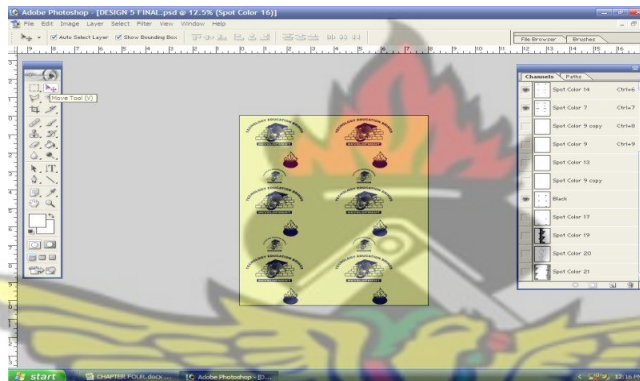


Plate 4.21: Vertical Arrangement of motifs

The second stage of the design process was the adaptation of textures from part of the motif in the form of a laid block. These laid-blocked textures were saved in defined pattern. The textures at the background were created using the pen tool and filled by using fill command. Select area to be filled with magic wand > Edit on the menu bar > Fill > Choose the pattern and Ok. The result is shown in plate 4.22.

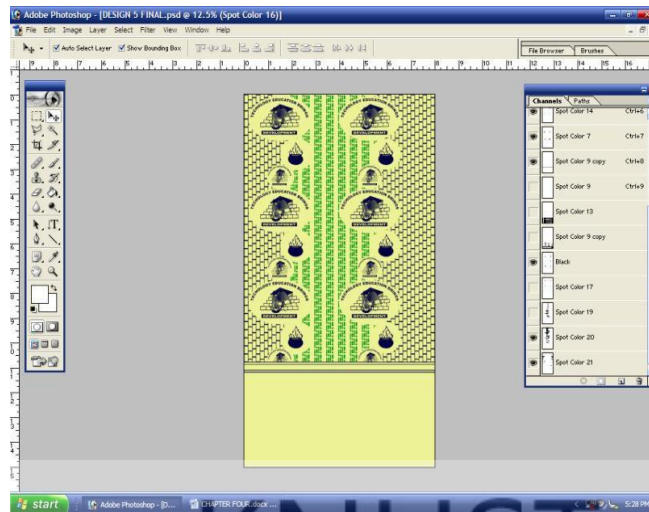


Plate 4.22: The design with textures

The final stage of the design process was the addition of boarder design. The same textures were converted into boarder design. Lines were drawn using the pen tool to separate the boarder design from the main work. Space was created on the canvas for the boarder design to fit in as in Plate 4.3. This was done by Selecting the space to be filled with magic wand > select Edit on the menu bar > select Fill > Choose the pattern and press Ok. The result is shown in Plate 4.23 as the final design. The final design was rendered in three different colours as seen in Plate 4.24.

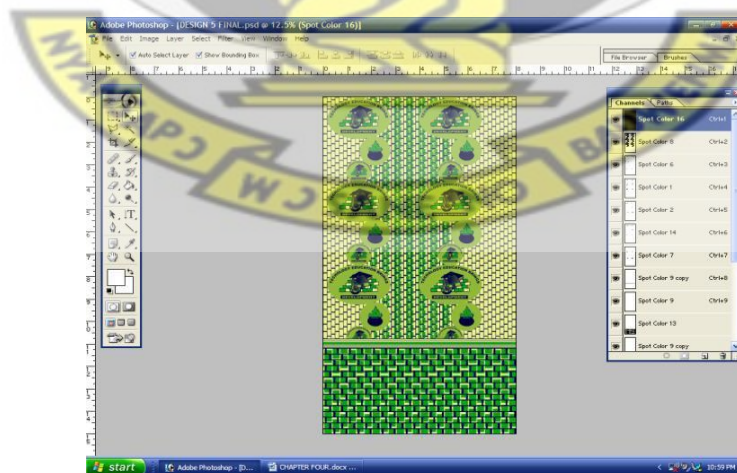


Plate 4.23: The final curtain design on Technical Education

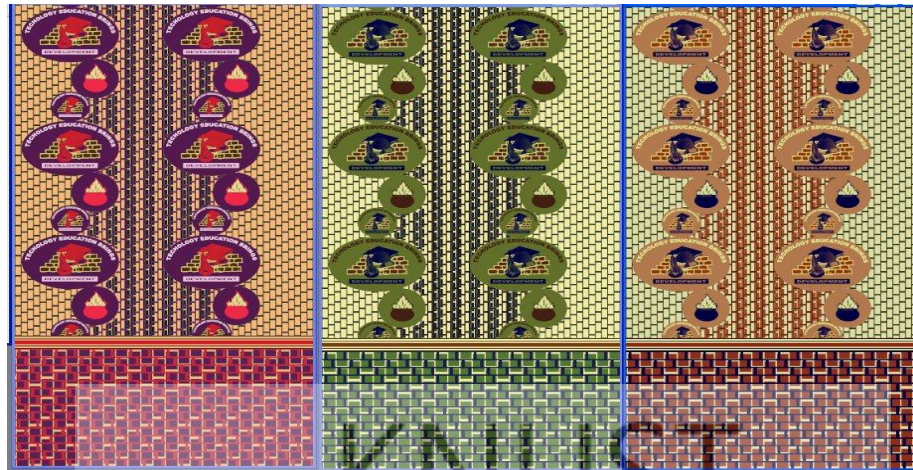


Plate 4.24: The final curtain design in three colour ways

4.5.7 Curtain Design 2 (Technical Education)

This design process employs the diagonal arrangements in executing the curtain design. The design process began with the positioning and arrangements of the motifs in diagonal order onto the work space as shown in Plate 4.25.



Plate 4.25: diagonal arrangement of motifs

The second stage of this design process was the inclusion of text as in Plate 5.26. The next and final stage was the adaptation of textures from part of the motif in the form of a threaded knot. This threaded- knot textures were saved in defined pattern. The textures held the motifs to the background. The filling of these textures were preceded by

highlighting of the areas and assigning them to a particular channel. The textures at the background were created by the use of the pen tool and filled by using fill command. Select area to be filled with magic wand > select Edit on the menu bar > select Fill > Choose the pattern and press Ok. The result is shown below in plate 4.27 as the final design. The final design was rendered in three different colours as seen in Plate 4.28.

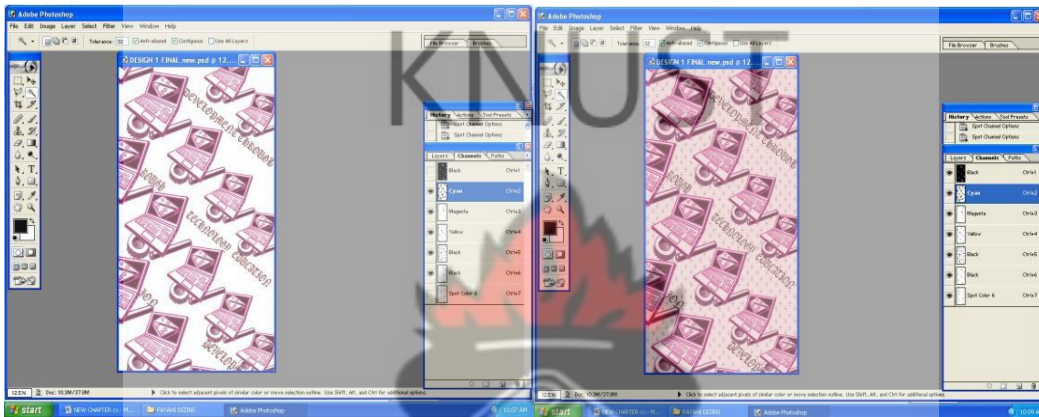


Plate 4.26: The Inclusion of texts Plate 4.27: The final Curtain designs.



Plate 4.28: The final curtain design on Technology Education in three different colours

4.5.8 Curtain Design 3 (Technical Education)

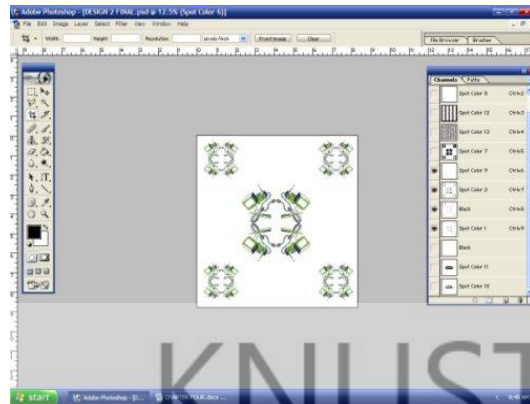


Plate 4.29: Arrangement of motifs on canvas

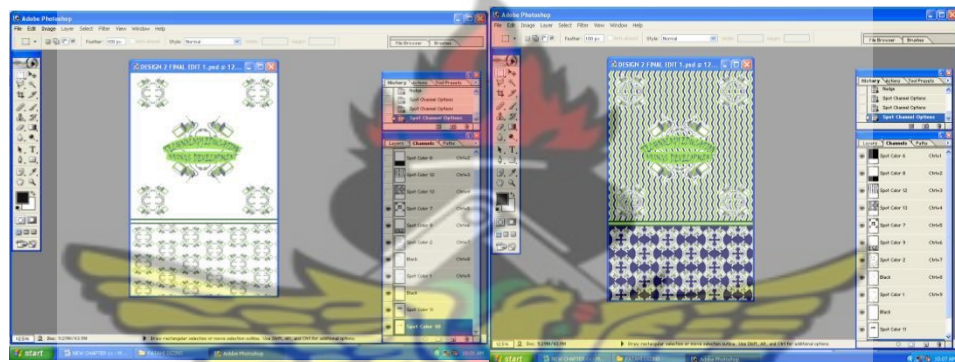


Plate 4.30: Inclusion of Text and
Border designs

Plate 4.31: Final design

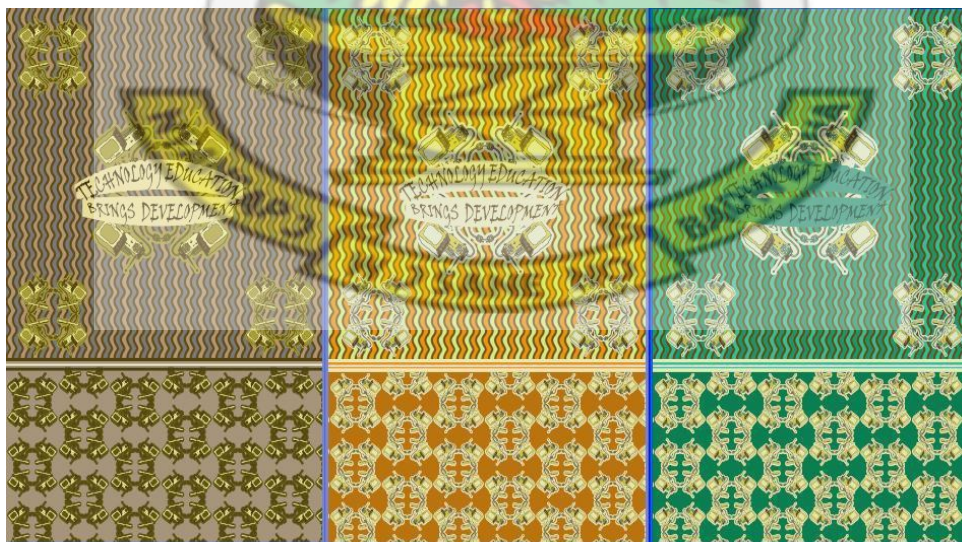


Plate 4.32: The final curtain design on Technical Education in three different colours

- The design process began with the arrangements of the motifs onto the Canvas as shown in plate 4.29.
- This arrangement was achieved by selecting the motif with the polygonal lasso; resize, copy and paste.
- Text and boarder designs were added to enhance the design in Plate 4.30.
- Textures and colours were added to the background to obtain the final design in Plate 4.31. Plate 4.32 shows the final design in three different colour schemes.

