

# The Impact of Industrial Practical Skills on Fashion students in Ghanaian Polytechnics (A case Study of Kumasi and Accra Polytechnics)

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## ABSTRACT

The main objective of the research was to determine the importance of students industrial practical skills program in the curriculum of the polytechnic education, how well the program is organized, its benefits and challenges that confront the organization. The research used qualitative method of collecting data using questionnaires and interviews. In all a total of 200 questionnaires were administered and 195 were returned. The population comprised of students on the program, past students, employers of fashion industries and homes and liaison officers from the two study areas. Qualitative and quantitative means were used to present the data in the form of charts, tables and texts. The most significant results were that students and the school were the main financiers of the program and finding places for the program was still a difficult task for both students and school. The rating for the organization of the program showed that 44.1% of the respondents rated it as average, 25.9% as good or excellent whilst 29.96% rated it as poor. More than 2/3 (76.29%) of the employers benefitted very much from the program as against the rest, (23.6%) which either did not benefit much or not at all. While less than 2/3 (64.10%) of the past students were employed based on prior experience on the program, (35.9%) were employed using different criteria. Suffice to that more than 9/10 (95.24%) of the respondents reported of the program being either very important or important as against a few (4.76%) considering it as less important. Two-thirds (66.7%) of employers preferred engaging the services of people with industrial practical experience whereas the rest (33.3%) not using that as prerequisite for employment. The notable challenges that confronted students on the program were 37.4% financial, 30.53% accommodation, 20.61% less attention from the places of attachment with the rest 6.1% and 5.34% accounting for disrespect from workers and other challenges respectively. It was also realized that most (63.3%) of the trainees found it difficult while looking for placement with the rest (37.6%) seeing it otherwise. In spite of the challenges, close to total respondents of (98.85%) were either satisfied or very satisfied with the program. The principal conclusion was that though majority of the students were satisfied with the program pragmatic steps should be taken to improve it.

**Keywords:** Industrial Practical Skills, Polytechnic Education, TVET, Fashion Department

## INTRODUCTION

### Background to the Study

Universities and colleges are being criticized for turning out designers who can't sew. This is because they are made to understand that other people will manufacture the designs they come up with. The practical craft skills needed to put together a garment are just as critical as the vision. Unfortunately too many students come out of the fashion design courses in Universities and Art Colleges lacking these skills. The consequent of this is that young people will find it very difficult to get employment (Kingston, 2008). In Ghana, a critical observation of Polytechnic Education reveals that, students in the various fashion departments are not able to relate practical meaning to theoretical lessons imparted in the lecture halls as there is no balance between academic education, practical skills and vocational applications.

The various institutions in Ghana organize industrial attachment program for their students in tertiary institutions to expose them to the day to day work environment of professionals. "This program is an accepted 'value-added' mode of delivery that enables students to receive credit in their subject discipline for classroom theory combined with on-the-job practical work." ([recruitgrad.vtc.edu.hk/text/workplace.htm](http://recruitgrad.vtc.edu.hk/text/workplace.htm)). In addition, it provides opportunities for the students to use their initiative to translate theories learnt in lecture halls to practical experience. Furthermore, the program instills in the students the right kind of work attitudes and professionalism through interaction with people in the organizations and observation of their future roles in industry. It also

lessens the on-the-job training requirement so that they can become effective and productive to their respective organization much sooner than is used for fresh graduates. The program also gives the companies the opportunities to assess the ability of students who are becoming professionals in the field as well as participate fully as partners in co-operative education. It is also an enhancement of the abilities of Polytechnic faculty in preparing graduates to contribute meaningfully to National Development (Gatsi, 2010).

