

Linkages Between the Curriculum of Institutions Offering Clothing and Textiles and Their Allied Industry

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Abstract

There is a need for a link between the curricular of the clothing and textiles institutions and the professional practice in the industry. However, there seems to be a vacuum in the literature regarding the extent to which the curricular of the clothing and textiles institutions are linked to what their allied industry does. The purpose of this article was to examine the relevance of the curriculum of the clothing and textiles institutions to the large-scale clothing and textiles industries, from the perspectives of respondents. The study is expected to promote establishment of collaboration and linkages between Clothing and Textiles institutions and industry. Action research and multiple case study approach were employed for this qualitative research. The researchers used purposive sampling to select respondents. Face-to-face interview, with semi-structured interview guide and observation were used to collect data for the study. The sample size was twenty-two respondents taken from industry and academia. The outcome of the study showed the following: varied perception about relevance of curriculum to the expectations of the industry, non-existence of some relevant skills in the curricula, different industrial attachment practices, non-involvement of the industry in curriculum development and review, inadequate facilities. The following conclusion resulted from the analysis of the study: Curriculum of the institutions is largely perceived to be relevant but requires some updates; inadequate facilities/equipment in the institutions for student training.

Keywords: Curriculum, industry, clothing and textiles, institutions, training.

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1. Introduction

It has been observed that industries play a vital role in the growth of every economy. The clothing and textile industry is a major contributor to the economic growth of Ghana because textile products are used locally and also exported to earn foreign exchange for the nation (Quartey, 2006). Studies on academia and industry relation have revealed that, there is poor linkage between academia and industries in Ghana (Donkor et al. 2009). Industries are also run with human resources. The success of industries, including those in the clothing and textiles field, is to a large extent dependent on the quality of their human resource. The question is, what kind of human resource is needed by the Large-scale clothing and textiles industries in Ghana? Besides, to what extent is the training of clothing and textiles students linked to the industry? It is expected that products from the academic institutions with clothing and textile background will be able to work either in the large-scale industry or to set-up their own small-scale businesses.

2. Literature Review

Industries are looking up to students from the institutions of training to be able to contribute to job satisfaction in terms of their ability and skills to work effectively. However, it has been noted that industries have the problem of recruiting the right skilled employees for certain positions (Society for Human Resource Management, 2014). This is because research has shown that clothing and textiles students are not usually well equipped enough to match with employment in the world of work (Makochekanwa and Kwaramba, 2010: as cited in Muzanda and Duku, 2014). Muzenda and Duku comment that contact hours involve many theories ignoring practical training. They also noted that if the contact hours are to include industrial attachment, students will not get the needed skills for the world of work. They further opine that the academia should involve people from the industries in the curriculum preparation.

As has been noted by Personnel Selection (n.d) industrial requirement for selection is not just based on knowledge but also skills and ability to work. Therefore, students from the clothing and textiles training institutions should have combination of knowledge, skills and attitudes with which they can succeed in the modern day industry. Playfair (2014) opines that where there is lack of skills among the younger generation, it can lead to economic stagnation. The acquisition of skills is linked to Vocational Education and Training (VET) which according to Basztura (2012) is considered as one of the backbones of the national economy and society. Therefore,

there is the need for inclusion in the curriculum, practical and theoretical aspect of textile studies so that students would be prepared for the job market.

However, when curricular for the various institutions are designed, the emphasis is laid on knowledge and skills, but some students are still not fit for the industry. There is the need to close the gap between the practice in industry and training in academia. Donkor, Nsoh and Stephen (2009) emphasized that students are to link theory they learn in school to practice in the industry, through industrial training. They were of the view that technology keeps on changing every now and then and the institutions do not have all the necessary machines and equipment for training students.

At times, textile students choose project topics which are relevant to the industry but at the end are kept in shelves in textile institutions. But it is assumed that academic research is conducted to benefit the industry as well as for economic growth. According to MSc Programme with Industry Placement (n.d) after the taught part of a programme students are given chance to be placed in the industry, and after that, they return to the University to conduct research on their project. This helps students to get in-depth knowledge about industrial problems before choosing individual projects. It is an undisputable fact that large-scale textile industries in Ghana have suffered a great set-back in their operations which nearly collapsed the industries. Studies have revealed a poor linkage between academia and the industries in Ghana (Donkor et al., 2009) and clothing and textiles field is no exception.