4.5.9 Curtain Design4 (Technical Education)

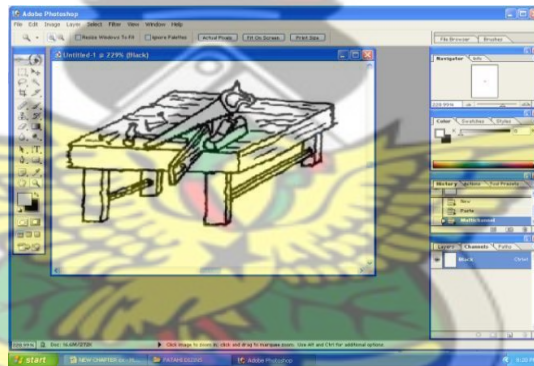


Plate 4.33: Motif opened in Photoshop

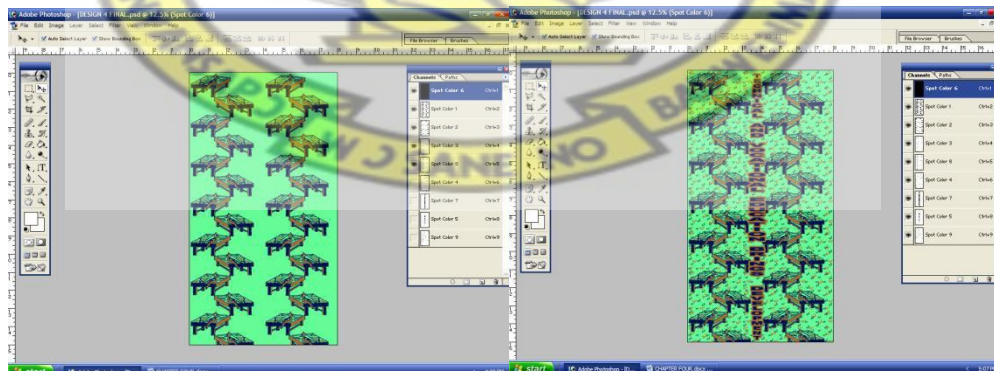


Plate 4.34: Arrangement of motifs

Plate 4.35: Final design

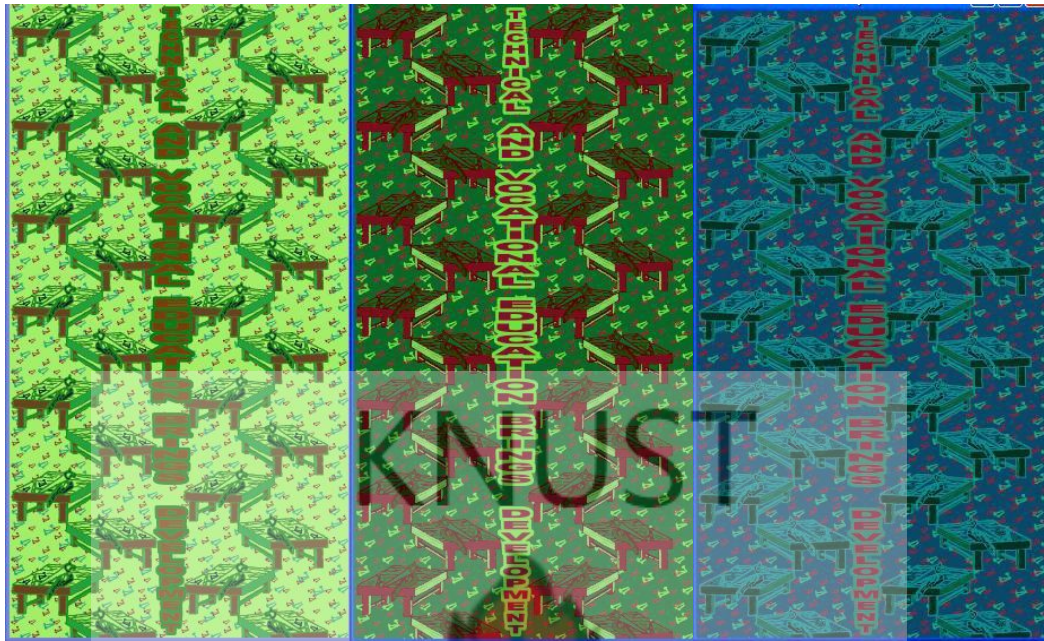


Plate 4.36: The final curtain design on Technical Education in three different colours

- The design process began by opening the motif in Photoshop as shown in plate 4.33. The motif was arranged using Control key + T to decrease the size of the motif and then Control and Control + V respectively to copy and paste the motifs as in Plate 4.34.
- Textures in a form of thumb nails were added to the background as in plate 4.34.
- The mode of the image was changed to multichannel to pave way for the application of colour. Texts were finally added to the design to complete it as the final design as in Plate 4.35.
- Plate 4.36 shows the final design in three different colour schemes.

4.5.10 Curtain Design 5 (Vocational and Visual Art Education)

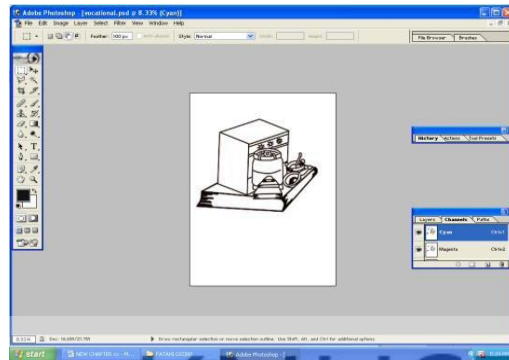


Plate 4.37: Motif opened in Photoshop

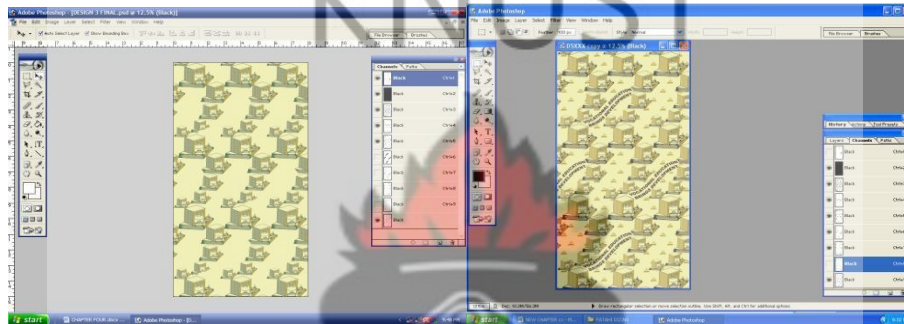


Plate 4.38: Arrangement of motifs Plate 4.39: Final design

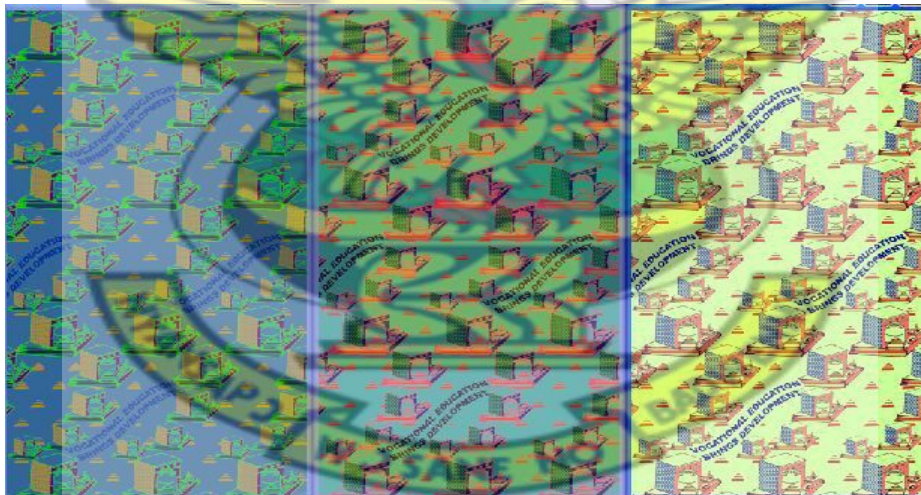


Plate 4.40: The final curtain design on Vocational Education in three colours ways

- The design process began with the importation of the motif in Photoshop as in Plate 4.37.

- Plate 4.38 shows the arrangement of the motif in a diagonal formation onto the work space. Text was added to the design as in plate 4.38 and 39.
- The mode of the image was changed to multichannel to pave way for the application of colour.
- Finally textures were added to the background in Plate 4.39 as the final design.

Plate 4.40 shows the final design in three different colour schemes.

4.5.11 Carpet Design 6 (Crop Production Education)

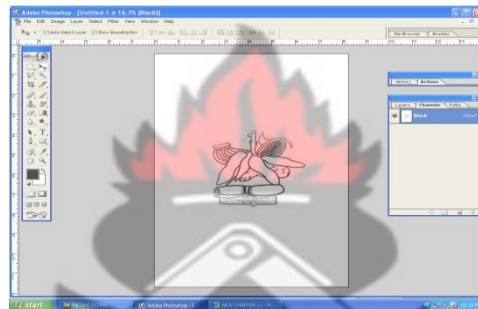


Plate 4.41: Motif opened in Photoshop

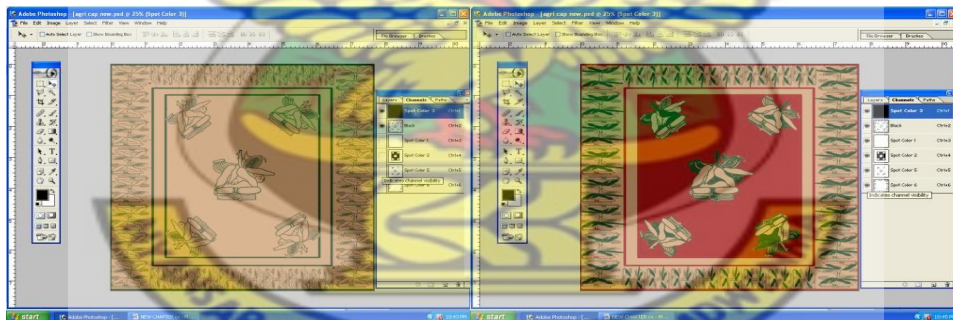


Plate 4.42: Arrangement of Motif

Plate 4.43: Final Design



Plate 4.44: Final design in three different colour schemes

- The design process began with the opening of the motif in Photoshop as shown in plate 4.41.
- Plate 4.42 portrays the positioning of the motif on the Canvas.
- The edges of the borders were designed using the motifs in a condensed form by using Control key + T > to resize, Control+ C copy and Control + P to paste, and the result seen as boarder design in plate 4.42.
- The mode of the image was changed to multichannel to pave way for the application of colour. Plate 4.43 shows the final design.
- The final design was rendered in three colour schemes to show the effect of colour for the same design as in Plate 4.44.

