Textiles Education in Ghana: A View from Senior High Schools in the Greater Accra Region

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Abstract

The vibrancy and enthusiasm of students in the Textiles education of the Visual Arts programme in the past is depleting currently. Most Senior High Schools (SHSs) and students are getting disillusioned about this decline and many schools are dropping Textiles from their menu of elective Visual Arts subjects. This makes it necessary to investigate the teaching and learning of Textiles in the senior high schools using schools that offer Textiles Education in Greater Accra Region as a case study. Mixed methods research approach with observation, interview and questionnaire administration were used to collect data using a convenience and purposive sample of 186 Textiles students and 12 teachers in seven senior high schools in the Accra Metropolis. Data were also sought from three textiles lecturers in a polytechnic, two universities, three West African Examination Council officials and two Curriculum, Research, Design and Development coordinators of the Ghana Education Service. The study revealed that the schools do not have the requisite textbooks, art studios, and the basic tools and materials to enable the students acquire enough knowledge and skills specified in the Textiles syllabus to enable them pass final examination and/or to establish their own businesses after they leave school. The Ghana Education Service should organise periodic in-service training to enhance the capacity of textiles teachers to sustain Textiles Education in SHSs. It was recommended that, government together with the Parent-Teacher Associations, and Old Students’ Associations of the senior high schools should support the schools with adequate facilities and equipment such as art studios, workshops, galleries and exhibition rooms for effective teaching and learning.

Keywords: Technical-vocational education; Senior High School; Textiles; Visual Arts; Ghana.

Introduction

Technical skills are indispensable tools for development so any country that aspires to develop technologically must develop its technical and vocational education as a prerequisite for enhancing the skills of her citizens (Laing, 2012). Making reference to the rapid development of Korea, Singapore and the other industrialised Asian nations, Laing (2012) exhorts nations to adopt policies that are based on technical and vocational education to train a highly skilled workforce to support economic development.

Ghana has made much effort over the years to infuse the general school curriculum with vocation oriented subjects that will equip the youth with entrepreneurial, productive and employable skills so they can function effectively in the global economy (Anthony, 2014). Ghana’s strategy for nurturing vocational skills among the citizens has focused on training students to become enterprising so they can adapt to the demands of a global knowledge-based economy that is driven by science and technology (Danso-Sintim, 2008).

This seems to be the basis of the series of educational reforms that Ghana has implemented since the 1960s which included the introduction of the Continuation School Scheme into the then middle school curriculum (McWilliam & Kwamena-Poh, 1975 as cited in Opolu-Asare, 2000) to orient adolescent students to vocational and technical education based on the arts practised in the various communities, using master craftsmen in the local communities as resource persons. This philosophy underlined the 1987 education reforms which included Visual Arts as a vocational education programme to foster national creativity through the school system (UNESCO, 2001).
Furthermore, the 2008 Education Act (p.12) succinctly defines the target as infusing the general school curriculum with vocational oriented programmes to produce well-balanced individuals with the requisite knowledge, skills, aptitudes and attitudes for becoming functional and productive citizens towards the total development and advancement of democracy, and other related matters”.

The 2008 Education Reforms in Ghana also reinforces the purpose for including Visual Arts, Home Economics and other technical skills oriented subjects in the secondary school curriculum as the development of creative citizens for the socio-economic development of the nation. Currently, Visual Arts and Home Economics constitute the two options of the Vocational Skills programme of the Senior High School (SHS) elective curriculum (Evans-Solomon & Opoku-Asare, 2011), which are taught independent of each other. This means that students who decide to pursue Vocational Skills education at SHS can only offer Visual Arts or Home Economics, and not both. However, Home Economics students can choose to study General Knowledge in Art (GKA) as their elective subject even though GKA is a core subject for Visual Arts students (Agbenatoe, 2011; Osei-Mensah, 2012). No Visual Arts student studies any Home Economics subject as their elective.

Textiles, which is the focus of this paper, is an elective subject that is studied within the Visual Arts curriculum in SHS and categorised as a two-dimensional (2-D) Visual Arts subject. Studied over the three-year SHS duration in tandem with one or two three-dimensional (3-D) subjects such as Sculpture or Ceramics (Ministry of Education [MOE], 2010, 2013), the Teaching Syllabus for Textiles (MOE, 2010) indicates that this elective subject was designed to equip students who study it with practical skills that will enable them to set up businesses and become self-employed in the field of textiles if they are not able to further their studies beyond SHS. However, some research findings have revealed that many Textiles students who graduate from the SHS Visual Arts programme and are presumed to have acquired enough practical knowledge and technical skills in Textiles for self-employed or employment in this subject area are unable to do so (Danso-Sintim, 2008; Keteku, 2008; Banson, 2010; Boadi, 2012).

This points to two issues: either the teachers of Textiles are not teaching the subject well enough for the Textiles students to understand what they are taught or the students are not motivated enough or interested to learn what they are taught in Textiles, which reflects as failure to answer questions set by the West Africa Examinations Council (WAEC) in the final Textiles examinations.

