

The Impact of Students Industrial Attachment Experience on Their Academic Performance Inteaching and Learning of Fashion

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ABSTRACT

Industrial attachment is one of the mandatory and important Programmes in tertiary institutions which offer students opportunity to acquire knowledge and practical skills needed to perform well in the industry. It is therefore imperative for the training institutions to give it the needed attention it deserves. Students are expected to match theory to practice after school. Lack of attention by the industry in this programme is a concerned to the students in the study area and also perceives that what the industry does is different from what they learn at school. The study was to find out the impact of students industrial attachment experience in the teaching and learning of fashion. Both quantitative and qualitative approaches were employed for the study adopting Case Study as a research design. Simple random sampling was used alongside purposive sampling technique. Questionnaire was used for data collection. Thirty-three (33) respondents were selected for the study. Descriptive statistics was used for data analysis. The following findings were revealed from the study: there is linkage between what students learn in school and what the industry is doing, high percentage (60.6%) of students do not expect to learn new things from the industry, students had objectives in mind when going for industrial attachment, the study found that 87.9% of student respondents were given supervisors perform specific work, students do well in class after industrial attachment and students GPA is high (63.6%) after industrial attachment. Some conclusions from the findings were: good linkage between what students learn in school and what the industry does, some students (60.6%) do not expect anything new from the industry.

INTRODUCTION

Student industrial training or attachment in the fashion and textiles industry enhances the mutual relationship between training institutions and the industry. Industrial attachment or training is mandatory to all technical universities in Ghana which practice skill training. Industrial training (or industrial attachment) involves the systematic placement of trainees in industry where they are helped to acquire specific skills and competences (Nyarko, 2010). It requires proper planning and effective supervision to achieve targeted results. The programme is, ideally, for both staff and students. The staffs (both academic & technical) use it to sharpen their skills in the use of the modern facilities and processes so that they can, in turn, better train students.

Industrial training is very vital to TVET institutions and the trainees (or students) as well as industry (Mensah, et. al., 2012). It is a vehicle for bridging the knowledge and skills gap between

the classroom learning and industry experience (Cole et al. 1992). According to Ross, et al., (2006), industrial training is very important to industry since it does not only provide academically sound individuals to supplement the workforce, but also serves as a breeding ground for future skilled technical expertise for industry. The industry trainees are able to assess their chances for varied and competing future careers as they gain better knowledge of the demands of each professional career (Nelson, 1994). In addition, Risks (1996) argued that industrial training relates directly to the career interests of students and cannot be overlooked within the context of skills acquisition. In 1995, Sharma et al., posited that industrial training improves the trainees' self-esteem and social skills, increases their practical skills and enhances employment opportunities open to them.

Some researchers as cited in Nyarko. Daniel A. and Amegbor Felicia (n.d) indicate that industrial training is more valuable than classroom teaching and that direct supervision should be present throughout the training period (Hite and Bellizi, 1986). This position Knouse, et al., (1999) agreed and further pointed out that industrial training is, indeed, beneficial to all stakeholders. Whereas Callanan and Benzing (2004) held that industrial training provides a test of fitness between individual characteristics and the demands of the work environment, Ayarkwa et al. (2012) emphasized that industrial training exposes the trainees to real work environment and helps them apply theory to practice. Pedro (2002) points out that it offers the trainee the hands-on experience to apply the knowledge gained in the classroom, acquire skills needed to become practice-oriented and to strengthen his understanding of work values and the work environment.

Economic development and globalization (Mohammad and Kamarul, 2011) call for the need to revise Technical Education system to prepare students with the relevant skills to compete around the globe. Mohamad and Kamarul (2011) note that technical skill is not enough for students, but further stated that "students must also be equipped with soft skills, appropriate work attitude and professionalism so that they could become effective and productive contributors to their organization" (p.281).

The industry relies on personnel who can perform and contribute to world of work. This has call for the need for some of the institutions to have a special industrial attachment programmes. For instance, Universiti Kebangsaan Malaysia has a programme where students have to go through ten (10) to twelve-weeks industrial training (Afida, Osman, Omar, Kofli and Suhana, 2013). The industrial training programme Nurfar (2013) further states that through industrial training students learn other trade secrets.