4.5.12 Curtain Design 6(Crop Production Education)

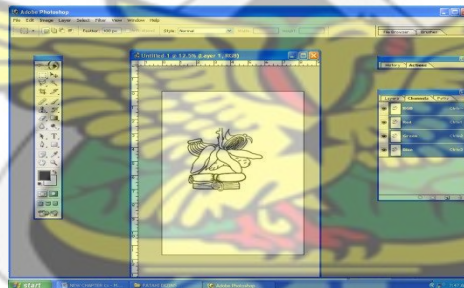


Plate 4.45: Motif on work space

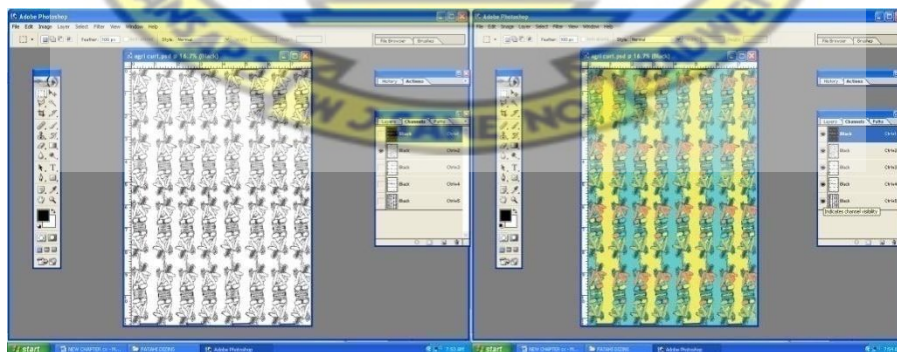


Plate 4.46: Vertical arrangement Plate 4.47: Final design



Plate 4.48: Final design in three colour ways

- The design process began with the opening of the motif in the work space as shown in plate 4.45.
- The motif was arranged in a vertical order onto the canvas as shown in plate 4.46.
- The mode of the image was changed to multichannel to permit the application of colour. Plate 4.47 shows the vertical arrangement rendered in colour as final design. The final design was rendered in three colour ways showing the effect of colour for the same design in Plate 4.48.

4.5.13 Carpet Design 7 (Crop production Education)

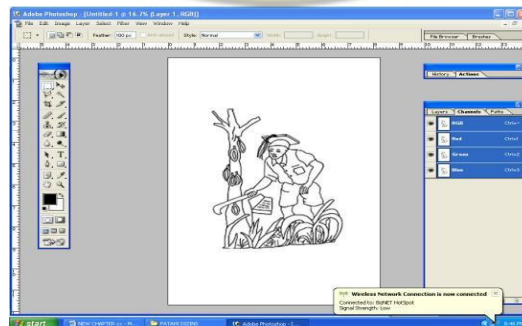


Plate 4.49: Motif on Canvas

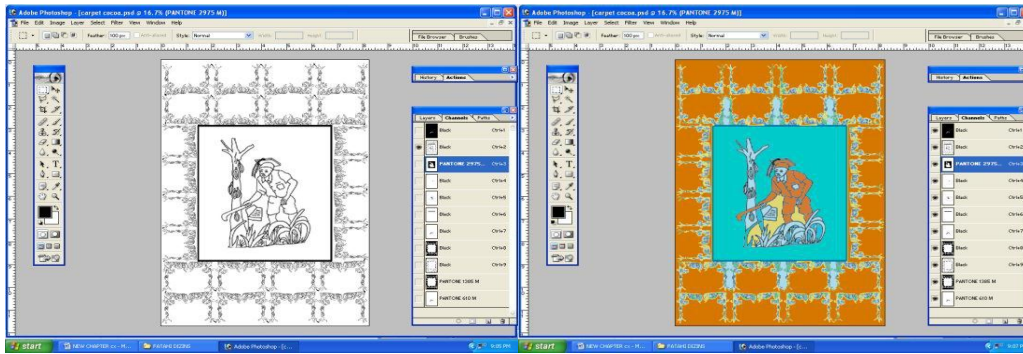


Plate 4.50: Motif arranged at borders Plate 4.51: Final design

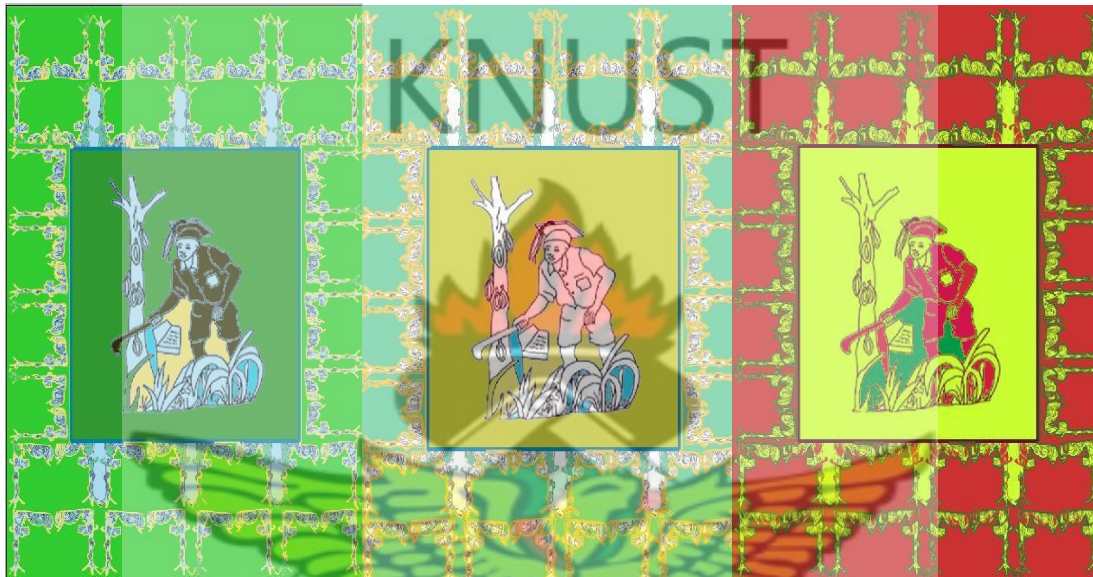


Plate 4.52: Final design in three colour ways

- Plate 4.49: Shows the positioning of the motif on canvas.
- The motif was reduced and arranged around the central motif as border designs as shown in Plate 4.50.
- The mode of the image was changed to multichannel to permit the application of colour.
- Plate 4.51 shows the arranged motifs in colour as final design.

The final design was rendered in three colour ways showing the effect of colour for the same design in Plate 4.52.

4.5.14 Curtain Design 7(Crop Production)



Plate 4.53: Motif opened in Photoshop

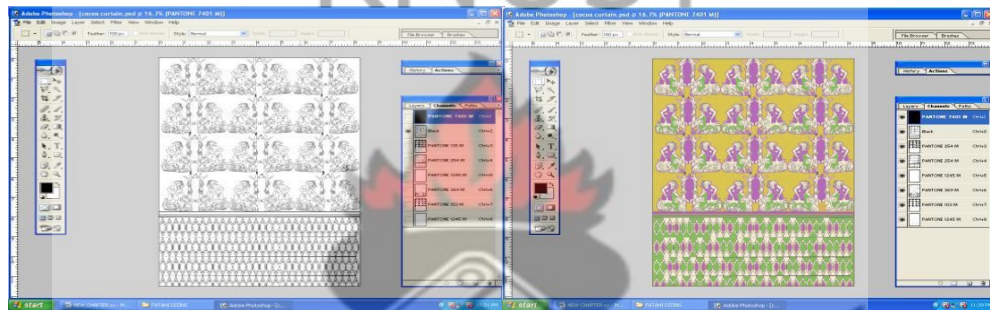


Plate 4.54: Arrangement of motifs

Plate 4.55: The Final design



Plate 4.56: Final design in three colour schemes

- In Plate 4.53 the motif was opened in Photoshop.
- The motif was selected and transformed for resizing and arrangement.

- The arrangement of the motifs in the design was done vertically as in plate 4.54
- A portion of the motif was abstracted, resized and arranged horizontally for boarder design as seen in plates 4.54 and 4.55.
- The mode of the image was changed to multichannel to permit the application of colour. Colour was applied to the background to get the final design in Plate 4.55.
- Plate 4.56 shows final design in three colour ways.

4.5.15 Carpet Design 8(Animal production)

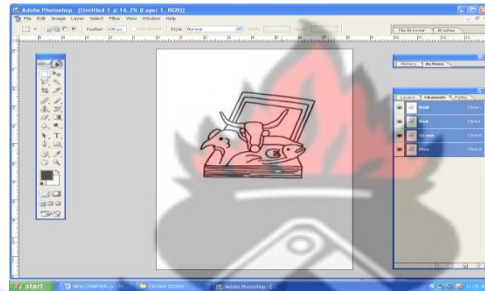


Plate 4.57: Motif placed on work space

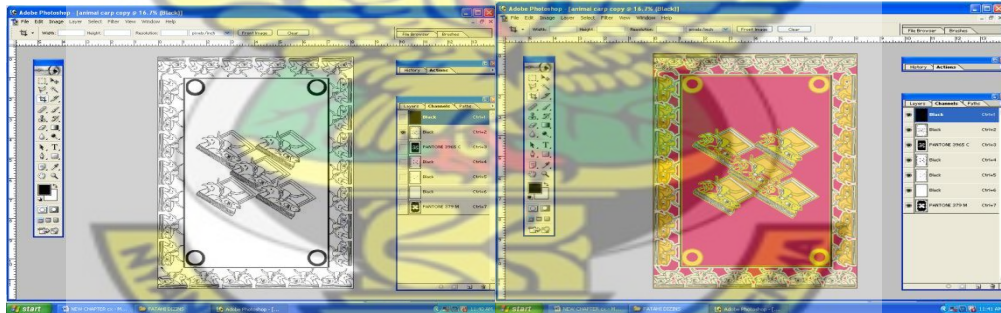


Plate 4.58: Motif arranged on canvas

Plate 4.59: The Final design



Plate 4.60: The Final design in three colour ways

- Plate 4.57 portrays the motif placed on work space
- The motif was reduced and arranged around the central motif indicating borders design.
- The brush and the eraser tools were used to create rectangular lines and circles separating the middle motif in plate 4.58.
- The mode of the image was changed to multichannel to permit the application of colour. Plate 4.59 indicates the arranged motifs in colour as final design.
- The final design was rendered in three colour ways showing the effect of colour for the same design in Plates 4.60.