Knowing that societies achieve significance through the production of visual arts, which includes Textiles, it is worthy to reiterate the opportunity that the SHS Visual Arts curriculum provides for Textiles students to develop pride and patriotism through the study of modern and traditional textiles towards imbibing some Ghanaian cultural and aesthetic values to promote the local textiles industry.

As the 2010 Teaching Syllabus for Textiles rightly points out, global competition in the textiles industry is suppressing the textiles industry in Ghana to the extent of adversely affecting employment of Textiles graduates in Ghana (Bruce-Amartey, 2012; Sackey, 2002), particularly the textiles manufacturing companies which were established partly as employment avenues. Promoting the study of Textiles is therefore important for diversifying and sustaining Ghana’s indigenous textiles industry. Sustaining Textiles education in SHS with workshops and relevant educational resources will therefore support Ghana’s socio-economic development as the President’s speech (Dzamboe, 2017) indicates.

Research objectives

The study basically investigates how teaching and learning occur in SHSs that offer Textiles within the Visual Arts programme to understand the knowledge and practical skills that are taught in Textiles lessons and to identify the challenges encountered during the teaching and learning of Textiles and how they could be resolved.
Statement of the problem

Textiles education at the SHS level has challenges that must be addressed to sustain technical/vocational education and national creativity via the Visual Arts programme. As Boateng (2012) has rightly pointed, disregard for vocational/technical education in Ghana shows through poor quality training facilities, inadequate number of institutions and training content. Personal experience as Textiles teachers and examiners in higher education attests to the waning interest in practical skills acquisition among many Textiles students, particularly with respect to developing competencies in idea development, manipulation of tools and materials to create Textiles works as enshrined in the Teaching Syllabus for Textiles. This situation hinges on the lack of the requisite studios, equipment and other relevant infrastructure and logistics for effective teaching, learning and development of technical and employable skills among the youth of Ghana. Visual Arts, which provides career-oriented skill is the most inadequately resourced of the elective programmes offered in the SHSs. The net result is lack of enthusiasm for Textiles among Visual Arts students.

JHS graduates are parading the streets of Accra and Kumasi selling dog chains, bread, handkerchiefs and fruits instead of engaging in Visual Arts related businesses or self-employment in the respective elective subject areas (Kokotah, 2008). This makes it reasonable for Quayson (2006) to say that the educational reforms that introduced vocational skills into Ghana’s school curriculum seems to be compounding rather than solving Ghana’s socio-economic problems.

Poor performance of students in Textiles at WASSCE also ends up diverting potential Textiles students into Graphic design, Picture making, Ceramics and other elective Visual Arts disciplines. Having fewer students in Textiles is therefore making it easy for many Senior High Schools to remove Textiles from their menu of Visual Arts elective subjects offered, thereby limiting the variety of creative and technical skills that Visual Arts could acquire from the programme. Invariably, more Visual Arts students are becoming disillusioned and less enthused to offer Textiles.

This scenario calls for a situational analysis to establish the state of Textiles education in Ghana, particularly at the SHS level which lays the foundation for tertiary education. This study therefore researched into the challenges facing teaching and learning of Textiles in seven SHSs as case study in order to suggest interventions for mitigating the problems to ensure acquisition of technical, creative and employable skills by the youth of Ghana.

Literature review

Vocational/technical education in SHS

Boateng (2012) refers to Vocational/Technical Education (VTE) as involving educational processes that embrace the study of technology and related sciences, acquisition of practical skills and knowledge which aim at discovering and developing individuals for employment in the various sectors of Ghana’s economy and social life. According to CRDD (2010), the justification for universal VTE is the provision of occupational or career skills for employment. Ghana’s desire to attain middle income status requires VTE; the decision to include vocational/technical skills oriented subjects in the general school curriculum is therefore very laudable. In particular, vocational/technical education the SHS level is aimed at preparing young men and women with relevant creative skills training to fulfil the country’s manpower needs in the fields of technology, industry, commerce, agriculture and business. In this regard, Boateng (2012) discusses the following as the requirements that VTE institutions need for effective functioning:

a. Workshops, tools/equipment, and materials to work with.
b. More instruction in practical periods.
c. Methods of assessment require trained appraisers who can assess students’ capability in the classroom and in the work place even though these make vocational/technical education more expensive than other types of education.
d. Skilled and proficient teachers. Teacher preparation is therefore very important.
e. Constant in-service training for teachers to upgrade their skills in addition to periodic industrial training to ensure that teachers are well-informed with technological changes that happen in the industry.

f. Development of strong co-operative connection between school and industry in order to design and implement programmes that will meet the needs of the industry.

The implication is that providing the required equipment, tools, training and capable human resources would ensure the viability of vocational and technical education to move Ghana’s agenda to attain middle income status just like Korea, Japan and other nations did to develop their national economies (Laing, 2012; Boateng, 2012.) It is critical therefore that Ghana promotes and sustains Textiles education in the senior high schools.

Challenges of vocational/technical education in Ghana

Professional and Technical Education in Ghana encounter difficulties. According to Boateng (2012), examination of Ghana’s education system towards the framing of a strategic plan for 2003-2015 by a board set up by government of Ghana in 2003 identified disregard for vocational/technical education as a key issue in Ghana. Other challenges the sector was encountering hinged on poor state of training facilities, inadequate number of institutions and outdated training content. Moreover, Boateng (2012) highlight the erroneous impression and perception that vocational/technical education, which includes Visual Arts education, is more expensive when compared with general education.