Studies according to Afida et al. (2013) found that industrial training has positive effect on the students' performance, therefore affecting their CGPA and also increasing their chances in job placement.

METHODOLOGY

Research Design

The researchers adopted mixed method approach for the study. Action research was also employed alongside the research approach. The adoption of qualitative study enabled the researchers to do in-depth study about the research. Again the use of qualitative approach also

helped the researchers to make meanings, looked for patterns or themes from the responses of the respondents.

Fraenkel, Wallen and Hyun (2012) explain qualitative research as approach used to investigate a situation or activity to identify the quality of it. Qualitative research according to Edmonds and Kennedy (2012) as cited in Abraham (n.d) is a “research in which the researcher decides what to study; asks specific narrow questions; collects quantifiable data from participants; analyzes these numbers using statistics; and conducts the inquiry in as unbiased, objective manner’ (p.12). The researcher used SPSS to generate statistical tables and to analyze the quantitative aspect of the study.

Action research according to Aditham (2008) provides workable solution and conclusions to a problem. The use of action research helped to find solution to problems related to skills acquisition in the industry during industrial training of students.

Population for the study

Fashion and Textiles students from Accra Technical University were selected for the study. Again, lecturers who teach fashion and textile students were also considered for the study. The consideration of lecturers for the study was to find out how the students’ experiences impact on the teaching and learning process of fashion and textiles. These respondents who were selected from the Fashion and Textiles Department have similar characteristics (Fraenkel, 2012) which helped the researchers to conduct the study.

Target population

The study targeted Higher National Diploma, Certificate Fashion and Textiles students from the Fashion and Textiles Studies Department who have had an experience in the industry before. The study again targeted Fashion and Textiles lecturers who teach practical courses.

Sampling Technique

Fraenkel (2012) stated that sampling is the procedure for selecting respondents among the larger population. Kumeckpor (2002) shares similar view with Fraenkel (2012) that, sampling is a way of selecting sample from a population with similar characteristics. The researchers used purposive sampling technique to select respondents knowledgeable in the area of study. The purpose of using purposive sampling according to Aditham (2008) is to serve a purpose for the study. The statement made by Aditham is also affirmed by Leedy (2005) that during sampling people or respondents are selected for a purpose.

Stratified random sampling was also used alongside purposive sampling to select different categories of respondents from each stratum. Below was the categorization of respondents:

Table 1. The Stratification of respondents

Stratum	Correspondents
Stratum 1:	Higher National Diploma Fashion students
Stratum 2:	Advance / Certificate Fashion students
Stratum 3:	Fashion Lecturers

DATA COLLECTION INSTRUMENTS

The researchers used the questionnaire as research instrument to collect data from the respondents. Questionnaires were issued to respondents to solicit their views on the research questions. The questionnaires were in open and closed ended forms.

Data Analysis Plan

Data collected was coded and analyzed using statistical package for social science (SPSS) and presented by means of tables to help enhance the understanding of the data as well as provide a summary of the data.

RESULTS AND DISCUSSIONS

The findings and discussions of the study were presented in themes relation to the objectives of the study. These include finding out what students expect from the industry during industrial training, analyze the kind of training given to students in the industry and to evaluate the impact of industrial training of students on teaching and learning of fashion.

Fashion Programmes of Study

Table 2: Fashion Programmes of Study

Programme	Frequency	Percentage
HND	24	72.7
Advance	3	9.10
Certificate	6	18.2
Total	33	100

Source: field work (2018)

Table 2 shows programme of students respondents. Out of the thirty-three (33) respondents used for the study, twenty-four (24) respondents constituting 72.7% study Higher National Diploma in Fashion and Textiles (HND), three (3) representing 9.1% of the students study Advance Fashion and Textiles and six (6) students (18.2%) study Certificate in Fashion and Textiles. This suggests that there are more HND students in the study area.

