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School-industry collaboration in the training of fashion design/clothing and textiles students in Ghana

Abstract
This descriptive survey sought to establish how Fashion Design and Textiles industries and schools collaborate in the training of fashion design and textiles students. The population of the study was teachers and students of Fashion Design and Textiles departments of Takoradi and Accra Polytechnics, as well as entrepreneurs in the garment and textiles industry. The sample size was 80 respondents. Instruments for data collection were interview guides and questionnaire. Data were analysed using frequency counts and percentages. The results show that the collaboration exists but the school is not making effective use of them. It has been recommended that Fashion Design and Textiles teachers need to have regular industrial attachment exposure to be abreast with current industrial techniques. It was also recommended that students should be given more practical exposure to fashion shows, exhibition and study trips organised by industry. Teachers should invite industry members as resource persons to handle special topics.

Key words: industry, training institutions, employability skills, school-to-work transition

Introduction
Linkage between the industry and the school started in Poland, China, Romania, Hungary and the Czech Republic many years ago (Grubb & Bandway, 1998). The inter-dependence of the school and the world of work enhance teaching and learning. The school is expected to develop the human resource for the industry in order to facilitate national development. There is therefore the need for the two institutions to relate vividly through mutual co-operation to achieve national development goals (Armstrong, Henson & Savage, 1989). The curriculum for Fashion Design and Textiles is structured such that first year students are sent to organizations and industries related to their area of study on attachment during the long vacation. Internship is also organised for them in the second semester to expose them to industrial practices. Bakar and Hanafi, (2007) stated that graduates employability skill is enhanced in quality and content when training is blended with industrial attachment and internship. Such well organised programmes grants students’ vivid explanation on industrial practices and provides real learning experience.

In Ghana, Vocational/Technical schools, Polytechnics and some universities send their students on industrial attachment and internship. The University of Education, Winneba also sends its students on internship for one semester to practise what they have learnt in the lecture theatres. These practices help the institutions to achieve the training objectives and also direct their training activities for the maximum behavioural change in their learners (Bakar & Hanafi 2007). Through this practice the two institutions (training institutions and industry) are able to work hand in hand in the training process.

A good relationship between the school and the industry gives a general orientation to graduates about the world of work and makes it possible for new employees to overcome problems in school-to-work transition (Ramesh & Chandra 2004). However, many writers have identified a gap between the school and the world of work. According to Ramesh and Chandra (2004), there is the need for a holistic effort to map out the connection that can be formed between employers of labour and educational institutions. Arkhurst (2004) and Anyakoha (2001) stated that some vocational schools clothing and textiles graduates lack information
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about job availability, and this situation is gradually discouraging students of clothing and textiles. Ramesh and Chandra (2004) therefore emphasized the need to relate the school curriculum to the world of work.

The study is premised on the functionalist theory which views the basic aim of education as keeping society running meaningfully and smoothly (Armstrong, Henson & Savage, 1989). The functionalist is concerned with the school’s role in enabling learners integrate themselves into the society and see the transition from school to the world of work as very critical to a nations’ development. Based on this, the functionalist lay emphasis on vocational/technical training and education and also promote liberal courses that are planned to promote responsible citizenship. This implies that a dysfunction of the school adversely affects the industry and productivity and ultimately the economy.

Fashion Design and Textiles which has a wide scope of promising occupational opportunities is one of the vocational subjects studied in Ghanaian schools up to the university level. According to Anyakoha (2001), the textile industry alone has thirty-four job opportunities under six categories appropriate for senior high school clothing and textile graduates. She observed that many teachers and students lack knowledge about job opportunities in the Fashion Design and Textile industry and this has resulted in the production of graduates who have become unemployable in the area. To solve this problem there is the need to link school to the industry in the training of students since the gap between the two will lead to deviation from national educational objectives of producing graduates with employable skills (Anamuah-Mensah, 2001). Bakar, Voogt and Pieter (2011) stated that to facilitate professional development, teachers must plan and undergo industrial attachment to upgrade their knowledge and skills in their subject areas. This is because current and relevant knowledge can only be acquired through mutual relation between the school and the industry. This will intern help teachers to update their course content and subsequently teach in relation to the needs of industry. Based on this Bakar, Voogt and Pieter (2012), emphasis that industrial attachment is a need for every teacher in the polytechnics since it broadens knowledge and skill level and also improves technical abilities.