The Polytechnics provide students with technical education that is relevant, up-to-date in technology, and forward looking in approach. As such polytechnic graduates play a significant role in the development of the nation (Boakye-Agyeman, 2006). Polytechnic education in Ghana received tertiary recognition in the early 1990s as a result of the reforms of the 1980s to produce middle level managers and engineers to provide strategic leadership skills to be deployed to both public and private sectors of the Ghanaian economy. The reform was predicated on the fact that, Ghana needed skilled and educated entrepreneurs, managers and leaders to feed into the development strategy of the country (Governments White Paper 1991). Quality programs and quality faculty can produce graduates whose training respond to the demand of current labor market and national policies. Therefore training students to be conscious of their entrepreneurial responsibility to reform the entrepreneurial culture in the country as well as self-employment is expected of polytechnic administrators, faculties and students (Gatsi, 2010). Somewriters have written many concepts related to the impact and benefits of Industrial Practical Skills Program (IPSP). For instance, Cole, Cumming and Bennett (UNDP, 1992) in the assessment of Gambia Technical Training Institute trainees on attachment program observed that without properly trained personnel in industry and in the public service, a country was not in position to exploit its own national resources. Therefore the industrial practical skills (industrial attachment) if properly organized could help solve the problem of non-acquisition of practical skills. The program is common in Asian and African Technical and Vocational Education and Training (TVET) Institutes offering practitioners to 'replenish and update their skills' (Choy and Haukka, 2009). The Industrial Practical Skills Program has been used elsewhere to augment the practical training received in classrooms (Choy and Haukka, 2009; Dudziak and Kohn, 2007; Poh Ling and Lih Fern, 2002).

#### **ORGANIZATION OF THE PROGRAM ELSEWHERE AND IN GHANA**

The Industrial Practical Skills Program (IPSP) is an integral part of the country's (TVET) curriculum, preparing students for dynamic, real-life employment situations, cultivating their aptitudes and attitudes, adaptive, interpersonal and collaborative skills ([www.nypedu.sg](http://www.nypedu.sg), 2010). This is to enable them function well in the world of work as expected ([nairaland.com](http://nairaland.com)). The foregoing looks at organizational issues of the program in Singapore (Nayang Polytechnic), New Zealand, Nigeria, Germany, USA, UK and Ghana.

In Singapore, it is a compulsory gradable module for all full-time diploma students. The 2<sup>nd</sup> year full-time diploma students are attached to a local or overseas company or business organization during their vacation to gain working experience from the industry. At the beginning of 2<sup>nd</sup> semester in 2<sup>nd</sup> year, the school conducts Pre- ITP (Industrial Training Program) seminars to brief students on the program and students are given a logbook to record training activities and work assignments. One month before the commencement of ITP, students receive e-mails about their assigned companies as well as their appointed Liaison Officers (LO's) or they can check the students' administration system to find out about their assigned companies and appointed LO's. The LOs visit the students at work to ensure that they are well taken care of. At the end of the ITP, students submit their completed logbooks to LOs for final grading after which the logbooks are given back to them. Each school then holds a post ITP seminar for its students to share their work experiences and give feedback on their attachment (Singapore Polytechnic, 2009).

In Germany, vocational training is provided by the private sector and the state. As a result, there is a large variety of training possibilities and qualifications. The dual system differs from pure school education, such as is common for vocational training in many other countries, in two main respects: In the dual system, the larger part of the learning process takes place not in schools, but in production facilities or service enterprises in industry, commerce, home management and agriculture. The students are trainees in a company. They are released from work for the purpose of attending school. They receive formal practical training in a company for three or four days per week and at a part-time theoretical training in a vocational school for one or two day's per-week. In Germany, responsibility for training is shared by all those involved: employers, employees and governmental authorities cooperate at all levels. The theoretical technical education in the vocational school is the responsibility of the state, while the practical training is the responsibility of the company. The costs of company training are borne by the private sector and the cost of vocational school from public funds. Companies provide training voluntarily at their own expenses because they believe that this is the best way in which to provide for their own need for skilled staff, and is necessary in order to maintain and increase their own performance and competitiveness. One of the most obvious advantages of the dual system is the practical training in the companies which takes place under conditions and using machines and facilities which reflect the current state of the arts simply because of financial reasons, the equipment in school workshops is always in danger of quickly

becoming out of date. On completion of their training, skilled workers are able to enter a qualified position immediately (tvvet-portal.net).

The USA also recognizes the essence of internship training for students. This gives the students a real-world of work experience. The individual will have the opportunity to work directly with companies and their expertise. Assignments are given to them in respect of their areas of discipline. The interns are placed in setting that relates to their area of discipline. They also receive a written end-of-assignment evaluation form from their managers providing feedback on the following competencies; leadership ability, communication skills, technical competency, administrative (e.g. time management, pc skills), strongest attributes and areas for development. They are paid too (SIC scholar summer, 2011).