Another adverse factor that Boateng (2012) identified is the general perception that vocational/technical education, and by implication Textiles education, is suitable only for individuals who cannot deal with scholarly work, which is aggravated by the absence of mobility courses for professional specialist training for those who desire advanced training in VTE.

Visual arts education in Ghana

Visual Arts education was first introduced into the Gold Coast school curriculum in 1908 (Edusei, 2004) primarily to foster creativity in the lives of her citizens and for solving the country’s unemployment problems. At the basic school level Visual Arts education is mainly practical in nature with no vocational objective. At the Senior High School level however, Visual Arts consist of optional elective subjects that are examined at WASSCE (Edusei, 2004).

The Visual Arts Teaching Syllabus (CRDD, 2008) has grouped the elective subjects under two-dimensional (2-D) and three-dimensional (3-D) art forms. Subjects designed as 2-Ds are Graphic Design, Picture Making and Textiles while Sculpture, Ceramics, Jewellery, Basketry and Leatherwork constitute 3-Ds. Every student is required to study two electives: one from the 2-Ds and one from 3-D in addition to General Knowledge in Art, which is a core subject and hence studied by all students on the Visual Arts programme.

The study of these subjects over the three years of SHS education leads to WASSCE qualification, which gives access to advanced education and employment (Evans-Solomon & Opoku-Asare, 2011). Although schools that offer Visual Arts mandated to offer their students more than two elective subject, local research studies show that the schools have challenges satisfying this condition because getting specialist subject teachers for all Visual Arts subjects is difficult; studio facilities, essential tools and equipment and the necessary raw materials for those subjects, are also very difficult to obtain (Opoku-Asare & Siaw, 2016; Evans-Solomon & Opoku-Asare, 2011). This means all the schools cannot offer the range of elective subjects that will enable them provide tuition in many of the elective subjects to expose their students to the rich variety of vocational/technical skills to satisfy the students’ learning needs. Consequently, students’ selection of elective subjects is constrained by the number of subjects the schools offer and ultimately, the extent of learning experiences the students would have to become well-equipped to practise the relevant skills that relate to the particular vocations those elective subjects prepare students for (Opoku-Asare & Siaw, 2016; Opoku-Asare et al, 2014; Edusei, 2004). These limitations also extend to the fact that the subjects that Visual Arts students have opportunity to study in SHSs directly influence their educational and career goals beyond SHS in Ghana (Evans-Solomon & Opoku-Asare, 2011).
4.2 Rationale for the visual arts education at the SHS in Ghana

According to the Teaching Syllabus for the Visual Arts (2008), the SHS Visual Arts programme was designed to foster creativity and problem-solving skills among the youth so they can contribute their quota meaningfully to national development. The idea is that engaging in art activities makes it possible for learners to think, act and feel creatively as they manipulate different art materials. Visual Arts education is also meant to provide each student with adequate basic knowledge and skills for further education in the elective subjects as well as preparing them for self-employment or apprenticeship for SHS graduates who are unable to continue their education beyond SHS (Evans-Solomon & Opoku-Asare, 2011). As Edusei (2004) reiterates, the basic understanding of infusing art into the school curriculum was the fact that art has an integration effect on the personality of those who study the subjects mainly because the subject offers unique learning processes that include avenues for exercises that aid the development of the mental, spiritual and physical faculties of its students. Moreover, art develops the intuitive and subjective thinking capacities of individuals which are very relevant and necessary skills required in this age of automation and computerisation. Besides, Art serves as a therapy that helps in the correction of psychological problems as well as providing occupational therapy for others.

Textiles education in Ghana

The Teaching Syllabus for Textiles (CRDD 2010, p.5) defines Textiles as “the process of producing fabrics, which involves twisting of fibres into yarns interlacing or otherwise of yarns to form fabrics, decoration, finishing and how to care for the fabrics”. Sackey (2002, p.1) views Textiles as “the act of producing, decorating and improving the efficiency and value of fibres, yarns, and fabrics to serve the needs of man” while Adjekum (2010) describes Textiles as fabrics produced by weaving. To Adu-Akwoaboah (2010), Textiles imply the manufacture of clothing and all the materials that can be formed or have been formed into yarns or fabricated into cloth. The Teaching Syllabus for Textiles (CRDD, 2010) also describes the Visual Arts subject named ‘Textiles’ as activities that result in two-dimensional and three-dimensional art works that depend on fabric, fibres and yarns. Textiles may therefore be described as the production of fibres, yarns and fabrics and the decoration, finishing and care of fabrics woven from the yarns.

Amissah (2004) posits that the variety in Textiles materials due to the taste, fashion and the different uses of Textiles products that have led to the concept of Textiles being redefined to cover non-woven products. Even though the etymology of Textiles focuses on weaving, the concept now extends beyond the art of weaving cloth to include any means by which cloth could be made to serve a specified need. As such all persons who engage in Textiles production, fashion design, interior decoration, laundering and other operations must have a good knowledge of Textiles technology. In view of this, the youth of Ghana who engage in Textiles education in schools, colleges and universities must be taught and learn about Textiles design and technology. It is appropriate therefore that the study of Textiles is emphasized right from the basic education level and carried through to the tertiary level in Ghana’s education system.

