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Integration Of Fabric And Leather As A Vocation By Pupils In Junior High School In Kumasi, Ashanti Region Of Ghana

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Abstract:

Fabric and Leather have been in existence for a very long time in Ghana. This industry has a vast role to play in the socio-economic development which has not been fully exhausted. This study aims at introducing pupils to basic skills in fabric and leather decoration and to use that skill to integrate fabric and leather to produce articles and functionalities to solve basic socio-economic problems in our society. The study is a qualitative research and it rides on an action research method. The data for the study were collected from both primary and secondary sources. The primary sources of data were gathered from resource persons in the field of work and personal interaction with fabric and leather workers. The secondary sources were from books, journals and the internet. The study discovered significant ability of pupils to integrate fabric and leather in producing articles worth selling. It also outlines how efficient and productive pupils can be in the fabric and leather industry. The research gave pupils the experience and the opportunity to come into contact with some basic tools and materials used in fabric and leather. Certain recommendations were made which include: pupils of Junior High School across the country should be provided with all the logistics to enable them work with fabric and leather. Pupils should be exposed to more practical knowledge and experience of fabric and leather than theory. Also they should be given room to explore with the synthetic and natural dyes used in the study. It is recommended that improvised tools should be used in order to make production less expensive for pupils.

Key words: *Leather. fabric. Pupil.*

1.Introduction

UNESCO (1984) submitted that, generally, vocation and career are used interchangeably. Vocational education might be classified as teaching procedural knowledge. This may be contrasted with declarative knowledge, as used in education in a usually broader scientific field, which might concentrate on theory and abstract conceptual knowledge, characteristic of tertiary education. Vocational education can be at the Junior Secondary or post-secondary level and can interact with the apprenticeship system. According to UNESCO, vocational education can help reduce poverty in Ghana. In agreement, Chin-Aleong (1993) stated that one approach to aid vocational education is to have a core curriculum and diversified clusters of elective subjects that include vocational and technical subjects.

Osei-Barnieh (2010) elucidated that the main objectives of vocational education as in recent information point out that technology is now a dominant factor in developing countries. The use of information technology has revolutionized the nature of industries. The new age calls for a new type of education and training. It emphasises more on developing people with creative minds and multiple skills.

In Ghana, one of the most used materials for domestic purpose is leather. Leather as described by Microsoft Encarta (2009) is a processed hide of animals with their fur or feathers removed. There are different types of leather. These include Vegetable-tanned leather, Chrome-tanned leather, Aldehyde-tanned leather, Chamois leather, Synthetic-tanned leather, Alum-tanned leather and Rawhide. The study made use of rawhide and synthetic-tanned leather.

Aside leather, fabric is also another material used in Ghana. Fabric refers to any material made through weaving, knitting, crocheting, or bonding. Cloth refers to a finished piece of fabric that can be used for covering a bed, decoration, fashion and so on. There are different types of fibres that are used for fabric. Some of them include linen, wool, cotton, silk and synthetic fibres (Aldrich, 1996). For the sake of this research, mercerized cotton, a type of fibre, was used by the researchers.

Castling (1996) noted that instruction is the main process used to teach skills. According to Castling there are two main methods of instruction teaching. These are coaching and demonstrating teaching. In Castling explanation, demonstrating teaching involves an expert practitioner modelling a desired way of performing a skill. It is usually followed by an opportunity for learners to try performing the skills for themselves under close supervision. Coaching teaching is usually carried out one on one during the job itself or during a period of simulated practice; it involves close attention to the learner's performance, pointing out how it can be adapted or improved.

Farrant (1982) opines that teaching and learning are opposite sides of the same coin because a lesson is not taught until it has been learned. Teaching therefore can be thought of as a process that facilitates learning. As stated in Microsoft Encarta (2009), teaching is a systematic presentation of facts, ideas, skills, and techniques to students. It is therefore fundamental for the researchers to delve into teaching technicalities and to ascertain the appropriate one to use to execute the study. The coaching teaching approach method was applied in this study to give the pupils the opportunity to engage the researchers one on one to produce the articles.