4.5.16 Curtain Design 8 (Animal production)

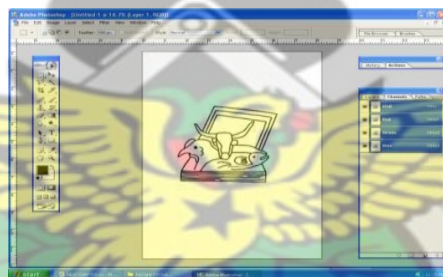


Plate 4.61: Motif opened in Photoshop

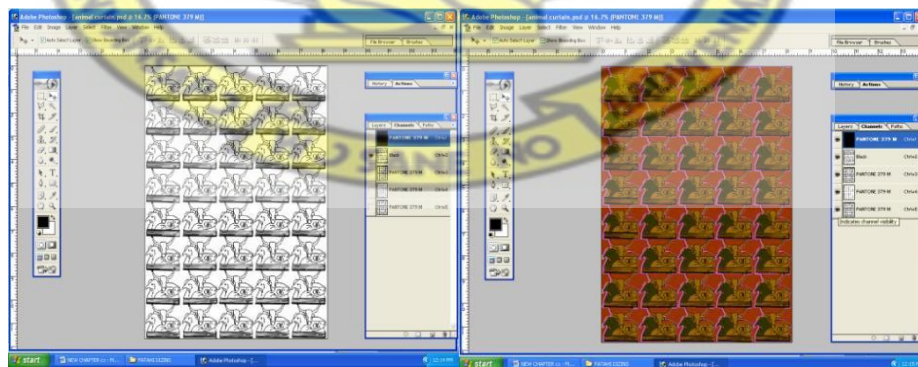


Plate 4.62: Motif arrangements

Plate 4.63: Final design



Plate 4.64: Final design rendered in three colour schemes

- In Plate 4.61 the motif was opened in Photoshop.
- The motif was selected and transformed for resizing and arrangement.
- The arrangements of the motifs in the design was done horizontally as in plate 4.62. The mode of the image was changed to multichannel to permit the application of colour.
- Colour was applied to the background to get the final design in Plate 4.63.
- The final design in three colour ways is shown in Plate 4.64.

4.5.17 Carpet Design 9(Fruit and vegetable production)

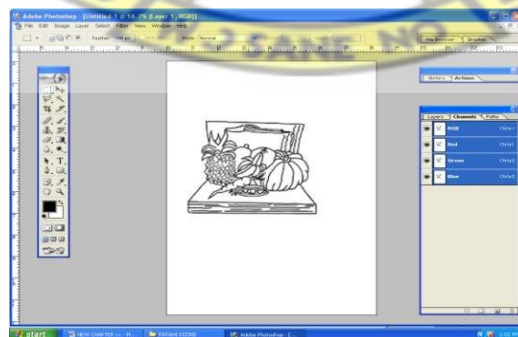


Plate 4.65: Motif shown on Canvas

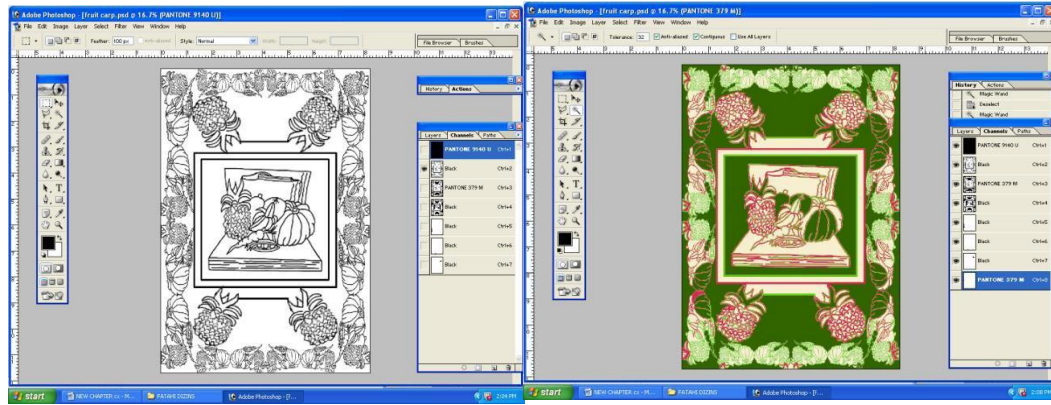


Plate 4.66: Arrangements of motif Plate 4.67: The final design



Plate 4.68: The final design in three colour schemes

- Plate 4.65 shows the motif opened in Photoshop.
- The motif was selected, transformed, resized and arranged at the borders.
- An aspect of the motif was cropped, zoomed and position at corners as a design
- The brush tool was used to create squares around the middle motif separating the middle motif from the borders as in plate 4.66.
- The mode of the image was changed to multichannel to permit the application of colour. Colour was applied to the background to get the final design in Plate 4.67.
- Plate 4.68. Portrays the final design in three colour ways.

4.5.18 Curtain Design 9 (Fruit and Vegetable Production)

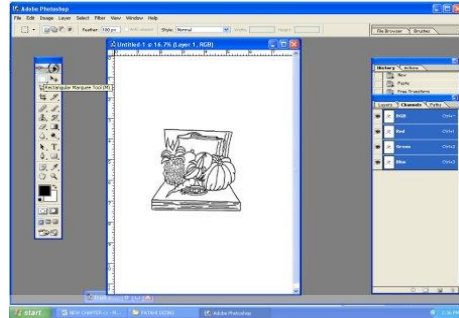


Plate 4.69: Motif opened in Photoshop

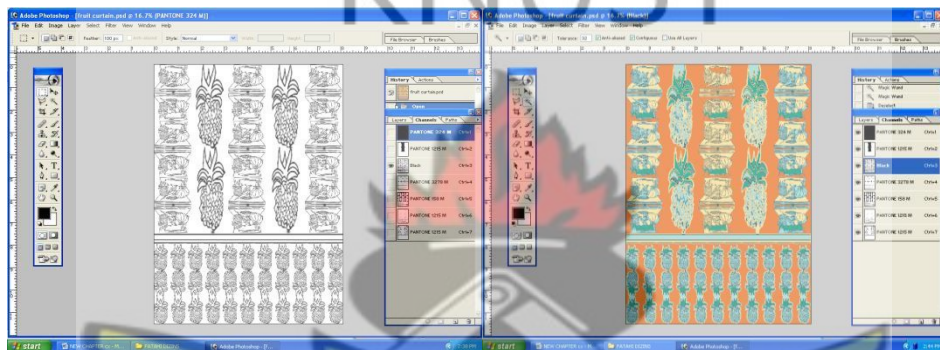


Plate 4.70: Arrangements of motif

Plate 4.71: Final design

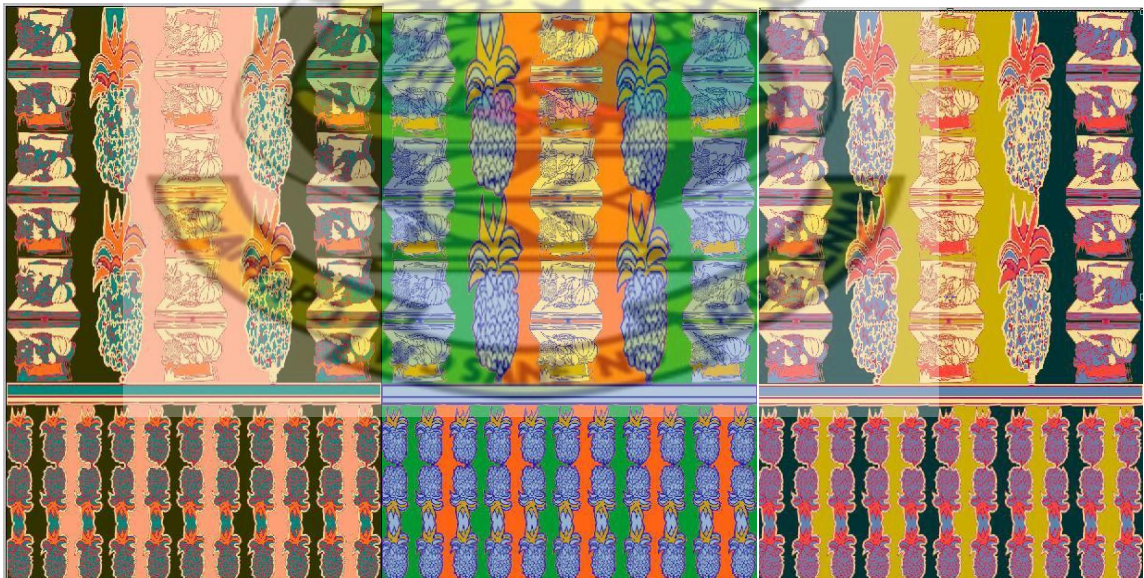


Plate 4.72: The final design in three colour ways

- Plate 4.69 shows the motif opened in Photoshop.
- Motifs were arranged vertically in a full drop pattern layout in linear orientation.
- An aspect of the motif was cropped, distorted and sandwiched between the linear orientations as seen in plate 4.70.
- A portion of the motif was cropped, resized, flipped and arranged horizontally serving as a boarder design as in plates 4.70 and 4.71.
- The mode of the image was changed from RGB > Gray scale > Multichannel to permit the application of colour. Final design in three-colour ways is shown in Plate 4.72.

It could be perceived that most of the Photoshop commands run through the process of generating the designs. This is so because some of the commands and tools are indispensable as far as textile design with Photoshop is concerned. However the various commands and tools were varied in the process to achieve special design effects and to enhance the aesthetic qualities of the design results.

4.6 Production of Selected Designs

Eighteen surface textile designs were made for curtain and carpet from themes under the philosophies of Technical, Vocational and Agriculture education. Out of this number of designs, few were selected and produced using the Hand Screen printing techniques.

4.6.1 Procedure

The processes involved in developing of screens and printing the designs were as follows:

- Wooden frame production

- Stretching of mesh
- Washing of the screens
- Tracing of designs
- Design transfer unto the screens
- Reinforcement of the screens
- Screen development
- Printing proper

4.6.2 Wooden Frame Preparation

The frames used for the preparation of the screen were made from “wawa” wood measuring 3cm thick. The sizes of the screen frame differ from one another due to the design and the width of the substrate to be printed. In preparing the screen few inches were allowed from the top and bottom of the screen as the reservoir at the sides to accommodate the print paste and the squeegee in their forward and backward movement in the screen during printing.

4.6.3 Stretching of the Mesh onto the Frames

A mesh was stretched over the wooden frames by hand with the aid of stapling machine and pins. During stretching an even and correct tension was ensured and maintain making the screens drum-tight.

4.6.4 Washing of the Screens

The stretched screens were thoroughly washed with detergents on both sides of the screens to remove all traces of grease and oil. The washing is done because the presence of these substances on the screens could cause a bad adhesion of the photo emulsion. The screens were allowed to dry.

4.6.5 Tracing of Designs

This method is also known as colour separation or di-positive. An exact copy of each individual colours in the designs were traced on a transparent film with an opaque ink. During tracing, the transparent films were placed flat over the design and fastened with pins.