However, societies are identified by their art works. To develop pride and patriotism in the youth, and enable them acquire love for the cultural and aesthetic values inherent in our arts, indigenous Ghanaian textiles have been incorporated in the SHS Visual Arts curriculum. The Textiles component has been structured with diversification of the local Textiles industry in mind so that those who study Textiles can generate jobs to alleviate poverty in the country. The idea is that Textiles has enabled many nations to improve their socio-economic status as well as the quality of life of their people (CRDD, 2010). The Textiles syllabus acknowledges that in Ghana, the combined energy of Textiles, science and technology is needed to reinforce national survival and development. It is important therefore to use Visual Arts to help the youth to develop their creative potentials and capabilities in Textiles so that they can contribute meaningfully to enhance both the indigenous and modern Textiles industry as well as the social well-being, as well as promote the culture and history of Ghana.

The SHS textiles syllabus and its Rationale

According to CRDD (2010) the study of Textiles provides information on the following:

a. Understanding the behaviour and character of fibres, yarns and fabrics when in use.
b. Fabric designing, construction, decoration and finishing processes.
c. Why certain fabrics are more durable and serviceable for specific purposes.
d. Why certain fabrics are cool or warm to wear and the impression of coolness or warmth when used as decoration.
e. The use of Textiles to promote, preserve, transmit and sustain culture.
f. Intelligent appraisal of standards and brands of merchandise for making appropriate choices.
g. Proper use of different fabrics for specific purposes and occasions.
h. How to care for and maintain fabrics to increase their life span.
i. Textiles as a vocation for earning a living.
j. How Textiles are used to foster community, national and international relationships.
k. Textiles as a foundation for further education.

The Teaching Syllabus for Textiles (CRDD, 2010) emphasises Textiles as a programme that generates 2-D and 3-D art forms. The intent is that the content, instruction and students’ learning outcomes should increase at each succeeding class level. The syllabus therefore provides teachers with a reference point from which to plan, implement and evaluate the instructional programme for Textiles at the SHS level.

Careers in the textile industry
Skills students should gain from studying Textiles include idea development, designing, printing, weaving, costing and pricing, packaging, exhibition and entrepreneurship. All the skills outlined in the syllabus are suited to a variety of vocations in the field of Textiles such as Textiles designer, Textiles Engineer, Textiles retailer, Textiles Technologist, Textiles Chemist, Quality Controller / Supervisor, and Textiles Teacher (Sottie, 2007; Evans-Solomon, 2004).

Scope of content of the Textiles syllabus
Textiles in SHS covers the history, principles and practice of Textiles as a vocation, and aimed at providing adequate foundation for further education in Textiles. The subject also offers enough knowledge and skills that students who terminate their education at the end of SHS to be able to practise Textiles as a vocation (CRDD, 2010).

Suggested basic tools/equipment and materials for SHS textiles
CRDD (2010) Textiles syllabus suggests that every SHS offering Textiles should have a studio furnished with at least a set of basic Textiles equipment needed in all the areas of the syllabus, including equipment for weaving, printing, dyeing, embroidery and appliqué. The specific equipment and accessories required by these units of Textiles are stated in the following sections.

Weaving
a. Traditional Kente looms
b. Table looms and broadlooms
c. Weaving accessories (reed, heddle hook, reed hook, warping mill, skein, bobbin winder, shuttle, and warping /shedding sticks)
d. Yarns (hanks/cones/cheeses)

Printing/dyeing
a. Printing tables (padded)
b. Wooden frames/screens
c. Squeegees, spoons, bowls/buckets
d. Large coal pots, stoves (kerosene /gas/electric)
e. Hand gloves and face masks
f. Chemicals: Photo-emulsion, dichromate, hydrosulphite, caustic soda, common salt
g. Fine mesh or silk organdie
h. Plain fabrics (poplin/calico/linen)
i. Waxes, raffia threads, “nkonkonte” (cassava flour) powder
j. Dyes (Vat, Procion, etc.)

Appliqué/embroidery/crocheting/knitting

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Methodology

Many Visual Arts students in Ghana who study textiles and are presumed to have acquired enough knowledge and skills to enable them become self-employed or employable in their respective areas of study are unable to do so. Their percentage in the tertiary institutions is also very low. Schools that used to offer textiles have now stopped and some are in the process of collapsing it. The study therefore, was to ascertain why many Senior High Schools (SHSs) are not offering Textiles and some schools have few Textiles students.

The study employed the mixed methods research design with interview, observation of classroom activities, and questionnaire administration to collect data from a purposive sample of 12 teachers and 186 students in seven SHSs that offer Textiles on the Visual Arts programme in the Greater Accra Region. In all, 28 lessons on different Textiles topics were personally observed across the seven schools with four lessons in each school. Additional data were collected from two SHS heads, three higher education Textiles lecturers, two CRDD and three WAEC officials.