If teachers relate vividly with the industry members through their self development in industrial attachment, organization of students study trip to the industry will not pose any challenge. A good relationship between the school and industry will bring to light skill needs of industry which will lead to development of realistic curricula that will help train students to satisfy the needs of the industry. The value of formal education is realized when learning focuses on the occupational skills required in the employment sector for the development and improvement of the quality of life of the citizenry. Seeking the views of industry will help in updating the knowledge level of curriculum implementers and granting students the opportunity to research into new areas to enhance industrial growth (Giloupou, 2008).

Anamuah-Mensah, Asabre-Ameyaw and Dennis (2007) stated that there is the need to link the universities to industry so that the problem of content and practice dichotomy would improve. With the link, the school will be aware of occupational requirements and will therefore build such skills into the curriculum (Yangben & Seniwoliba 2014). It will also open up areas of development that can be research into by the school to enhance industrial competition through innovative means of product development. Choy and Hauka (2009) stated that industrial attachment which is the formal placement of instructors and trainees in the workplace is to facilitate the achievement of specific learning outcomes that would potentially lead to their employability on completion of a training programme. Students acquire high skill levels when the school, training providers’ partner with industries and offer situated learning opportunities in the workplace so that learners access authentic experiences that the workplace can offer. Forster and Ampong (2012) also stated that the teaching universities should involve entrepreneurs in the garment industry in the curriculum development so that practices of industry will not differ from what is practice in the schools.

A study carried out by Gbeddie (2004) discovered that some clothing and textiles graduates did not easily get employment since the skills they acquired did not meet the level of skills required in the industry. If the school and the industry links are good industrial needs can be identified and incorporated in the curriculum to curb graduate unemployment and retraining (Bakah, Voogt & Pieter, 2011; Adentwi 2005). It is in this
context that the study is designed to ascertain the relationship between the garment and textiles industry and the school, to unearth possible areas of collaboration for the improvement of fashion design and technology and clothing and textiles education in Ghana.

Statement of the Problem
Formal vocational training and industry are inter-dependent if what is studied in school is supported by industry and is practiced in industry. In Ghana, research indicates that products of the school are not able to take up employment in industries because their knowledge base for employment opportunities in industries is inadequate. According to Gbeddie (2004), employed Vocational School graduates were retrained to make them productive in the industry. According to the Deputy Minister of Education, Ayariga (2010) every year a teeming number of graduates enter the job markets, therefore polytechnics need to devise appropriate means to match training to job requirements to enhance school-to-work transition. Polytechnic education in Ghana is set out to train middle level manpower for industry and graduates should also be able to employ themselves. Forster and Ampong (2012) stated that the teacher training universities should involve entrepreneurs in the garment industry in the curriculum development and skill training since there is skill gap in training students in pattern cutting of industry and the universities. There might not be the need for employers to retrain their employees if what was taught and learnt in school fell in line with occupational skill needs. Clothes are basic needs of human beings and the industry is labour intensive and it keeps on expanding in relation to increases in human population. This would only be possible in situations where there was close collaboration between the school and the industry. This study, therefore, seeks to examine school-industry links and collaboration in the training of human resource with the requisite skills for the garment and textile industry.

Purpose of the Study
The study sought to establish the schools’ level of collaboration with industry in Fashion Design and Textile education. The specific research objectives include:

1. Identify areas of school and the industry collaboration.
2. Examine how collaboration between school and industry can help in educating fashion design and textile students.

Research Questions
1. What are the areas of collaboration between school and industry?
2. How does the collaboration between school and industry help in educating Fashion Design and Textiles students?