4.6.6 Coating of the Screens

The design transfer was done in two folds namely; coating material and coating the screen. Coating Material -The coating materials used were a measure of potassium dichromate mixed with PVA and little pigment to give colour to the mixture for the sake of visibility. This mixture at this stage was light sensitive and was used to coat all the screens in a dark room.

Coating the Screen-The washed screens were coated with the light sensitive emulsion, consisting of PVA and potassium di-chromate. The emulsion was applied to the screen with a metal trough from a slight angle against a wall. The screen was coat from bottom to top in a stroke all over and dried. After drying the screens were coated again for reinforcement and dried.

4.6.7 Screen Development/Copying

The dried screens were brought into contact with the film(di-positive) and ensured that firm contact was achieved and maintained by means of a glass sheet and weight and exposed for 4-6 minutes. After the exposure period the screens were rinsed in cold water to remove the unwanted photo emulsion from the unexposed parts of the mesh. The developed screens were allowed to dry in an open air. After drying the screens were

examined for fault and pinholes and corrected. The screen frames were reinforced by fixing paper adhesive tape around their edges ready for printing.

4.6.8 Printing of Curtain and Carpet Designs

During printing the substrate to be printed was fastened to the printing table with pins. The screens were positioned accurately over the materials on the printing table, with the aid of a squeegee made of rubber and a wooden handle two strokes to achieve the depth colour needed. The screens were then lifted to the next alternate screen repeat position until the whole length of the material was printed. Due to the number of screens based on the designs, other screens were also positioned as before and printed until all the colours in the design were printed. The printed material was removed from the printing table, dried and fixed. The results of the selected printed curtain and carpet designs under the philosophies of Technical, Vocational and Agriculture education are shown in drapes in plates 5.73, 5.74 and 5.75, 5.76 and 5.77 also show the printed carpet.

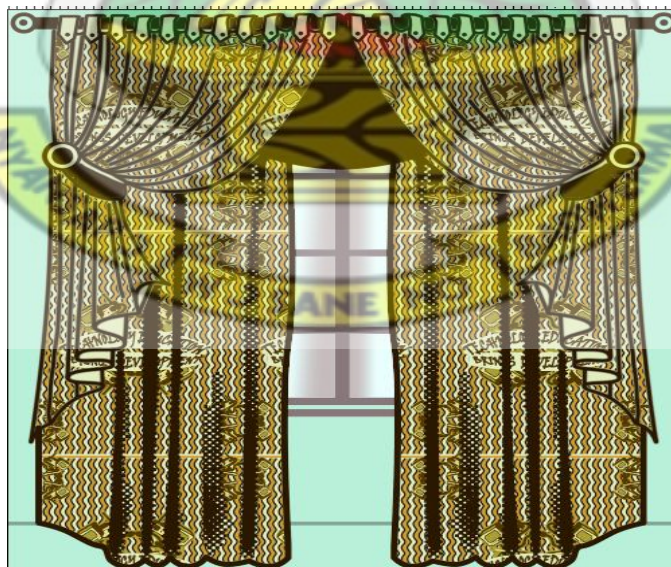


Plate 4.73: Printed Curtain design (Technical Education)



Plate 4.74: Printed Curtain design (Agriculture Education)

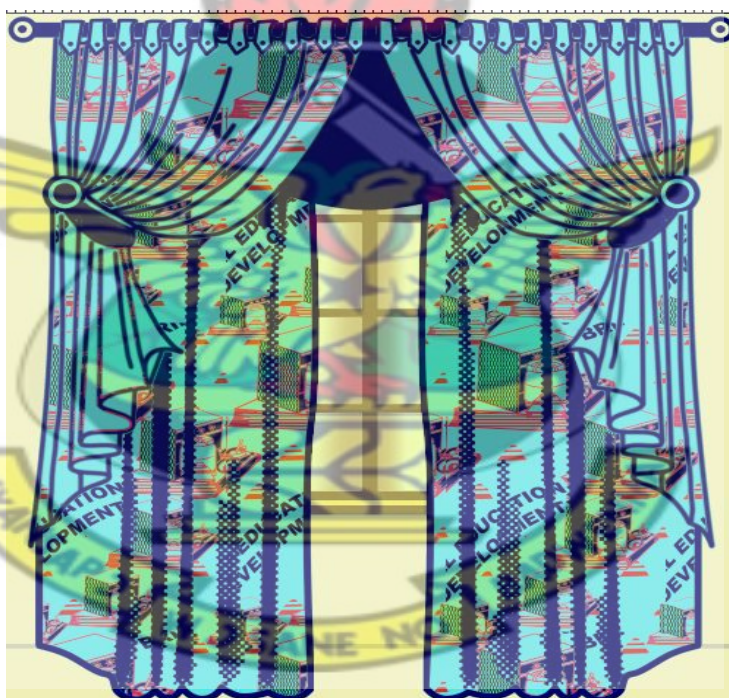


Plate 4.75: Printed Curtain design (Vocational and visual art education)

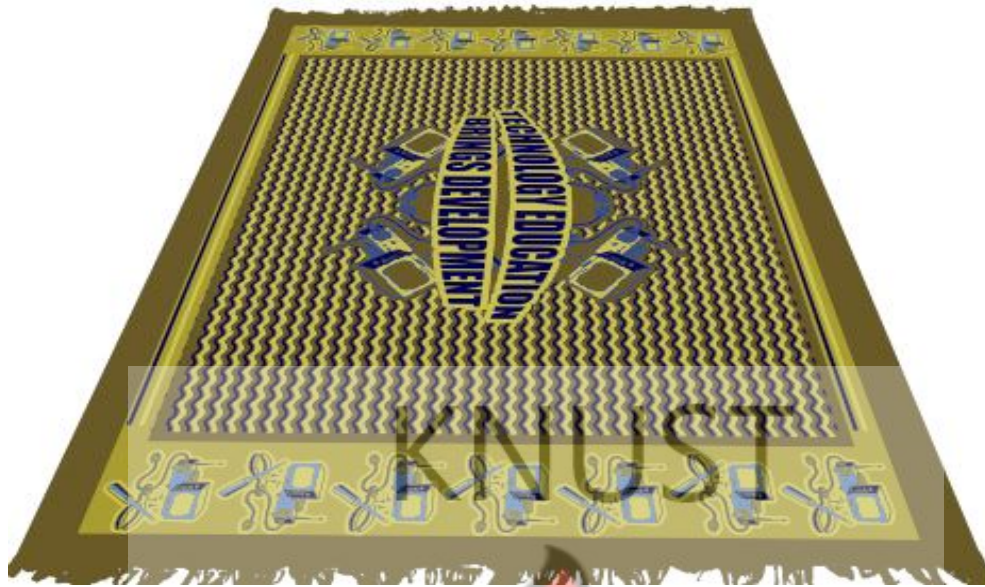


Plate 4.76: Printed Carpet design (Technical Education)



Plate 4.77: Printed Carpet design (Agriculture Education)

CHAPTER FIVE

RESULTS AND DISCUSSION

5.0 Overview

This chapter deals mainly with the presentation and discussion of the final designs made for curtains and carpets generated from the philosophies of Technical, Vocational and Agriculture education by government to promote developments in Ghana. The discussion of the results is focused on the aesthetic qualities with reference to arrangement of motifs, textures, and colour combination.

5.1 Result and Discussion of Design 1



Plate 5.1: Carpet design on Technical Education in Building Technology

The design in Plate 5.1 represents the design concept on Technical education in Building Technology. The motif consists of four concepts: a laid block and a head pan representing building technology, a hood and a roll of certificate also representing education, a text to stress on the theme. The laid blocks symbolizes progressive

advancement in building and construction industry in Ghana, a hood and a roll of certificate symbolize graduates who have graduated from Building and Technology institutions with the specialized industrial skills necessary for development. This confirms the assertions by Seidman (1989) that, an economy based on specialization is capable of attaining higher and higher levels of productivity as it permits the use of more advanced industrial techniques and scientific innovations in each sphere of the economy. The head pan also symbolizes labourers and technicians as indispensable personnel providing support and technical qualities to the building industries.

The building and Construction industries in Ghana is one of the key areas of the economy providing a lot of self employment and job opportunities to both graduate and non graduate Ghanaians to reduce the rate of unemployment in the country. Manjichi and Brouwer (2007) confirms that Vocational/Technical education produce skilled craft men and women who will be self employed and to build a vibrant economy to accelerate national development. It is against these backgrounds that the researcher introduces designs in the form of curtain and carpet to sensitize and insist on building and construction education as means to provide technical skills to create job opportunities and self reliance for Ghanaian people.

The Carpet and the Curtain designs in this project will be used as floor, window and door coverings for institutions, department and offices concern for Technical Vocational and Agriculture Education and Development. As a decorative piece it will also serve as a means of communication, awareness creation and education to learners, lecturers and other stake holders on the importance of Technical, Vocational and agriculture Education as the ultimate key for nation building. This will encourage many

Ghanaians to seek knowledge in these areas of education to acquire the needed practical skills and training needed for self employment and wealth creation to alleviate poverty in Ghana.

The design is composed with one type of texture in the form of laid blocks. The colours used in the design include yellowish, green, and Prussian blue which symbolize wealth, prosperity and productivity of Ghanaians.

5.2 Result and Discussion of Design 2



Plate 5.2: Carpet design on Technical Education in Computer/Automobile Technology

The design in Plate 6.2 represents the design concept on Technical education in Computer/Automobile Technology. The motif consists of three concepts: laptop Computer, a metal pipe and a threaded knot representing Computer and Automobile Technology, a pen on top of a book within the screen of the laptop also representing education, and texts to give emphasis on the importance of the theme. The Lap top

computer symbolizes the world as a global village, the book and the pen symbolize sources of knowledge, information, and education obtained from the use of computer via internet. As said by Hyland (1996) that Technical and Vocational education also produces technocrats who are self employed to bring creativity and skills in this modern day of information technology to make way for the development of a country. The shaft, and the threaded knot symbolize essential vehicular moving parts which aid in the conveyance of people, goods and services from one point to the other because transportation is an important economic sector.

The motif has been with an oval shape carrying a text in full drop, whilst the textures which are in the form of screws surround the motif in a random arrangement. This technique was employed by the researcher to enhance aesthetics of the design. The design is composed with a texture in the form of screws. The colours used in the design include, ultramarine blue, Prussian blue and light- violet these colours symbolize good fortune, integrity and trustworthiness the country seek to achieve.

5.3 Result and Discussion of Design 3



Plate 5.3: Carpet design on Technical education in Electrical/Electronic Technology

The Carpet design in Plate 5.3 represents the design concept on Technical Education in Electronic Technology. The motif consists of three concepts: a television set, a radio set and a screwdriver representing electrical and electronic technology, text to stress on the theme. The Television and Radio set symbolize sources of information, education and recreation. The screws and the screw-driver symbolize the ability to repair broken gadget whilst the plier symbolizes the ability to create and manufacture simple electronic gadget making oneself reliant as confirmed by Mensah (2006) that self reliance or actualization can better be achieved through Technical/Vocational and Agricultural education as these are aimed at equipping one with practical and employable skills.