The percentage distribution of student respondents in the sampled schools was: School A 16.7%, School B 11.8%, School C 5.4%, School D 8.6%, School E 32.8%, School F 8.6% and School G, 16.1%. For ethical reasons and the fact that permission was not sought to disclose the identity of the participating SHSs in this report, the schools are identified here as Schools A, B, C, D, E, F, and G.

Data analysis and discussion

Visits to the sampled schools revealed that out of the 130 registered SHSs in Greater Accra, only 30 of them offer Textiles. The WAEC list of schools also showed that 39 offer Textiles in Greater Accra Region but the data showed that about 30% of these SHSs no longer offer Textiles. These schools were therefore excluded from the study.

School B was in the process of phasing off Textiles and had no first year students offering this subject. School C had just re-introduced Textiles with 11 students after phasing out this elective subject for some time. From the information gathered many Visual Arts students do not like Textiles as compared to Graphic Design and Picture Making. The reasons for many schools discontinuing offering Textiles have been discussed in the ensuing sections.

Challenges affecting the teaching and learning of textiles in the selected schools

According to the CRDD (2010), the teaching of practical skills has been given 60% of the teaching and learning time to emphasise the point that the orientation in Visual Arts is more towards acquisition of practical skills at the SHS level. However, this is not the case as theory lessons were predominantly observed in the sampled schools probably due to lack of studios and adequate tools, materials and equipment such as looms, or there were no studios at all. This reflects the assertion that many Visual Arts lessons are taught theoretically via the lecture method, which mostly ignores practical activities. This is likely to shut off the spirit of active learning through exploration and experimentation among Visual Arts students and thereby deny them opportunity to develop critical thinking skills and high creative abilities in the respective subject areas (Opoku-Asare et al., 2014). Besides the predominant lecture method of teaching, discussion, demonstration, and group work methods occasionally featured in the teaching of some Textiles topics.
Permanent studios for practical work
Schools A, B, D and E out of the seven schools sampled for the study have Art studios where the students did their practical exercises. The studios were inadequately furnished with the standard equipment needed for practical lessons. Schools F and C were rather using their studios as classrooms. Since Schools C, F and G have no studios, their students do all practical works under available trees and sheds on the compounds. This situation contravenes the CRDD (2010) directive that every school that offers Textiles must have a studio furnished with at least, a set of equipment for all the component units of the Textiles syllabus they offer, which include weaving, dyeing, embroidery, appliqué and printing as seen in Table 1.

Table 1. Equipment / tools for SHS Textiles education

<table>
<thead>
<tr>
<th>Equipment/tool</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weaving (Fabric construction methods)</td>
<td>Weaving</td>
</tr>
<tr>
<td>Power looms and Manpower looms, e.g.</td>
<td>Yarns (hanks, cones and cheeses)</td>
</tr>
<tr>
<td>Traditional Kente looms, Table looms, Broad looms, Weaving Accessories (reed, heddle hook, reed hook, warping mill/warping board, skeiner, bobbin winder, shuttle, shed sticks)</td>
<td>Crocheting/Knitting</td>
</tr>
<tr>
<td>Crocheting/knitting</td>
<td>Stranded cotton, Metallic threads and sequins/beads</td>
</tr>
<tr>
<td>Knitting pins/needles, Crocheting pins, Hand-sewing needles (assorted sizes)</td>
<td>Printing</td>
</tr>
<tr>
<td>Printing table (Padded), Wooden frames/Screens, Kodatrace or tracing paper, stapler, stapler pins, brushes, Squeegees, Spoons, Bowls/buckets, Large coal pots, Stoves (kerosene / gas / electric), Hand gloves and face masks, Fine mesh or silk organdie, Waxes, raffia threads, needles, threads.</td>
<td>Printing</td>
</tr>
<tr>
<td>Printing /Dyeing (Fabric decoration methods).</td>
<td>Chemicals (photo-emulsion, potassium dichromate, hydrosulphite, caustic soda, common salt), Plain fabrics (poplin/calico/lien), Dyes (Vat, Procion, etc.) Postal colours</td>
</tr>
<tr>
<td>Appliqué/embroidery/</td>
<td>Appliqué /embroidery</td>
</tr>
<tr>
<td>Pins, Scissors, Tape measure, Hand-sewing needles (assorted sizes)</td>
<td>Stranded cotton, Metallic threads and sequins/beads</td>
</tr>
<tr>
<td>Finishing and Care of Fabrics</td>
<td></td>
</tr>
<tr>
<td>Pressing iron, tables.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2015

Table 2. Equipment/tools found in the selected schools

<table>
<thead>
<tr>
<th>School</th>
<th>Tools/equipment found</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Traditional looms without accessories, developing tables shooting tables without glass top, improvised wooden frames Squeegees, printing table (not padded)</td>
</tr>
<tr>
<td>B</td>
<td>Printing table, developing table, darkroom, squeegee, screens, Damaged broad loom without accessories</td>
</tr>
<tr>
<td>C</td>
<td>Damaged broad loom, warping mill, skeiner, shuttle large coal pot, large plastic bowls, improvised wooden frames padded table</td>
</tr>
<tr>
<td>D</td>
<td>Traditional loom without accessories, squeegees, prepared screens</td>
</tr>
<tr>
<td>E</td>
<td>Damaged broadloom and traditional loom without accessories</td>
</tr>
<tr>
<td>F</td>
<td>Padded table, four broadlooms with accessories, big plastic bowls</td>
</tr>
<tr>
<td>G</td>
<td>Damaged traditional and broadlooms without accessories</td>
</tr>
</tbody>
</table>