Significance of the study
This study provides important insights for professionals interested in understanding the ways in which industry and training institutions can collaborate to produce the kind of graduates needed in the world of work. It draws the attention of policy makers to the deficits and strengths of the industrial attachment programmes while highlighting the benefits that might be derived from effective implementation. The findings may be helpful to the National Accreditation Board in terms of examining the deficits in training of graduates in order that the necessary systems can be developed to facilitate qualitative evaluation in the processes of re-accreditation of programmes. The results provide useful knowledge that gives insights necessary to inform policy and planning within the Council for Technical, Vocational Education and Training (COTVET). The results provide knowledge to professional training institutions, policy making institutions and industry players on the need to improve their tripartite relationship to consistent advantage of the graduates.

Methodology
Simple questionnaire and interview guide were the two main instruments used and the study employed qualitative and quantitative paradigm. Questionnaire was used to collect data from students while interview guide was used to collect data from entrepreneurs (industry members) and teachers. The population of the study was Fashion Design and Textiles students and teachers of Takoradi and Accra Polytechnics as well as
entrepreneurs (industry members) who employ the graduates. The total sample size was 80, comprising 62 students, 6 teachers and 12 industry members. The sample for this study was selected using objective criteria – relevance of the individual or groups of individuals to provide useful data for the study. Student respondent were second and third year students since they can give a good account on their cost of study. Purposive, stratified and incidental sampling techniques were used to select respondents. Data were analyzed using frequency counts and percentages. Information gathered from the interview were organized under topic headings and themes and discussed together with the findings.

Data Collection and analysis
Questionnaire and open-ended interview guides were used for data collection. Data were analysed using frequency counts and percentages. Data gathered from the interview were analysed with findings.

Results

Research Question 1: What are the linkage signals between the industry and the school in educating fashion design and textile students?
Factors that were investigated in this section were field trips to the industries, industrial attachment, and participation in exhibitions, fashion shows and invitation of personnel to handle special topics.

Table 1 indicates linkage signals between school and industry in educating Clothing and Textiles/Fashion and Design students.

<table>
<thead>
<tr>
<th>Linkage signals</th>
<th>Teachers</th>
<th>Industry members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study trip to textile industries</td>
<td>Agree: 6</td>
<td>Agree: 12</td>
</tr>
<tr>
<td>Study trip to garment manufacturing companies</td>
<td>Disagree</td>
<td>Disagree</td>
</tr>
<tr>
<td>Students’ industrial attachment</td>
<td>Agree: 6</td>
<td>Agree: 12</td>
</tr>
<tr>
<td>Attendance of exhibition organised by industry</td>
<td>Disagree</td>
<td>Disagree</td>
</tr>
<tr>
<td>Participation in fashion show organised by industry</td>
<td>Agree: 6</td>
<td>Agree: 10</td>
</tr>
<tr>
<td>Invitation of resource persons from industry to handle</td>
<td>Disagree</td>
<td>Disagree</td>
</tr>
<tr>
<td>special topics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that all the six teachers agreed that study trip to textiles industries, garment manufacturing companies, students’ industrial attachment in industries, attendance of exhibition organised by industry and participation in fashion show organised by industry are favourable linkage signals in training students. Interestingly all the six teachers disagree to the invitation of resource persons from industry to handle special topics. The results revealed that teachers and industry members agree that, they need to collaborate in training students to facilitate a smooth transition from school to work. Bakar and Hanafi, (2007) stated that for trainees to acquire employable skills there is need for training institutions to collaborate with industry in the following ways; invitation of industrialists as resource persons to teach in schools, the involvement of students in exhibitions and fashion shows organized by the industry; the acceptance of students on field trips and industrial attachment to the industries. These are very good signals that can be harnessed further to strengthen the linkages between industry and the Fashion Design and Textiles training institutions.