The motif has been position in the middle with an oval shaped text in full drop whilst the textures surround are in horizontal arrangements. This technique was employed by the researcher to add beauty to the design. The design is composed with wavy lines textures. The colours used in the design include green, yellowish-green, blue -green, and blue which symbolize prosperity, wealth and good fortune for Ghana.

5.4 Result and Discussion of Design 4



Plate 5.4: Carpet design on Technical Education in Carpentry Technology

The Carpet design in Plate 5.4 presents the design concept on Technical education in Carpentry Technology. The motif consists of five concepts: A bench, a saw, a hammer, a piece of wood and a plane representing carpentry technology, a text emphasizing on the theme. The Bench, hammer and the piece of wood symbolize the basic raw materials used for all Carpentry and Joinery Technology. The saw, the hammer and the plane symbolize the basic knowledge and tools used in Roof and Cabinet making whilst the nails also symbolize the durability of the product of Carpentry and Joinery.

The motif is placed in the middle and aside it the text in a diagonal position in full drop whilst the textures in the form of nails surround it in random arrangement. This technique was adapted by the researcher to enhance aesthetics of the design. The design is composed of texture in the form of small nail. The colours used in the design include golden-yellow, orange, and ultramarine blue which symbolize maturity, glory and responsibility of Ghanaians.

5.5 Result and Discussion of Design 5



Plate 5.5: Carpet design on Vocational Education in Cookery and Visual Arts

The Carpet design in Plate 5.5 indicates design concept on vocational education in cooking and Visual Arts. The motif consists of five concepts: books, a gas cylinder and burner, and cooking utensils representing cooking technology, the books representing education, a text to stress on the theme. Cookery and Visual Art education establishes a skilled and productive workforce for Ghana's socio-economic development as indicated by World Bank Group (2011) that Technical/Vocational and Agriculture education establishes skilled workforce seen through; Improve health and nutrition, Increase Productivity and Earnings, and Reduction in poverty and Inequality. The Gas Stove and a Burner symbolize cookery and the ability to prepare nutritious and good food, the book symbolizes book binding and graphics art, the cooking pot and the ladle symbolize Ceramics ware whilst the sieve cup symbolizes Metal Art in Visual Arts.

A bigger size of the motif has been placed in the middle enclosed within a square in full drop surrounded by textures. This technique was adapted by the researcher to give aesthetics to the design. The design is made up of textures in the form of superimposed books. The colours used in the design include brown, red- orange, golden-yellow, and dark-green symbolizing genuineness, preciousness and prosperity for Ghanaians.

5.6 Result and Discussion of Design 6



Plate 5.6: Carpet design on Agricultural Education in Crop Production

The Carpet design in Plate 5.6 represents the design concept on Agriculture education in crop production. The motif consists of five concepts: a cocoa tree, a maize plant, a book and a human figure holding a cutlass representing crop production and an opened book also representing education in agriculture. The motif is made up of a book and a male figure wearing a hood symbolizing graduates who have received education and skills in crop production, a stump of cocoa tree and plantations of cocoa seedlings also symbolizing intensification of cocoa farming as one of the crops that earns Ghana name and more foreign exchange.

The motif has been positioned in the middle in full drop. This arrangement was employed by the researcher to advance the beauty of the design. The colours used in the design include red-orange, yellow, light-blue, and dark- brown symbolizing prosperity, maturity, integrity and genuineness of people of Ghana.

5.7 Result and Discussion of Design 7



Plate 5.7: Carpet Design on Agriculture Education in Crop Production

The Carpet design in Plate 5.7 portrays the concept design on agriculture education in crop production. The motif consists of five concepts: Maize, a bunch of plantain, a stump of cassava, a roll of certificate, and a book. The agriculture items represent crop production whilst the roll of certificate and the book also representing education. The motif is made up of a book and a roll of certificate symbolizing graduates who have received education from crop production, Stump of cassava, a bunch of plantain, a tuber of yam, and a comb of maize all portraying the staple food produced, consumed and marketed by Ghanaians as confirmed by Baffour, (2000) that Ghana being an agricultural country has about 70% of its population engaging in agricultural activities therefore, it serves better for government to focus on agriculture education because it is the main stay of a country's economy. The motif is positioned in the middle in full drop. This design approach was employed by the researcher to enhance aesthetics of the design. The colours used in the design include light-brown, dark-green and reddish brown symbolizing abundance of natural resource, growth and prosperity of Ghana.

5.8 Result and Discussion of Design 8



Plate 5.8: Carpet Design on Agriculture Education in Animal Production

The Carpet design in Plate 5.8 represents the design concept on agriculture education in animal production. The motif consists of four concepts: a cow head, a hen head, a fish and an opened book representing animal production, the opened book representing education. The motif is made up of a book symbolizing education in livestock production, a Cows head, the head of a hen and a fish, all symbolizing diversities in livestock production as viable venture for poverty reduction as indicated by Seidman (1989) that the philosophy of agriculture education has to do with reduction of poverty and self sustainability. The motif has been positioned in full drop. This technique was employed by the researcher to enhance aesthetics of the design. The colours used in the design include light- brown, medium- brown and deep-brown symbolizing abundance of natural resources in Ghana.

5.9 Result and Discussion of Design 9



Plate 5.9: Carpet Design on Agriculture Education in Fruit and Vegetable Production

The Carpet design in Plate 5.9 presents the design concept on agriculture education in fruit and vegetable production. The motif consists of eight concepts: A book, a pumpkin, a mango, an orange, a pineapple, a banana, a carrot and a pea, representing fruit and vegetable production. The book represents education. The motif has been positioned in the middle.

The motif is made up of a book and assorted fruits and vegetables symbolizing education in fruit and vegetable production. This is an alternative venture for poverty reduction as confirms again by Seidman (1989) that reduction of poverty and self sustainability is achieved through agriculture, since the sale of agricultural raw materials and foodstuffs may be made available for further investment in industry and agriculture. Colours used in the design include yellow, Reddish-brown, dark-green and light yellow symbolizing maturity, abundance of nature and the growth of Ghana.

5.10 Result and Discussion of Design 10

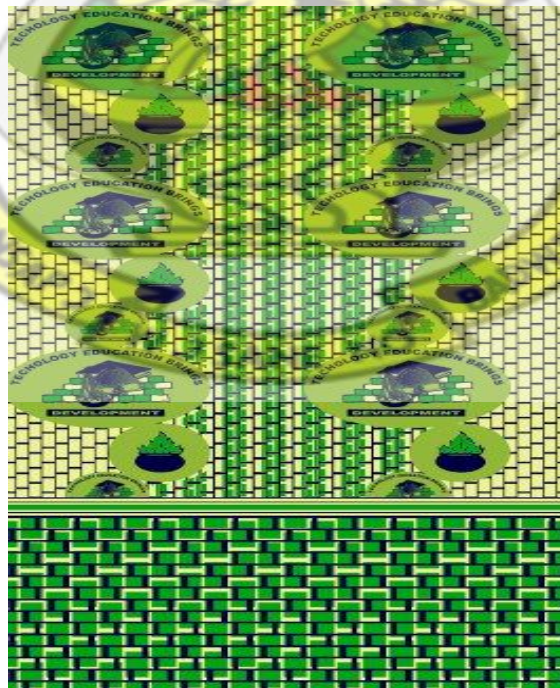


Plate 5.10: Curtain design on Technical Education in Building Technology

The Curtain design in Plate 5.10 presents the design concept on technical education in building technology. The motif consists of four concepts: a laid block and a head pan representing building technology, a hood and a roll of certificate also representing education, a text to give emphasis on the theme. The motifs have been arranged in a vertical order, alternated by additional motif in a form of a pot with blazing fire, symbolizing: the storehouse of knowledge and the quest for knowledge must be kept alive and burning always as seen in Plate 5.10. The motifs are in full drop arrangement whilst the textures surround them in vertical arrangements in the form of laid block. Boarder design in laid block formation was employed by the researcher to enhance aesthetics of the design. The design is composed with one type of texture in the form of laid blocks. The colours used in the design include cream, yellowish-green, green, and Prussian blue.

5.11 Result and Discussion of Design 11



Plate 5.11: Curtain Design on Technical Education in Computer/Automobile Technology

The Curtain design in Plate 5.11 presents the design concept on technical education, electrical/automobile technology. The motif consists of three concepts: a lap top, a metal pipe and a threaded knot representing Computer/Automobile Technology, a pen placed on a book within the screen of the lap top also representing education, and texts to give emphasis on the theme. The motifs and the textures have been arranged in diagonal order, as in Plate 5.11. This technique was adapted by the researcher to enhance the design. The design is composed with one type of texture in the form of reduced threaded knot. The colours used in the design include: Dark- green, light violet, and light brown.

5.12 Result and Discussion of Design 12



Plate 5.12: Curtain Design on Technical Education in Electrical/Electronic Technology

The Curtain design in Plate 5.12 represents the design concept on technical education in electrical/electronic technology. The motif consists of three concepts: a television set, a radio set and a screwdriver representing electrical and electronic

technology, text to emphasize on the theme. The motif has been arranged in full drop but in varying sizes whilst the textures surround it in a vertical order. The Boarder design is a reduction of the motif that was arranged at the base closely to form the boarder design as seen in Plate 5.12. This creativity was employed by the researcher to enhance aesthetics of the design. This technique was employed by the researcher to enhance aesthetics of the design. The colours used in the design include green, yellowish-green, blue-green, and Prussian blue.

5.13 Result and Discussion of Design 13

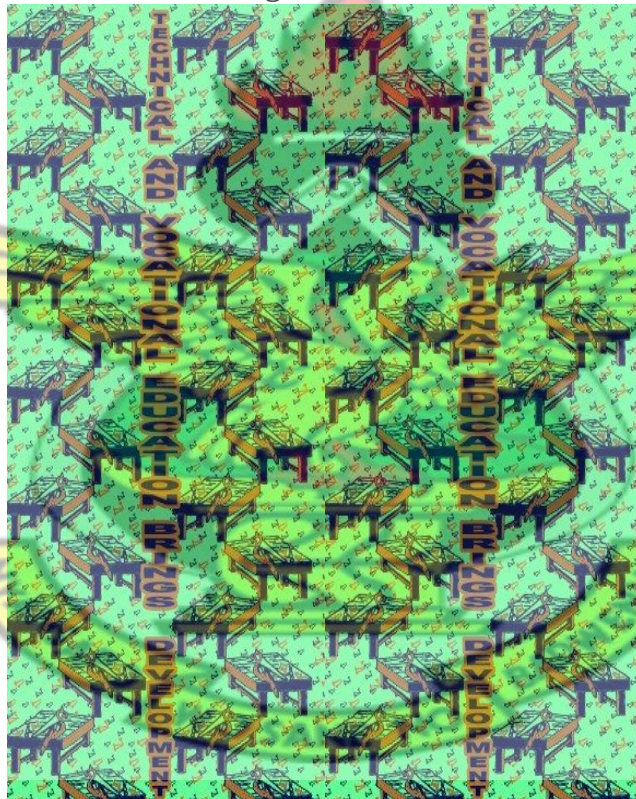


Plate 5.13: Curtain Design on Technical Education in Carpentry Technology

The Curtain design in Plate 5.13 indicates the design concept on Technical Education in Carpentry Technology. The motif consists of five concepts: a bench, a saw, a hammer, a piece of wood and a plane representing carpentry technology, a text to give emphasis on

the theme. The motifs have been arranged in zigzag formation vertically whilst the textures were randomly placed around them as seen in Plate 5.13. This technique was employed by the researcher to enhance aesthetics of the design. The design is composed with one type of texture in the form of small nails. The colours used in the design include golden-yellow, orange, and ultramarine blue.