Source: Field work, 2015
Comparing Tables 1 and 2 reveals that all the schools are not fully equipped with the requisite tools, equipment and materials for some units of the syllabus. For weaving in particular, only School F has looms with accessories to support skills acquisition in weaving while the other schools either had their looms damaged with their accessories, or they had none to practise this unit of the syllabus. None of the schools had dyes to work with. Not having the right equipment and its accessories militates against practical skills acquisition and contributes to the students’ inability to practise Textiles as a vocation. This confirms the view that Ghana cannot fully benefit from the creativity of its citizens as long as Visual Arts and the Technical/Vocational sub-sector of the nation’s public education system is poorly resourced to enable it positive impact on human capital development for economic growth (The President’s Education Reform Review Committee, 2002). Lack of material resources explains why the students in the sampled schools reported they buy almost all their materials needed for practical lessons.

The findings corroborate those realised by Evans-Solomon and Opoku-Asare (2011) and Banson (2010) that schools offering Visual Arts are not able to offer a variety of elective subjects due to the lack of studio facilities, tools, equipment and relevant raw materials to satisfy the students’ learning and career needs.

**Strategies and methods of teaching**

Strategies and methods of teaching have great influence on students because they come to school with unique sets of characteristics that may assist or impede academic performance (Gray, Griffin & Nasta, 2005). In Schools B and C, the teachers demonstrated high levels of control over the subject and topics they were teaching and the students were highly motivated by the teachers’ classroom strategy during their presentations. The practical demonstration, students’ involvement and excellent use of teaching and learning materials the teacher employed made the teaching-learning process lively and active.

In Schools A, D and E, the observation revealed lack of teacher preparation for the lessons. No teaching and learning materials were used to help the students to understand the topics discussed. The teachers used the lecture method of teaching to verbally describe everything which made the teaching-learning process passive, abstract and teacher-centred. Knowing that teachers’ skill and expertise affect student achievement, the students did not respond well to these lessons. This teaching style could emanate from inadequate knowledge and experience in the teaching of Textiles.

In School G, a teacher who was observed teaching a lesson on “Natural fibres” lacked knowledge and control over the topic and learning environment. The tools and materials required for the lesson were available but were not used and the demonstration that accompanied the lesson was done by another person. The output of the demonstration in this lesson was ineffective, which seemed to indicate lack of teacher competency. However, as Vin-Mbah (2012) posits, effective teachers have a thorough knowledge and understanding of their subject matter, are able to use their knowledge of learning processes to determine the right strategies to communicate the content of their lessons to their students’ understanding. Further inquiry confirmed that this teacher did not specialise in Textiles hence being unable to handle the topic well. Textiles, like other specialised subjects, must be taught by specialist teachers. The teaching and learning situations described here affirm the assertion that the outcome of any strategy is influenced by the teacher’s motivation, the effort that has been put into the planning and preparation of the lesson (De Bortoli & Thomson, 2010). It also confirms Siaw’s (2009) assertion that the motivation a student brings to class influences the learning process.

**Lack of tools, equipment and materials**

The observation also revealed that almost all the schools (except Schools A and F) lacked tools, equipment and materials required for effective teaching and learning of Textiles. Equipment found in the respective schools (see Table 1) was either damaged or inadequate for effective practical work or class demonstration. Teaching in this situation seemed to make it easy for the teachers to simply describe tools and equipment required for specific Textiles topics without the students getting to see or practise with them.

The findings confirmed that students who were unable to buy materials needed for practical work simply dropped out of practical classes. This scenario highlights administrative neglect of the critical requirement for schools which offer Textiles to provide art studios and at least, a set of standard tools and equipment to
facilitate teaching of a minimum of one unit of the Textile syllabus listed in Table 1 (CRDD, 2010). This scenario reinforces disregard for vocational/technical education cited by Boateng (2012).

Table 2 also attests to the absence of art studios, damaged looms, lack of weaving, printing and dyeing accessories, chemicals, dyes and allied tools and materials for creative and technical skills development in Textiles for employability and entrepreneurship in these SHSs.

Insufficient instructional time is another challenge that 83% of the sampled teachers reported. The fact is that the current Textiles syllabus (CRDD, 2010) has more topics and a teaching schedule of 18 periods per week instead of 21 periods specified in the 2008 syllabus, which the teachers reported as inadequate to complete the syllabus within the three-year SHS period. If Textiles students were not faring well in WASSCE with 21 periods of teaching, increased topics with reduced teaching hours, inadequate instructional resources and specialist teachers are less likely to equip Textiles students to do well in WASSCE towards higher education or employment in the Textiles industry.

On teaching methods used by the teachers in the schools, Fig. 1 shows the lecture method being the predominant method used by all 12 teachers, with 50% of them adopting discussion in addition to the lecture method. Only 2 teachers adopted demonstration and group work, which enables collaborative learning among students.