2. Materials And Tools

The study made use of tools such as a steel rule, cutter, a pair of scissors, measuring tape, punch, hand brush, hammer, rubber mallet, pen, pencil, owl, squeegee, printing paste, wood board, Iron, soldering torch, needle, thread, sewing machine and wax which is in agreement with Zimmerman (1969) and Cock (1981). Materials used include: fabric, leather, self-made hard card pattern, nylon thread, dye (both natural and synthetic), screen, lining, fastness, zip, card, stiff. For the purpose of the practical work in this research, the researchers employed greybaft and polyester as the fabric and treated rawhide as the leather. This is because they possess the needed quality for the practical work and pupils can best handle them.

2.1. Decorative Techniques Employed In Producing Works

The researchers agreed with Zimmerman (1969), Batts (2007) and Microsoft Encarta (2009) to use techniques such as thonging, marbling, carving, dyeing, In-lay, tooling, embroidery, patchwork, quilting, appliqué and embossing in decorating the products.

3. Methodology

The qualitative research approach was adopted for the study with special emphasis on action research. Mills (2000) explained that action research is any systematic inquiry conducted by teacher researchers, principals, school counsellors, or other stakeholders in the teaching and learning environment to gather information to improve on the existing situation. An action research method which is a type of descriptive research was used for the study (Given, 2008). This was because it allowed the development of new skills, approaches and gave direct solution to problems through active participation by the researchers with direct application to the classroom. Cohen and Manion (1997) define action research as a small-scale intervention in the functioning of the real world and a close examination of the effects of such intervention. Action research is situational; it is concerned with diagnosing a problem in a specific context and attempting to solve it in that context. It is participatory, self-evaluative, modifications are continuously evaluated within the ongoing situation, and the ultimate objective is to improve practice. The researchers recorded, described, analysed and interpreted findings and conditions in line with the works produced by pupils.

A population consists of all elements in a well defined collection of a set of values (Nkpa, 1997). The population of study for the research deals with pupils in the second year class of St Louis Junior High School who comes from all the metropolis in Kumasi and have opted for Fabric and leather Decoration. Best (1998) explained that, "a population is any group of individuals who has one or more characteristics in common that are of interest to the researcher".

Leedy (2005) suggests that, for one to be able to come out with a good research work, there is the need to restrict one's self or focus on a specific target group, industry, area, community, or an organization. The target population for the study were the two classes of second year pupils in St. Louis Junior High School which were A and B class. The accessible population for the research were the pupils who optionally and of much interest chose the subject Fabric and Leather Decoration. The sample group was the pupils whose parents gave them the permission to be used for the research work totaling 18 pupils representing 52% of the total population for the study which was 34 pupils representing 100% of the two second year pupils classes of A and B combined that were offering Basic Design Technology subject. A hundred copies of the questionnaire were given to teachers, parent and guardians of which 88 were retrieved. Observation was employed to obtain a direct information and ascertain the truth from pupils.

3.1. Procedures in executing the work

This segment of the study is centred on presentation of the processes that were used for the research. It also deals with the analysis and interpretation of the data collected. The data collected has been assembled in the form of figures and discussed. The researchers introduced greybaft fabric, polyester fabric and leather decoration to the pupils. In the introduction, pupils brainstormed what fabric and leather was all about. Articles with decorative techniques were given to each pupil for examination. The articles examined were made up of decorative techniques which include embossing, appliqué, stamping, scorching, thonging and carving. The researchers discussed the use of both fabric and leather.



Figure 1: Pupils Having A Feel Of Natural Leather Figure 2: Pupils Having A Feel Of Greybaft Cotton Fabric



Figure 3: Some Pupils Examining Leather Bag

Figure 4: Pupil Having A Look Of Leather Mask

The researchers presented some examples of fabrics to the pupils. For the purpose of the research, the researchers exposed pupils to tools of which most of them were improvised ones made of nails, shaped iron rods, needles and blades. Dye solutions such as "waakye" leaves, "sobolo" flowers, nail and iron rods were prepared by pupils. They give brown, reddish or wine and dark brown or black colours respectively.