It is expected that graduates would be able to work in the industry after school if they do not set-up their own businesses. Most often graduates after school do not fit into the industry because they have to be re-trained to do a prescribed job in the industry which is also a cost to the employer. Others too lack the confidence of setting up their own businesses and this has contributed to the unemployment situation in Ghana. Indeed, preparing the workforce to meet the requirements of employers in these modern days is noted to be a challenge for training institutions' rapid advances in technology and globalization (Barnett, 2011). According to Barnett, this challenge is a reason why things have to change as far as the curricula of the training institutions are concerned so that the skills of employees can meet the requirement of the employers and the new economy. The focus of the study was to examine the relevance of the curriculum of the clothing and textiles institutions to the large-scale clothing and textiles industries, from the perspectives of respondents. Linkage between industry and academia around industrial training, according to the study, constitutes a spring board for strengthening collaborative efforts that would ensure active involvement of industry in many areas of students training.

3. Research Questions

1. What kind of expertise and skills are needed by the large-scale clothing and textiles industries in Ghana?
2. How does the clothing and textiles training in the Universities linked to what is done in the industry?

4. Methodology

The design of this study was informed by a qualitative approach with the use of action research. Qualitative research according to Fraenkel, Wallen and Hyun, (2012) seeks to investigate situation or phenomenon of the natural setting in its quality form. They explained further that in qualitative research the researcher visits a particular place of desire, observes the situation and then collects data for the study. Action research was also found to be appropriate in the study, so it was employed. Hopkins (1985) as cited in Cohen, Manion and Keith (2007) indicates that action research is used to improve practice. Elliott (1978) as cited in Cohen, et al. (2007) views action research as "focusing on practical issues that have been identified by participants and which are somehow both problematic yet capable of being changed" (p. 298).

The target population for the study comprised lecturers, instructors, students, technicians, heads of section and production managers selected from the clothing and textiles institutions and their allied industry in Ghana.

4.1 Sampling

The researchers used purposive sampling for this study. Sampling as explained by Fraenkel et al. (2012) is a procedure for selecting a sample from a population for a study. Kumekpor (2002) also states that sampling is using clear and precise procedures for selecting part of the population having certain characteristics and properties which can be used to represent a whole. A total of 22 respondents were sampled for the study. The details are shown in table 1.

Table 1: Sampled population

Institutions	Industry
Textile lecturers from Kwame Nkrumah University of Science and Technology, KNUST (Textiles Section): 3	Heads of section (Tex Style Ghana Ltd): 6 Production manager (Nallem Clothing): 1
Textile lecturers from Kumasi Technical University (Textile and Fashion Department): 3	Technicians (Nallem Clothing/Volta Star Textiles Ltd): 2
Technical instructors (KNUST/KsTU): 2	
Students (KNUST/KsTU): 5	

This sampling was purposive because the selected respondents in clothing and textile institutions and their corresponding industry were knowledgeable in clothing and textiles issues required for this study.

Purposive sampling according to Aditham (2008) is a way of selecting individuals from a sample based on their knowledge regarding the issue being studied. Aditham explains further that the objective of using purposive sampling is to serve a particular purpose. Leedy (2005) states that in purposive sampling, unit or people are selected for specific purposes. Qualitative researchers, using purposive sampling, do not just consider who is available for the study but select their sample from the population based on who they think have information that will give them the required data (Fraenkel et al., 2012).

4.1.2 Data collection

The researchers used interview and observation for the collection of data for the study. The interview was appropriate for the study because the study was aimed at soliciting respondents' views regarding how they perceived the curriculum of the clothing and textiles institutions to be relevant to the industry. Interview according to Fraenkel et al. (2012) is a way of asking respondents questions in a careful manner with the aim of finding out respondents' ideas or feelings about something. Asante (2011) explained interview as having one-on-one interaction with respondents so that the needed information for a study can be obtained. The researchers interviewed respondents using semi-structured interview guide. These face-to-face interviews were tape-recorded and later transcribed verbatim.

Observation was also important for the study because, for the purpose of corroboration and comparison, there was the need to observe the production processes and equipment at both the clothing and textiles (C&T) institutions and Large-scale clothing and textiles industry. Fraenkel et al. (2012) noted that observation as a research instrument could be used to answer questions in research by observing the nature of something or the way people behave. The researchers adopted non-participant observation technique for the study. With non-participant observation, the researcher watches what goes on in the activity but does not take part in the activity under study (Fraenkel et al., 2012). The researchers observed the activities in the clothing and textile institutions and industries in terms of production practices and facilities in use.