The low number of demonstrations and group work usage could be attributed to the lack of tools and equipment for the teaching and learning of Textiles in the selected Senior High Schools. It also implies lack of resourcefulness on the part of the teachers as they were not looking for improvised resources that would enable them to teach the outlined topics. This issue was however, not discussed with the teachers.

![Teaching methods used by the sampled Teachers](image-url)
In general, the sampled students’ attitude or approach towards practical exercises was described by the teachers as ‘good’ or ‘very good’; no teacher said that the students’ attitude was ‘very poor’ as shown in Fig. 2. This positive attitude suggests that if the tools, equipment and materials required for practical lessons are provided and adequate instructional time is allocated to Textiles as a subject, the teaching and learning activities could engage the students to participate meaningfully and effectively in class.

On the frequency of having Textiles practical work per term, seven of the 12 teachers (representing 58.3%) conduct practical / demonstration work once every term; one teacher (representing 8.3%) did not conduct any practical or demonstration work in the course of the term (see Table 3.).

It can be deduced from the analysis that if the sampled Textiles students are engaged in more practical lessons each term, they would acquire more of the skills they need to be able to practise Textiles on their own after graduating from school.

**Table 3. Frequency of Textiles Practical per Term**

<table>
<thead>
<tr>
<th>Frequency of Textiles practical/demonstration per term</th>
<th>Number of Teachers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Work, 2015

Having adequate study time is also a problem as the large majority of 155 students (representing 83%) reported that instructional time for practical lessons is inadequate for them to learn enough to equip them to practise what they are taught. Only 32 students (representing 17%) of the sampled Textiles students reported that the time allocated for practical work is enough for them to practise what they are taught.

This emphasizes the fact that most of the schools lack the tools and equipment for engaging in practical work. This may also be forcing the teachers to simply allocating more time teaching theory...
lessons and less time for practical lessons. This ties in with the idea that skills oriented subject such as Textiles, needs to be allotted sufficient time for both teachers and students to satisfy their practical goals Boateng (2012).

Interviews with the sampled students revealed that they lacked textbooks for further reference and research, which does not help the students to read ahead of classes. Unlike the science programme which the students pointed out as being well resourced, the school authorities seem to be neglecting Visual Arts, because they are not providing the basic necessities required for effective teaching and learning of Textiles and also not paying attention to broken down looms for example. Without the basic tools, equipment and materials for teacher demonstration lessons and student practical work, it is not clear how the students would acquire the relevant weaving, dyeing, appliqué, printing and other skills identified in the Textiles syllabus. The students also, complained that because the time allocated for practical lessons is inadequate, they are not able to complete their practical assignments. Besides, there are no studios where they could do their practical works and store them.

Field trips and excursions are recommended by the syllabus (Opoku-Asare et al., 2014; CRDD, 2010) as educational exercises that help to explain the concepts presented in the classroom setting. Yet, the Textiles teachers and their students had not embarked on any excursions to the Textiles factories and private businesses located in Accra and Tema where they could get first-hand information about the subject they were studying. Field trips could supplement information provided through Textiles lessons yet this resource is not utilized.

As some of the Textiles teachers intimated, “the average Textiles student should be able to make a living from practising Textiles as a vocation because man cannot do without clothing”. Mention was also made of the need to review the Textiles syllabus to meet the requirements of modern trends, the existing local industry and the job market. According to these teachers, creating new focus in the syllabus will help to ensure specialisation and prevent the students from learning about things which may even have no bearing on the current job market and Textiles industry in Ghana.

The teachers said topics defined in the Textiles syllabus should be easy to understand, practise, and are related to raw materials and community resources available in the country. “We must do away with learning too many topics within the three-year period when these skills cannot be practised commercially after school”, they said. They also suggested that topics such as “detailed weaving with the broadloom and Kente looms” should be reserved for higher education and called for crocheting and knitting to be scrapped.

Interviews with the WAEC officials revealed the following:

1. The SHS Textiles syllabus is too broad.
2. Financial constraints restrict amount of practical work the students can do.
3. Textiles students are not taken through practical works by teachers to gain knowledge and vocabulary to answer examination questions. For example, theory of weaving is not taught by many teachers and no practical work is done with the students. They suggested that teachers invite technicians to help them do practical weaving.
4. Textiles entails so much work; categorising it as a 2-D subject makes students opt for Graphic design or Picture Making instead.

As to reasons for the decline in Textiles education in SHSs, the WAEC respondents gave these answers:

1. The content of the Textiles syllabus is broad and what the students must learn is very loaded.
2. Poor WASSCE results of past Textiles students discourage parents from allowing their wards to offer the subject.
3. The Textiles industry in Ghana is not doing well; many factories have collapsed, and graduates fear to become unemployed in the field of Textiles when they leave school.

The CRDD Coordinators revealed the challenges facing teaching and learning of Textiles in SHSs as follows:

1. Inadequate Human Resource: Textiles teachers in SHSs are few and in some cases, those present are not specialists and not qualified to teach Textiles. There are no opportunities for teacher professional development in Textiles.