5.14 Result and Discussion of Design 14



Plate 5.14: Curtain Design on Vocational Education in Cookery/Visual Arts Technology

The Curtain design in Plate 5.14 portrays the design on vocational education in cookery technology. The motif consists of five concepts: books, a gas cylinder, a burner, and cooking utensils representing cookery technology, the books representing education, a text to give emphasis on the theme. The motifs were arranged diagonally in varying sizes whilst the textures surround it in horizontal manner as seen in Plate 5.14. This

technique was employed by the researcher to enhance aesthetics of the design. The design is composed with one type of texture in the form of superimposed books. The colours used in the design include Prussian blue, pink, ash and dark-brown.

5.15 Result and Discussion of Design 15



Plate 5.15: Curtain Design on Agriculture Education in Crop Production

The Curtain design in Plate 5.15 shows the design concept on Agriculture education in crop production. The motif consists of five concepts: a cocoa tree, a maize plant, a book and a human figure holding a cutlass representing crop production and an opened book also representing education in agriculture. The motifs in this design have been abstracted and arranged vertically in full drop. The boarder design is abstracted from the motif and was arranged at the base closely to form the boarder design as in Plate 5.15.

This creativity was admitted by the researcher to enhance aesthetics of the design. The nature of the motifs and the arrangement do not pave way for the addition of textures. The colours used in the design include yellow-orange, yellowish-green, light-green, dark-green and brown.

5.16 Result and Discussion of Design 16

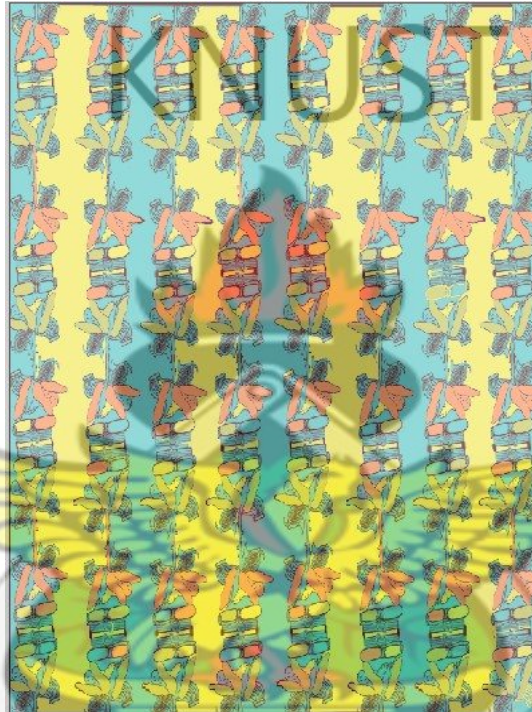


Plate 5.16: Curtain Design on Agriculture Education in Crop Production

The design in Plate 5.16 presents the design concept on agricultural education in crop production. The motif consists of five concepts: Maize, a bunch of plantain, a stump of cassava, a roll of certificate, and a book. The other items represent crop production, whilst the roll of certificate and the book also represent education. The motifs in this design have been arranged vertically in full drop in parallel formation as seen in Plate 5.16. This technique was applied by the researcher to enhance aesthetics of the design.

The colours used in the design include red-orange, yellow- orange, blue- green, lemon- green and dark- brown.

5.17 Result and Discussion of Design 17



Plate 5.17: Curtain design on Agriculture Education in Animal Production

The design in Plate 5.17 represents the design concept on agriculture education in animal production. The motif consists of four concepts: a cow's head, a hen head, a fish and an opened book representing animal production, the opened book representing education. The motifs were arranged diagonally as seen in Plate 5.17. This technique was used by the researcher to enhance aesthetics of the design. The colours used in the design include reddish- brown, purple, golden yellow, deep-brown and dark green.

5.18 Result and Discussion of Design 18

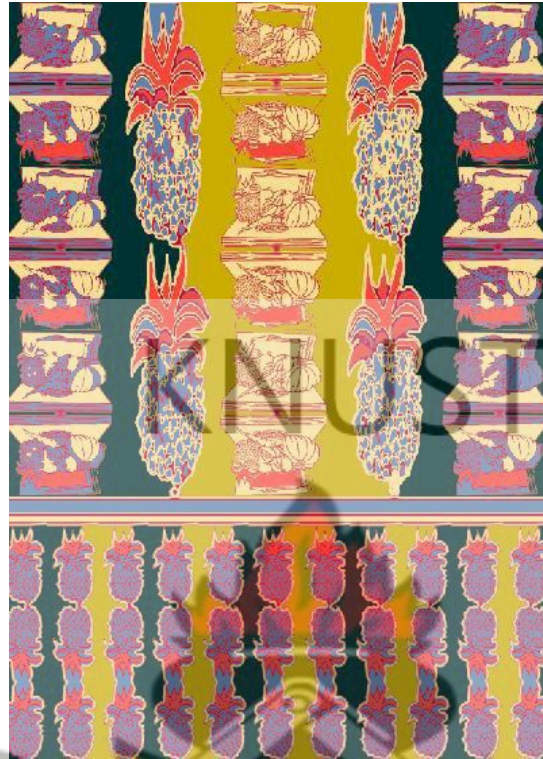


Plate 5.18: Curtain Design on Agricultural Education in Fruit and Vegetable Production

The printed textile design in Plate 5.18 exhibits the design concept on agricultural education in fruit and vegetable production. The motif consists of eight concepts: A book, a pumpkin, a mango, an orange, a pineapple, a banana, a carrot and a pea, representing fruit and vegetable production. The book represents education. The motifs were arranged creatively in vertical manner. The motif for the boarder design is cropped from the main motif. This was arranged vertically at the base closely to form the boarder design in plate 5.18. This creativity was employed by the researcher to enhance aesthetics of the design. The colours used in the design include golden-yellow, sea-blue, red, red-violet and blue-green.

5.19 Field Research Findings

Using the qualitative research approach for this study, the researcher personally observed the interior furnishing materials at Offices of K.N.U.S.T, Kumasi Polytechnic and Kumasi Technical Institute. The data collected from these sources indicate that all the interior furnishing materials were foreign made basically from colorful floral and geometrical motifs for aesthetics and carry no message to the on-looker as seen in the

Plates below:



Plate 5.19: Curtain fabric at Building Department office K'Poly (Field Survey 2010)



Plate 5.20: Curtain fabric at Department of Agriculture office KNUST (Field survey 2010)

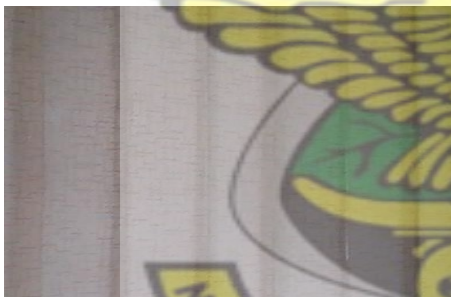


Plate 5.21: Curtain fabric at Treasure Land Hotel's office Kumasi (Field Survey 2010)

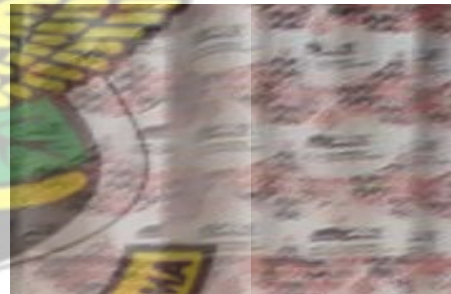


Plate 5.22: Curtain fabric at Department of Engineering office KNUST (Field Survey 2010)



Plate 5.23: Carpet design from Principals Office KTI (Field Survey 2010)



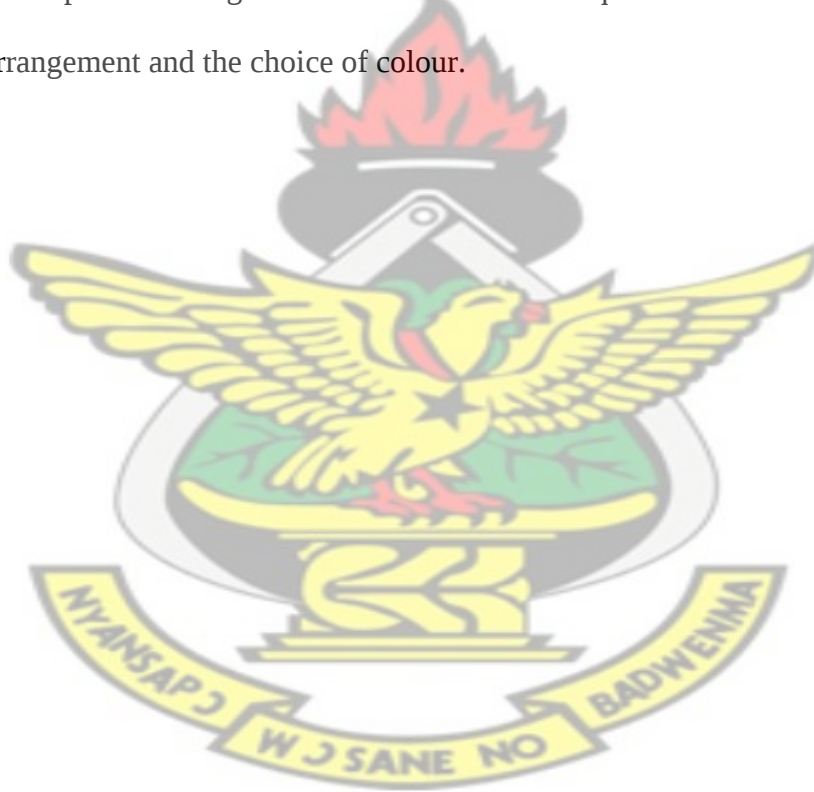
Plate 5.24: Carpet design from reception at Anita Hotel Kumasi (Field Survey 2010)

5.20: Main Findings

The study exposed the possibility of creating motifs from themes. It also affords the possibility of using Adobe Photoshop programme as a design tool in creating textile designs from abstract images. The main findings of the study are as follows:

- It was realized that it was not common for textiles designers to use themes to create motifs for designs. The study, however, proved that themes can be successfully used as inspirations for textile designs but a great deal of effort, creative thinking, and consultations are required for one to be able to achieve an appealing motif from themes for textile design.
- The study showed that the Adobe Photoshop software cannot function satisfactorily if installed on a computer with low speed. Because a low speed computer takes a long time to respond to a command, this cause the computer to freeze. In order to achieve good performance, the software must be installed on a computer with high speed.
- The ability to select the right Photoshop tool or the right command for specific purpose enhances the quality of the design result. The Photoshop programme though good for creating unlimited designs, sometimes presented challenges to the designer, therefore one has to have patience, perseverance and endurance as a result of fatigue
- Lot of creativity and skills are required in the use of Photoshop for textile designing especially when one does not have the expertise in designing using the Photoshop.