The following statements were the comments from teachers when they were interviewed on possible signals for collaboration:

*I don’t think they will come when I invite them so I normally talk to colleagues who can help when it becomes necessary.*  
Teacher respondent 1

*The industry members think we are not doing well because our students cannot do everything they practice.*  
Teacher respondent 4
I practise what I teach commercially so am abreast with time so far us new developments are concern, my industry even train students during industrial attachment. Teacher respondent 6

The comments from the teachers concerning invitation of resource persons from industry to handle special topics implies that, they do not see the need to use them and that was why it was not agreed upon by the teachers in Table 1. Handling special topics by industry will offer a situated learning opportunities to learners to access authentic experiences that the industry offer, hence there is a need for training institutions to partner with industry. This practice will help in curriculum review and reduce graduate unemployment since curriculum will match industrial practices (Forster & Ampong 2012).

Table 1 further show the twelve industry members agreed that study trip to textile industries and students industrial attachment are ways used in collaborative training of students. Majority of industry members ten agreed that schools’ participation in fashion show organised by industry while eight agreed on the schools’ attendance of exhibitions organised by industry and study trip to garment manufacturing companies. Also four each of industry members disagree to schools’ participation in study trip to garment manufacturing industry and fashion show. Two industry members disagree to schools’ participation in industrial exhibitions. The result also shows that six industry members of industry agree that schools invite them to handle special topics while six members disagree.

How can you teach effectively if you are not aware of current development in the industry you training people to work in? Industry member 2

Some of the universities always contact me to lecture and even for practical demonstration, they also ask for our views when it comes to review of their curriculum. Industry member 3

After school I had to go and learn again before setting up my industry so they must also learn that, no resource person taught me, it was quite frustrating when I had be apprentice after tertiary education. Industry member 5

That bond is not there so we do not invite them rather we focus on our client and our main objective is to make money. Industry member 6

Close interactions between the school and the industry would help to bridge the gap between theory and practice and enhance opportunities for graduate employment (Bakar et al 2011). Also the interview result shows that the majority of industry members are ready to collaborate with school to bridge the gap between theory and practise. Adentwi (2005) emphasized on the need to make the school curriculum relevant to the needs, interest and purposes of individual learners and the society as a whole.

The next result (table 2) is on relationship between teachers and the industry to enhance their skills for effective teaching.

Table 2 shows how teachers relate with the industry to enhance their training skills.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Once per annum</th>
<th>Once two years</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial attachment</td>
<td>1</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Attendance of industrial fashion show</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Attendance of industrial exhibition</td>
<td>-</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Invitation of resource persons from industry to handle special topics</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
</tbody>
</table>

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Table 2 shows that one teacher had industrial attachment once a year, interestingly five had never had industrial attachment, two attended industrial exhibition organised by industry once in two years and none of them six had never invited a resource person to handle special topics. Also four had never attended fashion show and exhibition organised by industry since their teaching experience in the polytechnic. Interview comments concerning the linkage signals to help them enhance their skills to facilitate effective training of the students included the following:

Teachers, who go on industrial attachment supervision are normally selected and written to, I had not had that experience yet, but then if I realise a need skill in a particular area I personally consult the industry and go on attachment during the vacation. Teacher respondent 2

At the end of every academic year students go on attachment and for two times I was part of the supervision team but personally I have not being on personal attachment after school. Teacher respondent 4

I exhibited my products in the school once and also the final year and second years normally exhibited their collections every year. But I have not attended any exhibition of any industry since I started teaching. Teacher respondent 1

We normally attend fashion shows of sister Polytechnic but not the industry. Teacher respondent 5

I had the opportunity to witness a fashion show organised by some past-student who are practising. It was interesting when we discussed some of the collections and the ideas behind products in relation to their target group. Teacher respondent 6

However, the result also shows that the teachers themselves do not go on industrial attachment to enhance their skills; significant number of them four had never had the opportunity to benefit from most of the existing modes of collaboration. Barkar et al (2011) opined that to facilitate professional development, teachers must plan and undergo industrial attachment to upgrade their knowledge and skills. The industries have innovative ways of practicing the necessary skills which are not sometimes documented these innovative ways of practicing are crucial to trainees and can facilitate quality training if their teachers are exposed to them. Based on this, there is a need for teachers to regularly go on industrial attachment to enhance their skills for effective teaching and learning.