5. Results and Discussion

The main findings of the study, discussions and their relevant literature connections have been presented in this section. The findings were from the perceptions of respondents regarding the relevance of the curriculum of clothing and textiles institutions to their allied industry.

5.1 Varied perceptions about the relevance of curriculum to the expectations of the industry Respondents from the clothing and textiles institutions in this study mostly seemed to perceive the existing curricula of the programmes to be relevant to the large-scale clothing and textiles industry. Respondents thought that the curriculum met the expectations of industry and would be able to equip students with the needed knowledge, skills, and attitudes that would ensure their success in the industry. However, not all the respondents seemed to support the above assertion. Few of the respondents thought that the curriculum in their institution does not capture everything in the industry since the training institutions do not have the same set-up as the industry. Respondents from industry also seemed to be divided in their opinion regarding the same issue. Those respondents who considered the curricular of the clothing and textiles institutions to be relevant thought that the training offered exposes students to the basics required for industrial practice. They believed that with a little support and adaptation of the industry, the students should be able to succeed. Those respondents who did not agree that the curricular of the clothing and textiles programmes are relevant to the needs of their allied industry were of the view that the skills of the students are sometimes obsolete and fail to conform to the contemporary trends and practices in the industry.

5.1.2 Non-existence of some relevant skills in the curricular

It was found out from the views of respondents selected from clothing and textiles institutions that they seem to view the existing curricular in the programmes to be useful in equipping students with skills that are relevant to the industry. They believed that the students acquire relevant skills from the existing curricula. Some of these useful skills mentioned were found in weaving, knitting, drawing and illustration, computer designing, textile designing, garment construction, production, marketing and inventory. However, respondents conceded that there

were some skills/competencies that are relevant to the industry, considering the contemporary nature and changing needs of the industry, which are not captured in the prevailing curricular of the programmes. For instance, the respondents mentioned some additional knowledge, skills and competencies such as inventory taking, quality finishing, machinery management, chemistry and textile science.

The respondents held the view that the clothing and textiles institutions were doing their best with their current curricular to offer students opportunity to acquire many skills such as fabric designing, spinning, illustration, chemical processing, drawing, computer designing, creativity and innovation. However, there were certain skills and competencies that are currently needed in the industry which were not part of the student training programmes. The clothing and textiles industry is very dynamic and technology is constantly changing. This dynamism needs to inform curricular decisions. The dynamic nature of skills needed in the industry including quality finishing, inventory-taking, machinery management, chemistry and marketing were also corroborated by the participants' responses selected from the industry. The contemporary nature and changing needs of the clothing and textile industry have implications for the training of students. It calls for a review of the current curricular so that some of the additional competencies that may be considered relevant can be added. Reviewing curricular and changing them to suit the needs of employers due to advances in technology and effects of globalization have already been alluded to by Barnett (2011). In fact, Barnett had requested for a movement from a traditional curriculum to modern one if institutions are to meet the requirements of employers.

5.1.3 Different industrial attachment practices

Opinions differed among respondents as far as the nature and periods of industrial training in their programmes were concerned. One institution had industrial tour experience for the students instead of industrial training. However, students on that programme had an option of going for industrial attachment on the voluntary/non mandatory basis. The responses indicated efforts being currently made to integrate a whole semester of industrial attachment in the curriculum of this particular institution. It was noted that the other category of clothing and textile institution already offers series of industrial attachment experience, totalling seven months, to the students.

The difference in opinion among the respondents, on the existence and duration of industrial training in their programmes, was not surprising since the respondents belonged to different tertiary institutions. It was good to note that one category of an institution already had an exten period of industrial training exposure for students. It was also important to realize that efforts were underway to integrate industrial training in the other category, because industrial attachment has become part and parcel of education and training in the field of clothing and textiles.

Adequacy of periods of industrial training is important since Muzenda and Duku (2014) have observed that contact hours in Clothing & Textiles programmes usually involve more theory to the neglect of industrial attachment. As a result, according to Muzenda and Duku, such students become ill-equipped to match with employment in the world of work. A longer period of industrial attachment is important because that helps students to develop a better understanding of what they have learned from school (Pertuze et al. 2010). This is because industrial training offers students with the opportunity to practice their theoretical knowledge gained from school in line with the expectation of industry (Hughes, 1998 as cited in Karunaratne & Perera, 2015). Therefore, industrial attachment helps to boost the confidence level of students.