Figure 5: Leather Being Dipped Into Lime Solution So To Open The Pores In The Leather For Easy Dyeing
&

Figure 6: The Washed Leather Being Dipped Into Dye Solution



Figure 7: Leather Is Dipped Into The Dye Bath



Figure 8: After Sometime The Leather Is Taken Out



Figure 9: Pupils Stretching Leather For Drying



Figure 10: Pupil Removing Dried Leather

3.2. Pupil's Drawings

The Pupils used idea development method to make a lot of sketches and at the end drawings of bags, wallets, ties, table covers, belts and other fast selling items were made by them.

Amenuke (1995) significantly stated that designing should consist of identifying the problem, defining and specifying the problem, investigating the problem (research and analysis), suggesting possible solutions, make pattern, production (making the article) and finally appraisal of them.



Figure 11: Pupils Sketching For Practical Work



Figure 12: Pupils Sketching For Practical Work

The researchers gave pupils the opportunity to brainstorm and explore the kind of design they wish to use in their production. Adinkra symbols such as "gye nyame" (except God), "nyame biribiwosoro" (God something is in heaven), "Akoma" (the heart), "Akoben" (war horn), "sankofa" (go back and take) and "nkonsonkonson" (chain) were the most used Ghanaian symbols in designing the works produced by the pupils. The intent is to give the works unique orientation features not similar to the imported ones.

3.3. Pattern making

In order to save waste of leather and fabric, pupils transferred their drawings into pattern. This was later used to cut leather and fabric to the required dimensions needed to produce the items for sale.



Figure 13: Pupils tracing pattern onto leather

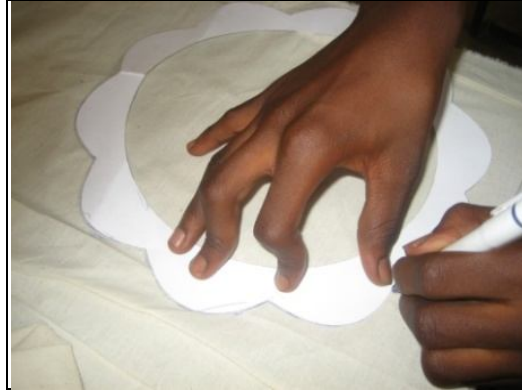


Figure 14: Pupils tracing pattern onto greybaft

3.4 Putting the pieces together into products

Pupils then used joining and decorative processes which included thonging, in-laying, tooling, embossing, marbling, carving, dyeing, patching and appliqué to put together cut pattern for items to be produced into finished works for sale.



Figure 15: Pupils working on the flower vase

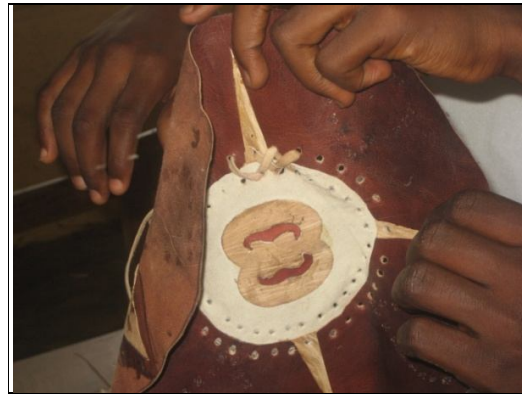


Figure 16: Pupils working on table cover



Figure 17: Pupils In A Group Picture With Some Of The Works They Produced

4.Results And Discussion

With reference to the new syllabus of Curriculum Research of Development Division of Ghana Education Service (2008) on Basic Design and Technology for Junior High School in Ghana, the mode of assessment was classified into three categories; namely: Originality, Design and Craftsmanship. This is to ascertain the viability and sustainability as well as how competitive the works produced by pupils for the study can be.

4.1.Originality

Works produced by pupils were made to suit the purpose for which it was manufactured. The works were influenced with Ghanaian culture. Different Adinkra symbols were used by pupils with the intent of maintaining originality as well as to attract both the local and foreign market. The combination of the fabric and leather also made the work creative.

4.2.Design

Designing simply formed the basic concept of the work produced by the pupils. The design process began with a problem (Amenuke, 1995). Pupils brainstorm about articles that are portable and less expensive to produce. They therefore defined and specified the problem. Afterward, they investigated the problem by looking at the shape, size and form of the article; taking a critical look again at the elements and principles of design and symbols to be used. The pupils then went further to make sketches of which one was selected. Patterns were then made using soft paper cards to form a prototype.