Research question 2: How does the linkage signal between school and industry help in educating Fashion Design and Textiles students?

Table 3 shows how often students participated in collaborative programmes between school and industry.

Table 3: Frequency of Students’ participation in school industrial collaboration activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Once per annum</th>
<th>Once per programme</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
</tr>
<tr>
<td>Study trip to textile industries</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Study trip to garment companies</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Industrial attachment</td>
<td>48</td>
<td>77.5</td>
<td>14</td>
</tr>
<tr>
<td>Exhibition</td>
<td>9</td>
<td>14.5</td>
<td>35</td>
</tr>
<tr>
<td>Fashion show</td>
<td>8</td>
<td>12.9</td>
<td>27</td>
</tr>
<tr>
<td>Taught by resource person from industry special topics</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
All the students 100% benefitted from school industrial collaboration in industrial attachment while none of them had ever been on study trip to a garment industry and textile industry. Also about 71% and 56.4% of students had benefitted from exhibition and fashion shows respectively. However none of the students had the opportunity to be taught by a resource person from industry. The results showed that students of training institutions and the industry had no collaboration in the areas of study-trips to the industries, and the use of resource persons from industries. It is therefore necessary for these areas of collaboration to be used and strengthened. Close interactions between the school and the industry would help bridge the gap between theory and practice and enhance opportunities for graduate employment.

Anamuah-Mensah et al (2007) suggested that students should undertake projects in industrial research and entrepreneurship. He added that industrialists should serve as members of University Councils, participate in policy making, and do part-time teaching in training institutions. The result showed that some students never benefitted from being taught by resource persons from industry and never gone on study trips to industry exhibition and fashion show. Such students are likely to find it difficult to adjust to the industrial environment after school since the school is not as well equipped as the industry. Adentwi (2005) stated that the school is expected to pass on knowledge, skills, attitudes and values in such instrumental terms that the learners will be equipped to bring about worthwhile changes for the progress of society. The results from interviews revealed that there are many different ways in which training institutions can collaborate with the garments and textiles industry in the training of Fashion Design and Textiles students however only one (students industrial attachment) that is being used effectively. Even though the teachers agreed to most of the collaboration modes such study trip to garment and textile industry, attendance of industrial exhibition and fashion shows, they are not making good use of it to facilitate the training process.

Conclusion
The findings of the research raise a number of issues. All the students 100% had never been on study trip to industry. There were areas of collaboration between schools and industry. The already existing linkage signals between industry and schools need to be used and strengthened. Schools have to harness the linkage signals and improve collaborations between industry and schools in order to prepare Fashion and Design/Clothing and Textiles students adequately to fit into the industry. Majority of industry members agreed that they need to collaborate with training institutions in training the students to enhance quality of graduates. Five out of six teachers had never been on industrial attachment to enhance their practical skills and four had never attended any exhibition and fashion show organized by industry. More so none of the six teachers have ever invited resource persons from industry to handle special topics. The literature attested to the fact that through effective collaboration in areas of industrial attachment, organization of study trip to industry and the use of resource persons from industry to handle special topics students will be adequately prepared for the world of work. It will also enhance teaching skill and through that students are given content relevant training in relation to industrial need.

Recommendations
Based on the findings of the study the following recommendations were made:
1. To grant students good orientation about the work environment teachers need to regularly organised study trips to facilitate better understanding of classroom lessons.
2. The school must use resource persons from industry to handle special topics and review of the curriculum for effective training.
3. Fashion Design and Textiles department must partner with industry so that teachers can have regular in-service training through industrial attachment to enable them update their skills.

References
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