5.1.4 Non-involvement of the industry in curriculum development and review

Respondents from the clothing and textiles industry, in their responses, indicated that the industry players were not currently involved in the curriculum development and review process of the clothing and textiles programmes. By their responses, they seemed to suggest that their involvement and contributions were not sought for as far as discussions and decisions regarding curriculum development, review and student training were concerned. There were claims that the industry players used to be invited to take part in curriculum decisions at the clothing and textiles institutions, but that was not the case now. This notwithstanding, the respondents indicated their willingness to support students who visited their companies for attachment.

Education and training in clothing and textiles demand the active involvement of both the academia and industry at different levels. According to Padmini et al. (2009), it is important that efforts are made to integrate the best ideas and practices of the industry into the curriculum of the training institutions. The authors also advocated that it is important for the industry to play a role in the preparation of curricula of the training institutions. This, according to them, will not only help in integrating requirements from industry into the curriculum of the institutions but will also assure industry of the implementation of the acceptable requirements by the institutions.

5.1.5 Inadequate facilities

In addition to interviewing respondents about facilities in the institutions for the training of students, there was also the need to observe, for purposes of corroboration, the nature of facilities available in the institutions and how they were used for production. Facilities and production in selected large-scale clothing and textile industries were also observed. Responses show that facilities for training students in the institutions were not sufficient. The responses also indicated that the increasing number of students outweighed the existing limited facilities. Data from field observation concerning the production processes and facilities at the institutions and industry

show that though there were inadequate facilities for training students, the institutions were trying to help students to acquire the needed competencies so that they could fit into the job market. As indicated above, industry uses modern machines for their production operations which are hardly found in the institutions. Again, it was realized that the clothing and textiles institutions have similar ideas of production processes as found in the industry. The industry also has other production operations which are different from that of the clothing and textiles institutions.

Responses on equipment and facilities for effective training of students indicate that clothing and textiles institutions have some equipment, but they were not adequate. Respondents recognize the effort being made to improve their equipment base to support effective training of students. However, they affirm that the increasing number of students outweighs the available facilities. The respondents are conscious of what they have and the institutional support to augment their existing facilities. They are equally conscious of what they need to be effective, especially, considering the numbers of students and what they need to work with.

Proper skill training, especially through a modern approach called competency-based training, is an expensive enterprise which requires investment in the areas of equipment, laboratories and other teaching and learning materials (Anane, 2013). Anane further states that inadequate facilities, obsolete equipment, and increasing number of students have been noted as a challenge in skill training in general and competency-based training in particular. Based on observation, it was realized that there were differences in terms of the equipment and facilities at the institutions and industry. This partly corroborates data on equipment, though the difference in equipment between industry and academia was not strange since the industry is for commercial purpose.

Again, it must be noted that the goals of the two organizations (institutions and industry) are not the same. The former is focused on training of students while the latter is for mass production. It was also observed that the clothing and textiles institutions were able to effectively use what they presently have for the purposes of students training and production. That is not to suggest that investment in equipment and facilities is not needed. The clothing and textiles institutions will need full-scale equipment and facilities considering the changes in the industry and the increasing number of students and their learning needs.

6. Conclusion

In conclusion regarding respondents' perspectives on the relevance of curriculum of the clothing and textiles institutions to the large-scale clothing and textiles industry, the curriculum is largely perceived to be relevant but requires some updates in order to capture some current needs of the clothing and textiles industries. The respondents acknowledge the contributions of the clothing and textiles institutions through training of students. They thought that acquisition of the knowledge, skills and competencies provide the basis for students to do well in the industry after school. Also, facilities at the clothing and textiles institutions were inadequate in preparing students to work effectively in the industry. Though it was not strange that the industries have modern facilities, it was expected that clothing and textiles institutions would have some kind of comparable equipment. Besides, not all the clothing and textiles institutions had an industrial attachment as a compulsory requirement integrated into their curricula. While one category of the institution had comprehensive periods of industrial attachment opportunities for its students, the other had voluntary industrial attachment opportunities for its students.

7. Recommendation for Management

There would be the need for a review of the existing curricula of the clothing and textile programmes in this study so that they can address the emerging needs of the industry. The institutions should seek the inputs of the industry in the review of curricula. Furthermore, there should be a compulsory industrial attachment to be integrated into the curricula of institutions. The institutions should assess students on attachment to make the process effective. Again, there should be adequate provision of the needed facilities for the clothing and textiles institutions. Project proposals are effective ways of attracting funding for facilities, and the institutions should put in efforts to achieve that.

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