Programme Level of Students

Table 3: Programme Level of Students

Level	Frequency	Percentage
100	4	12.1
200	29	87.9
Total	33	100

Source: Field work (2018)

From table 2 which shows the level of students for the study, it was found that majority (87.9%) of the students were in level 200 of their study programme, this is followed by those in level 100 representing 12.1% of the students for the study.

Industrial Attachments

Table 4: Industrial Attachments

Attachment	Frequency	Percentage	Yes	Frequency	Percentage
Yes	33	100	Fashion	21	63.6
No	0	0.00	Textiles	12	36.4
Total	33	100	Total	33	100

Source: Field work (2018)

In table 3 the study found that, 33 respondents representing 100% for the study went for an industrial attachment. Out of 33 students who went for the attachment 21, representing (63.6%) of the students did their industrial attachment in the Fashion industry while the remaining (34.6%) of the students did their attachment in the Textiles industries. The figures implied that, students attach importance to industrial attachment with the view of acquiring knowledge and skills Muzaffar (2014) from the industry.

Level of Industrial Attachment

Table 5: Level of Industrial Attachment

Level	Frequency	Percentage
100	26	78.8
200	7	21.2
Total	33	100

Source: Field work (2018)

The level of the industrial attachment was done during the long vacation period of their studies as shown in table 5. It was found that 78.8% of the students did their industrial attachment after the completion of their level 100 programme while the remaining 21.2% had their industrial attachment after the completion of the level 200 programme.

Duration of the Industrial Attachment

Table 6: Duration of the Industrial Attachment

Duration	Frequency	Percentage
2 – 3 weeks	8	24.2
4 -6 weeks	2	6.1
7 – 8 weeks	23	69.7
Total	33	100

Source: Field work (2018)

The study found that 69.7% of the students did their industrial attachment within seven to eight weeks (almost two months), 24.24% of the students had theirs within two to three weeks and the least duration of the industrial attachment was within four to six weeks (one month, two weeks) representing 6.1%. These show that, most of the students had quality training period to learn in the field of their attachment.

Students Pre-conceived Objectives about the Industrial Attachment

Table 7: Students Pre-conceived Objectives about the Industrial Attachment

Objective	Frequency	Percentage
Yes	29	87.9
No	4	12.1
Total	33	100

Source: Field work (2018)

Table 7 shows that 87.9% of the students out of 33 students were of the view that they did have some pre-conceived objectives in mind while 12.1% of the students did not have any objectives in mind before their industrial attachments. Some of the pre-conceived objectives of the students included: knowing more about sewing, drafting, free hand cutting and how to use industrial machines, to acquire more skills and knowledge (Nyankang'i, 2015), to learn on different styles, cutting without a pattern.

Expectations of students from the Industrial Attachment

Table 8: Expectations of students from the Industrial Attachment

Expectations	Frequency	Percentage
Yes	13	39.4
No	20	60.6
Total	33	100

Source: Field work (2018)

Table 8 indicates expectations of students from industrial attachment programme. The study found that only (39.4%) out of thirty-three(33) students were expecting to learn something new during the attachment period. Some of the things students were expecting to learn from their industrial attachment included: learning on different types of designs and how to cut them, sewing of trousers, free hand cutting and measurement. Only (60.6%) of the students were not expecting to learn new things.

Industry based Orientation for students during Industrial Attachment

Table 9: Industry based Orientation for students during Industrial Attachment

Challenges	Frequency	Percentage
Yes	22	66.7
No	11	33.3
Total	33	100

Source: Field work (2018)

The study revealed as shown in table 9 that 66.7% of the students were given industry-based orientation in their various attachment places before the start of work whiles 33.3% were of the view that they were not given any form of such an orientation.

Assignments of industry Supervisor and Specific work

Table 10: Assignments of industry Supervisor and Specific work

Attachment	Industry Supervisor		Specific work	
	Frequency	Percentage	Frequency	Percentage
Yes	29	87.9	19	57.6
No	4	12.1	14	42.4
Total	33	100	33	100

Source: Field work (2018)

As indicated in table 10, the study found that 87.9% of the students were assigned to industry-based supervisors during the attachment period whiles 12.1% of the students were not assigned to industry-based supervisors. It was also observed from the study that 57.6% of the students who embarked on the industrial attachment were given specific tasks to accomplish. Some of the specific works assigned to students included: sewing, fixing button holes, fixing zips. Jackets and suits, tailoring whiles 42.4% of the students were not given specific tasks or work to do.