- As a result of wear and tear and the affinitive for the woolen carpet to absorb the colour, the print paste was mixed with acrylic pigment for better results.
- Printing on woolen carpet was a difficult one as the printing paste dried up quickly during the printing process therefore, one needs to be very fast during printing to avoid drying up of the paste.
- Overlapping colours created interesting effect after printing both the curtain and the carpet design.
- Each printed design came out with its unique effect due to the mode of arrangement and the choice of colour.



CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Overview

This chapter discusses the summary of the study, conclusion and make recommendations towards awareness creation on Vocational, Technical and Agricultural Education through the use of furnishing Textile designs.

6.1 Summary

The main objective of this project was to generate printed textile designs on the philosophies of Ghanaian education in Technical, Vocational and Agriculture Education thereby educating the public on the importance of Technical, Vocational and Agriculture education to the development of Ghana.

This study began with an introductory chapter which considered the definition of the problem, objectives, followed by the review of related literature on the topic under consideration. Libraries were visited to obtain data for the review of related literature so as to set the foundation for the project to be carried out. Data were also sourced from the internet, journals as well as magazines to support the study. Photographs and other images used in the idea development for the project were derived from books and sketched by hand and adobe Photoshop software.

The researcher adopted the descriptive, observational and Art studio based practical research methods in the execution of the project. The experimental research method involves the designer's abilities to experiment with causes and effects of textile design elements and principles with the use of Adobe Photoshop software in the

designing process. The descriptive method of research enables the designer to vividly describe the design generation process and the outcome of the design results.

In the attempt to achieve the set objectives the philosophies of Ghanaian education were identified purposefully through observations and interviews of the lecturers, students and workers within the study area. This was used in analytical discussion in support of the study.

The designs were focused on Technical, Vocational and Agricultural education in Ghana. These conversational printed textile designs reveal the possibilities of using concept to carry a message across to the public through the use of fabric. The study finally presents and discusses the results obtained.

6.2 Conclusions

The results of the study have proven that printed textile designs can be developed from themes by converting abstract ideas into visual images. This is a possibility even though a lot of challenges of brain storming are required to be able to convert thoughts into pictures on a particular theme. Communication in design is said to be complete when the message being carried across is understood by all and sundry. To achieve this form of communication, which was the main objective of this study, calls for using images that have direct meaning and relationship with philosophical ideas from Ghanaian Technical, Vocational and Agricultural education. Majority of the images generated and used for the textile designs were obtained by the researcher as a result of brainstorming and employing other sources of inspiration so as to expediently convey the message associated with philosophies of Technical, Vocational and Agriculture education and presenting them in a design.

The outcome of this research will be useful because concept-generated textile designs were produced to educate the Ghanaians on the importance of Technical, Vocational and Agriculture education. It is important to note that these designs will provide the opportunity of educating Ghanaians on the significance of Technical, Vocational and Agriculture education for national development.

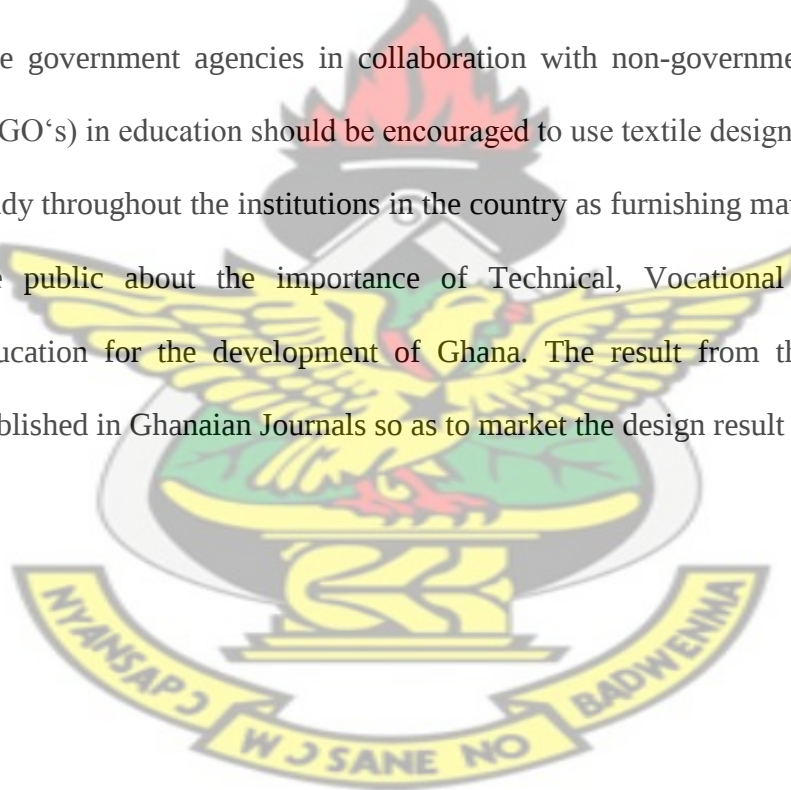
6.3 Recommendations

Based on the findings of the study, the following recommendations have been made for consideration:

- The National Vocational and Agricultural Institutions should adopt the result of this study and educate Ghanaians on their cultural values, to discard the notion that Technical, Vocational and Agriculture education are meant for the less privilege in the society or for the weaker minds resulting from poor academic qualifications.
- A concept generation design aimed at problem solving in our society must be encouraged especially by textile designers, artist and students in Ghanaian institutions to enhance their level of creativity.
- Textile designers and students should explore theme-based motifs to bring out innovation as well as easy identification which will provide better understanding for all classes of people to appreciate.
- The use of Adobe Photoshop in making Textile designs is a challenge therefore; beginners should learn the software with patient and perseverance.
- Science and technology have expanded ways of creating designs. The researcher therefore recommend that, the Department of Industrial Art in collaboration with

the Government of Ghana should make available computers that have textile designing programmes like Photoshop, Coral draw and other CAD to students. This would make each student have a feel of these designing programmes in order that they would be able to learn, understand the tool and their applications so that they could effectively apply them in textile designing.

- It is highly recommended that the Government and Ministry of Education of Ghana make funds available for further research on this project or similar projects so as to revamp the textile industry and their designs catalogue.
- The government agencies in collaboration with non-governmental organization (NGO's) in education should be encouraged to use textile designs produced in this study throughout the institutions in the country as furnishing materials to sensitize the public about the importance of Technical, Vocational and Agriculture education for the development of Ghana. The result from this study will be published in Ghanaian Journals so as to market the design result



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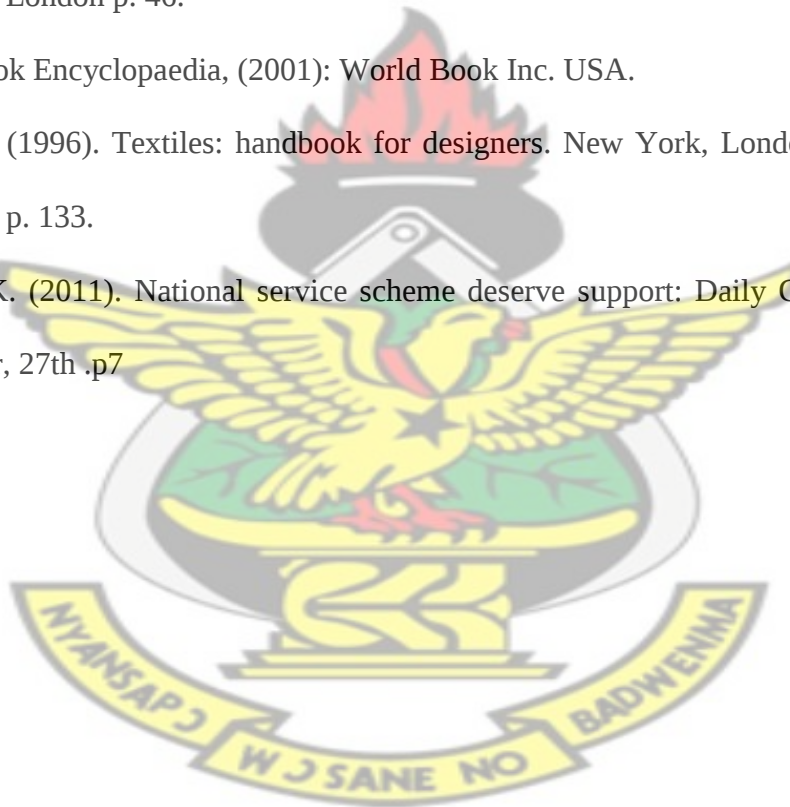
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APPENDICES

APPENDIX 1: GUIDED INTERVIEW SCHEDULE FOR STUDENTS AND THE WORKERS OF KNUST, K’POLY AND KTI

1. Do you know of any Ghanaian educational philosophy?
2. Mention the philosophy that you know.
3. Give the importance of these philosophies.
4. Which of the philosophies do you think is popular, in terms of knowing their importance?
5. Do you have some knowledge about technical/vocational and agricultural education?
6. Do you know how vocational/technical and agricultural educations render development?
7. Can printed fabric design with philosophies of Ghanaian education inform the public?
8. Do you think the philosophy of Ghanaian education in technical, vocational and Agriculture can become more popular by using it in designing furnishing materials for Ghanaian institutions?

**APPENDIX 2: A GUIDED INTERVIEW SCHEDULE FOR
LECTURERS/TEACHERS OF KNUST, K’POLY AND KTI**

1. What is your understanding about education and development?
2. What is your understanding about Ghanaian educational philosophies in Technical/Vocational and Agriculture?
3. How do you understand development in general?
4. How would you measure development?
5. How could education foster development?
6. How relevant is vocational/technical and agriculture education to the development of Ghana.
7. Would you consider textile design for interior furnishing as an alternative medium to communicate the government policy on technical/vocational and agriculture education?
8. Do you think the philosophy of Ghanaian education in technical/vocational and Agriculture can become more popular by using it in designing furnishing materials for Ghanaian institutions.

APPENDIX 3: OBSERVATIONAL GUIDE/CHECK LIST FOR INSTITUTIONAL OFFICES, RESIDENCE OF LECTURERS AND HOTELS IN ASHANTI REGION

1. Location of educational institution offices, residence of lecturers and students, hotels and guest house in Ashanti Region.

In Kumasi ☐

Outside Kumasi ☐

2. If outside Kumasi, state the exact province

3. Magnitude or size of the institution/residents/hotels and guess houses:

Small ☐ Medium ☐ Large ☐

4. Types of educational institution: ☐ Private ☐ Government

5. Level of education: Primary ☐ Secondary ☐ Tertiary ☐

6. Types of curtain and carpet used.....

7. Types of motif used in curtain and carpet design: Floral ☐ Geometrical ☐

☐ Theme Based

8. General observations.....