4.3.Craftsmanship

The ability of pupils to skillfully and efficiently manipulate materials into new ideas was uniquely done. Pupil's technical knowledge of handling tools and materials were very good. Pupils were able to hold tools very well to execute their works. Materials were also manipulated especially the greybaft and leather. The application of glue and using of thread in sewing were employed to execute the work. More importantly pupils were able to show knowledge and understanding of the use of materials and tools as well as techniques in production and designing. Pupils were able to recollect what was taught them as well as put to use what was demonstrated and practiced by the researchers. The understanding level shown by the pupils was to the extent that they could explain whatever technique was employed.

4.4.Finished work

A total number of 18 fabric and leather combine works were produced by pupils. Works produced have four main features. This entails: all works were designed with adinkra symbols, all works had a combination of fabric and leather, natural dyes prepared by pupils were used and more importantly all input and output of the works were pupils made. Works produced include table cover, tie, flower vase, bag and wallet which covers furniture decoration, body dressing, wall decoration and money or document keeping works respectively. The sizes of work ranges from 21cm x 9cm to 82cm x 5.8cm. Choice of colours were blended of brown, coffee, reddish and black for the leather and black and cream for the fabric. With the exception of the fabric colours, the colours of the leather were the making of the pupils.

- Some finished works made by pupils



Figure 18: Finished In-Laying Wallets



Figure 19: Finished Thonging Wallet



Figure 20: Finished Flowervase

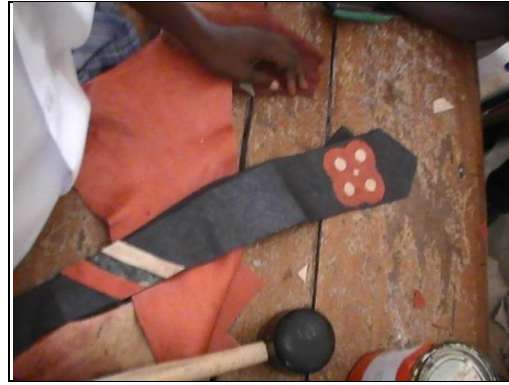


Figure 21: Finished Tie



Figure 22: Finished Handbag



Figure 23: Finished Thonging Wallet

5. Conclusion

Practical exposure expresses one's hidden skills. However, acquiring this skill needs reinforcement and the teacher is the best person to provide the environmental conditions that will make the learning experience the skill he or she has. The research has provided detailed ability of how pupils can effectively use fabric and leather to produce articles when apt explanation and appropriate teaching skills is used. It also uncovered the ability of pupils to integrate both fabric and leather to produce articles of use in our society. The success of this study has proven the capability of pupils in manipulating fabric and leather into a standard product.

The study further stressed on creative development and use of knowledge to think quickly and solve problems by pupils. An observation revealed that pupils showed interest in working effectively since they were responsible for everything that went into the production of the articles. In Ghana, according to www.worldbank.org/education/adultoutreach, government of Ghana increasingly view vocational education as skill development. It sees it as an important factor in the drive to enhance productivity, stimulate economic competitiveness and raise people out of poverty. In effect pupils made sales out of the 18 works produced which allure to their benefit.

6. Recommendation

In view of the results of the study the following recommendations have been considered. Pupils of Junior High Schools across the country should be provided with all the logistics to introduce them to fabric and leather work. Pupils should be exposed to more practical experience of fabric and leather than the theory, so that pupils would have total practical knowledge of the subject before they complete Junior High School.

Pupils should be given the room to explore with the synthetic as well as the natural dyes used in this study. It is recommended that improvised tools should be used in order to make production less expensive for pupils who want to go into fabric and leather production after school. Articles produced by pupils should be influenced by Ghanaian culture to preserve our heritage.

Vocational Institutions and Non-Governmental Organizations should adopt procedures in the study to train and give employable skills to their trainees and the unemployed. All Junior High Schools in Ghana should be provided with exhibition centre where they can display works produced by pupils for sale.

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