Supervisor feedbacks

Table 11: Industry-based Supervisor feedbacks

Feedbacks	Frequency	Percentage
Yes	22	66.7
No	11	33.3
Total	33	100

Source: Field work (2018)

The study also revealed as shown in the table 11 that 66.7% out of 33 students received feedbacks on their performance from the industry-based supervisors while 33.3% were of the view that they did not receive feedbacks on their performance from the supervisors.

Linkage of learning to Industries

Table 12: Linkage of learning to Industries

Linkage of learning	Frequency	Percentage
Yes	22	66.7
No	11	33.3
Total	33	100

Source: field work (2018)

Table 12 shows the linkage of learning to the industry. Out of the 33 students in the study, 66.7% agreed that they were able to link what they have learnt in school to what they learn from the industry. 33.3% were not able to link what they have been taught in class to what they learn in the industry. This affirms the accession of Matamande et al. (n.d) that students learn from the industry to match the industry practice to what they learn in school.

Examination Performance

Table 13: Examination Performance

Performance	Frequency	Percentage
80 – 100	20	60.6
70 – 79	11	33.3
60 - 69	2	6.1
Total	33	100

Source: Field work (2018)

The study found that 66.6% of the students did very well in their end of semester examination after they have gone through industrial attachments, with a score of 80% – 100%. Thirty-three percent (33.3%) of the students have their examination mark within 70% – 79% and the least

performance of students 6.1% is 60% – 69%. This information gives the impression that students perform better in class and in their examination when they return from industrial attachment. Again, it implies there is a direct link between theory and practice.

Nature of Grade Point Average of Students after their Industrial Attachments

Table 14: Nature of Grade Point Average of Students after their Industrial Attachments

Performance	Frequency	Percentage
Yes	21	63.6
No	12	36.4
Total	33	100

Source: Field work (2018)

Table 13 shows that majority of the students constituting 63.6% had a high GPA after their industrial attachments. Also, about 36.4% of the students had above average GPA after their industrial attachments. This information gives the impression that students GPA have gone up after their industrial attachments, this implies that industrial attachment has contributed highly enough in student performance.

CONCLUSION

The good linkage between what students learn in school and what the industry does is a good sign for preparing students to meet the world of work. This again, indicates that the school (training institutions) of study prepared the students well.

The dissenting views of some students (36.4%) not expecting anything new from the industry means that they perceived what they learnt in school to be different from what they learnt from the industry. In this sense it creates a gap between training institutions and the industry that needs to be filled. It could also mean that the students have no objectives going for industrial attachment so they decide not to learn new things.

Students given specific work to do during industrial attachment and supervised by the work based supervisors showed that students were given training which would prepare them to face the industry demands after school. Students supervised well by the supervisor will help the student to acquire some knowledge and skills.

The academic performance of students after successful industrial attachment showed an upward turn as the Grade Point Average (GPA) of students indicated in the study. A true reflection of students attachment activity positively was evidence in their performance.

Recommendations

Although there is good linkage between what students learn in school and what goes on in the industry, the linkage should be strengthened. This can be done by the institutions finding out from the industry their demands in terms of students training.

Students should be encouraged by the lecturers to have an objective or aim for industrial attachment so that they will remain focused and learn new things from the industry. This also could be realized based on effective pre-attachment orientation for students.

The authorities in the training institutions should build a strong collaboration with the industry through Memoranda of Understanding (MOU) which will make both entities partners in development. This in a way will boost the attachment activities from both ends. Supervisors from the industry will supervise the students well to acquire the needed skills.

Students reports from the industry should be properly assessed and discussed in class by presenting their attachment experiences. This will make students aware of the need to learn during and acquire new skills during the industrial attachment. This will help students improve on their GPA.

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