Elsewhere in London, industries and organizations publish internship placement opportunity to enable student graduates have the chance of gaining industrial experience. This is for about 10 to 12 weeks in reputable companies. Those who do well are employed on the job. Internship (vacation work placement) which usually takes between 4 and 10 weeks over the summer provides opportunity for gaining insight into how companies work. Upon creating a good impression, students stand the chance of being offered a graduate placement in their field of work and receive payment (UK Student Internship Guide).

In Nigeria, publications are made for students from Universities / Polytechnics due for attachment to apply for vacancies in the industries. Accommodations are given free to them and are paid too. It is compulsory for students to undergo attachment with a selected participating industry or company for a period of three (3) to four (4) months. The program is financed by the Industrial Training Fund (ITF) (Odugbesan, 1999: Nairaland.com).

In Ghana, specifically, the Kumasi and Accra polytechnics (fashion departments), the program is organized annually for HND first and second year students over duration of one to six months. The students are sent to both private firms and public institutions all over the country for the IPSP. A student's supervisor is appointed to coordinate all industrial activities of the department with support of the Industrial Liaison Officer. Lecturers from the department embark on follow-up exercises to supervise the attachés twice during the practical training program. Students undergo at least 1 to 6 months scoring Industrial Practical Experience (IPE) after which they write and submit reports on their experience for assessment. Each year, industrial training is organized for the students at the Presidential Special Initiative (PSI) on Garments in Accra and the Ghana Textile Production (GTP) in Tema for practical skills on the use of industrial machines and also Bonwire Kente village near Kumasi for the observation of Kente weaving. Additionally, educative visits are also made within and outside Accra for the various classes during the semester to enhance the practical and research base of the students (Reviewed curriculum, 2009: Rectors report to congregation, 2009/10; Addo, 2010). Apart from the submission of their reports on IPE for assessment, they are also required to work on projects on Pattern Technology, Garment Technology, CAD and Illustration and Textiles Design among others. Projects are submitted after 4 months of the program and each attracts 3 credit hours.

## **RESEARCH METHODOLOGY/MATERIALS AND METHODS**

This section dealt with the descriptive method used in carrying out the study. It provided information on the population, sampling techniques, procedure and the instruments that were relevant for both data collection and analyses.

### **Population/Population Sampling**

For this study the population was based on Fashion Students in both Kumasi and Accra Polytechnics coupled with the organizers of the program (Liaison officers and Department coordinators) in each study area. It also included: Industries, Dress Makers Association and other Fashion homes that provide useful services to the attachés.

### **Sampling Technique**

Purposive sampling was used to sample the population. This was found to be the most appropriate technique that could enable the needed information to be obtained (changingmind.org). The approach was used to select the Industries, Employers, Dressmakers, Liaison Officers/Coordinators and Students. However, that of the past students was selected based on opportunistic sampling as data was collected at a fashion show. In all a total of 200 people were used for the study: 131 current students, 21 industries/employers, 39 past students, 2 liaison officers and 2 department coordinators from the Kumasi and Accra polytechnics in August, 2010.

### **Data Collection Instruments**

The study used mostly closed ended questionnaires with a few open ended ones. Occasionally unstructured interviews were conducted to seek clarification on important issues. 200 questionnaires were administered to the participants. The questionnaires were made up of: Current Students, 11 items, Past Students 9 items, Industries/

Employers 8 items, Department Coordinators; 9 items and Industrial Liaison officers, 11 items.

### **Validity of the Instruments**

The initial draft of the instrument was subjected to face validity. This was to ensure that it would elicit the information it was designed for (Babble, 1999). The relevance of the items was checked against the purpose of the study and was clearly stated and was confirmed to be appropriate for the right responses from the respondents.

### **Reliability of Instruments**

The instruments reliability was determined by trying and testing few randomly picked students from the fashion departments (Kumasi and Accra Polytechnics).