2. Lack of Tools and Material resources: There are no looms and accessories in some schools for teaching and learning of weaving; inadequate development tables and related equipment for dyeing, printing, etc., and inadequate materials such as dyestuffs, chemicals and printing paste.

3. Vocational Progression: many Textiles factories in Ghana, such as Freedom Textiles, and GTMC, have collapsed and the local Tie-Dye business is not growing due to preference for cheap foreign Textile products.

4. Curriculum Provision and Requirement: The 2007 Curriculum policy that removed Textiles from 3-D arts group to become a 2-D subject reduced its patronage among the Visual Arts subjects. The requirement for Visual Arts students to select one subject from 2-D arts and one from 3-D arts made Textiles unattractive and shifted students’ attention to Graphic design and Picture Making instead, creating unfair competition between Graphic Design, Textiles and Picture-Making for the elective curriculum slot.

According to the CRDD officials, poor performance of Textiles students at WASSCE can be attributed to some of the following factors:

1. Absence of hands-on activities to equip the learner with employable skills due to lack of appropriate and suitable materials, tools and equipment.

2. Lack of interest in the subject due to its unfavourable academic and vocational progression.

3. Placement of JHS graduates with low grades in Visual Arts, including Textiles discourages some interested students.

4. Disrespect, labelling and branding of Visual Arts students as daft, unintelligent and ‘good for nothing’ by the public, teachers and peers in other elective programmes push potential students away from Textiles.

5. Absence of good working environment; no studios for students to work and keep their works.

6. Use of ineffective teaching methods and approaches by the teachers.

An interview with University lecturers concerning the intake of Textiles students into higher education revealed that very few SHS graduates who studied Textiles apply and get admitted. In KNUST, it was learned that few SHS Textiles graduates get to pursue Textiles in the Industrial Arts programme. At the Accra Technical University, only 25 out of 150 first year students who were offering Fashion Design and Textiles Technology had studied Textiles or Clothing and Textiles at SHS. The majority offered Business, General Arts, General Science, and other Visual Arts subjects like Picture Making, Sculpture, and Leatherwork.

According to the Lecturers, students who have background knowledge in Textiles understand the techniques and skills taught better than those with other backgrounds that make it difficult for them to cope on the programme. Again they said the change of Textiles into a 2-D subject is the major reason why Textiles is dying at the SHS level, which is also negatively affecting student enrolment in higher education.
Some interventions to resolve the challenges

- Discussions held with CRDD coordinators and Ghana Education Service (GES) officials highlighted the need for the two units to liaise to provide approved Textiles textbooks covering the full content of the syllabus to schools to standardize the knowledge and skills that must be taught to Visual Arts students who specialise in Textiles at the SHS level.
- Discussions on the need for tools and equipment to support Textiles as a career oriented subject persuaded three of the sampled schools to purchase six looms with their accessories for the Visual Arts departments in those schools.

Conclusions and Recommendations

Although this study focused on seven SHSs that offer Textiles within the Visual Arts programme in Greater Accra Region only, the findings point to a detailed SHS Textiles syllabus that has a clear vocational skills orientation and an impressive rationale and objectives. If the schools had the resources and capacity to achieve the objectives of the Textiles syllabus, Ghana would have young men and women with the requisite knowledge, creativity and technical skills to set up businesses to create employment opportunities to boost the local Textiles industry.

The sampled Textiles students provide their own tools and working materials hence CRDD should enforce monitoring and supervision to ensure vocational/technical education meets specified requirements to offer specific programmes. Many Textiles students also perform poorly or even fail in the final WASSCE because nearly 50% of the sampled teachers are not specialists in Textiles and therefore unable to teach the subject for the students to understand the concepts and terminologies of Textiles well enough to answer WASSCE questions. Heads of SHSs should ensure teachers teach in their areas of specialisation. Effective teaching and learning of Textiles requires school heads to ensure their schools have studios, requisite tools and equipment, and materials for their students to acquire the printing, dyeing, weaving and other technical and practical skills outlined in the syllabus that are relevant for higher education in Textiles, entrepreneurship and employment.

Art exhibitions and excursions are required aspects of the Textiles syllabus that Visual Arts students do not enjoy. Moreover, similar to findings by Opoku-Asare et al (2015) in Ashanti region, Visual Arts students in the sampled schools are ridiculed and not taken seriously by teachers and non-Visual Arts students. These factors have negative effects on Textiles education in the SHS.

There is lack of entrepreneurship drive among SHS Visual Arts graduates, which includes Textiles (Kokotah, 2008). Therefore, regular career awareness seminars, entrepreneurial skills development, workshops and fieldtrips could be organised to expose Textiles students to the variety of career opportunities that are open to them in the local Textiles industry.

GES must organise periodic in-service education and training to upgrade Textiles teachers’ capacity to select teaching methods for better teaching output and enhanced student learning. This should include designing of practical activities and interactive lessons that engage students in active learning and experimentation to boost student interest in Textiles, and make the Textiles syllabus relevant to the socio-economic needs of Ghana.

Suggestion for future research

To examine the WAEC assessment of practical Visual Arts projects and its impact on students’ performance in WASSCE.
References