### **Data Collection and Procedure**

The study was conducted in two locations namely: Accra and Kumasi Polytechnics. They were selected due to their similarities to other polytechnics in terms of objectives and the program run. Therefore the methods used to collect the data could be applied to other similar areas. To increase the internal validity of the study, questionnaires and interviews were adopted. The questionnaires were prepared based on an intensive literature review regarding the program organization, benefits and its challenges. The questionnaires consisted of the (1) personal records/bio data (e.g. gender, age, educational level etc.) and (2) Information about the program (e.g. experience on the program, frequency of attending the program, benefits and challenges of the program, rating and satisfaction). Appropriate Likert scales were employed (Osuala, 1993). For example Likert scales ranging from “None to Twice” was used to obtain information concerning the number of times respondents have attended the program, whereas “very difficult to very easy” was used to elicit the information regarding the difficulty or otherwise of locating places for the program. “Strongly disagree to strongly agree” was also used to collect data regarding the disparities that exist between the lecture room taught lesson and that of the industrial program experience. In addition to the above “less important to very important” was applied to find out the importance of the program to the industry. Apart from the use of the questionnaires, unstructured interviews were occasionally used to elicit data from key informants such as the liaison officers and some of the employers. This method was employed in order to obtain further information and clarification necessary for the study.

In order to get a successful data useful and credible for the study, we explained to every respondent the rationale for the study so as to win their trust for their participation whole- heartedly. I assured them of profound confidentiality and the anonymity needed. Because they were educated they were able to answer the questions with little assistance given them.

### **Result and Analysis**

Qualitative and quantitative analysis were used in scoring and analyzing the primary data collected using Statistical Package for Social Sciences (SPSS) for windows (version 16.0) Descriptive statistics (Kieiss&Bloomquist,1940) and frequency analysis were used to evaluate most of the data. Cross tabulations were also employed when presenting and analyzing the data.

### **DATA PRESENTATION**

This section interpreted and analysed the presentation of data obtained. It looked at three research questions of the study in related sequence. Research question1 was about organizational issues, Research Question2 dwelt on the benefits, whereas Research Question 3 covered the challenges. Since data was collected from five groups of people, the responses were discussed based on the five groups. These were current students, past students, employers,industries, departmental liaison officers and school liaison officers.

### **ORGANIZATION OF THE PROGRAM**

Proper organization of the program will undoubtedly contribute immensely to its ultimate success. Some of the factors that can affect the success of the organization of the program are the frequency of the trainees on the program, duration of the program, sources of funding and placement issues. The others are accommodation and feeding of the trainees on the program, the mismatch between the lecture hallstaught lessons and the practical activities at the industries aiming at equipping trainees with the necessary skills that will enhance their competence.

### **Frequency of the Trainees**

It was essential to verify how often students from the polytechnics in the fashion department embark on industrial practical skills program. Frequency of their attendance may be a contributory factor to their competencies in that, the more they experience the program the more they become equipped with the requisite practical oriented skills and the more competent they become which invariably will be responsive to the needs of

the industry and the world of work. Table 1 presents the result. From the table 90.1% (n=118) of the respondents had attended the program twice, 8.4% (n=11) thrice with only 1.5% (n=2) experiencing only once.

**Table 1 : Frequency on Attending the SIPSP**

Students	Frequency			Total
	Once	Twice	Thrice	
Accra Poly	1(2%)	47(94%)	2(4%)	50(100%)
Kumasi Poly	1(2%)	71(87.7%)	9(11.1%)	81(100%)
<b>Total</b>	2(1.5%)	118(90.1%)	11(8.4%)	131(100%)

### Duration of the Program

Another factor which is indicative of how well the program was organized was the period (number of days or months) that trainees spent on the program per year. Spending more times on the program will provide a greater opportunity for practice and hence become perfect. In this vein, there was the need to ascertain how long trainees spend on the program per year hence the reason for the study. The result from the interaction with all the liaison officers and coordinators from both polytechnics showed that the duration for the program is normally from 1 to 6 months.

### Sources of Funding for the Program

Financial support for the organization and implementation of the smooth running of the program is very paramount. Lack of funds can hinder the success of the program. Enough funds will ensure better organization and implementation of the program and its ultimate success. Against this background it was apt to determine the sources of funds for the program. Respondents from the two polytechnics who were liaison officers and department coordinators asserted that the program is mainly funded by the school and students themselves. They indicated other sources as being from the government and non- governmental organizations (NGOs).

### Placement Issues

Better placement of trainees on the program is an attribute of better organization. When students have smooth access to industries which are well equipped with modern and state-of-the arts equipment, the better the organization. On the other hand, if students are left alone to fish out for their own places for attachment, they will face difficulties and may therefore abandon their search. There is also the possibility that students may not get better places that are well equipped with the necessary machines/equipment essential for the training on the job. It was therefore vital to find out how trainees are placed on the program.

An interaction with the student from both Accra and Kumasi Polytechnic indicates that more than 75% of students search for their own probable places for attachment with introductory letters from the school. In Accra Poly students on finding places ideal for attachment seek the consent of an assigned lecturer who will either approve or disapprove of them based on how the setup of those places are. They should have standard equipment/machine that will help enhance the acquisition of practical skills. Anything short of that does not make the place suitable. In Kumasi Polytechnic, students also look for probable places for attachment and come back to the school for introductory letters. On visit to the attachment centers by the assigned lecturers for assessments, places which are seen to be substandard and therefore cannot help facilitate the acquisition of skills, the trainees there are advised to quit and are recommended to new places suitable. This becomes possible because the recommenders may have been privy to the vacancy in those places during the visit. In both cases the schools annually place less than 20% of potential attachés in well- equipped places through their own effort based on contact already established. They are not able to do more because of the proximity of the assigned areas to students' places of abode. Indeed if locations of attachment are too far from students they cannot afford the high cost of transportation and accommodation and may thus affect their interest. Though the school may have established contact with fashion homes and other suitable places for attachment location proximity becomes a major hindrance to them.

### Accommodation and Feeding Whilst on the Program

Attachés accommodation and feeding whilst on the program is worth knowing. This is because their inability to feed themselves and get decent accommodation can influence negatively on the success of the program. Students can learn better on the program when these challenges and others are solved. There was therefore the necessity to explore how students are accommodated and fed whilst on the program. An interaction with the liaison officers from both institutions showed that more often than not accommodation and feeding of students on the program is through the effort of the trainees themselves.

### Mismatch between Lecture Hall taught Lessons and Industrial Training Experience

What goes on in the school and that of the industry is very crucial to the success of the program. When lecture halls taught lessons are different from what the industries teach the students on the program, then it gives a cause to worry about. The essence of the study was to ascertain whether there is a difference or not. Figure 1 gives the result of the study as shown below.

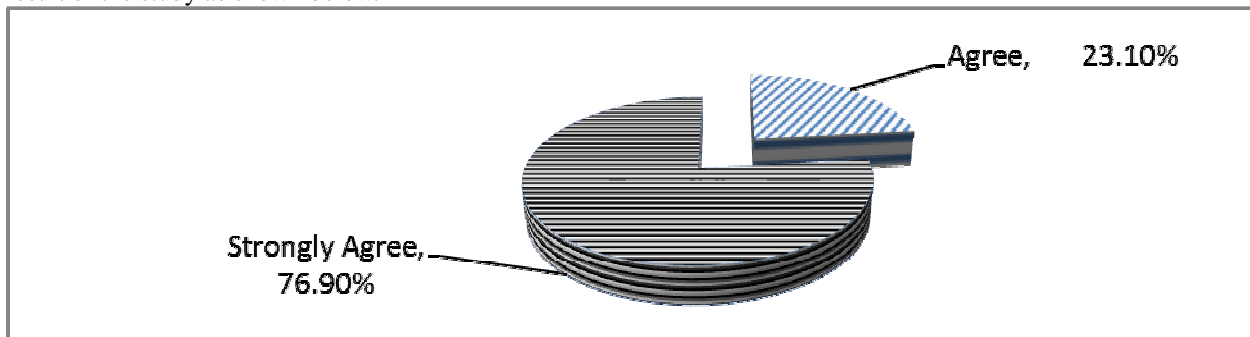


Figure 1: Opinion of Respondents as to the Disparities between School Based Learning and Industrial Training

Figure 1 refers to the result as to how different the school based lesson was from that of the program experience. Out of 100% (n=39) past students, 23.1% (n=9) agreed whilst 76.9% (n=30) strongly agreed in confirming the mismatch between school based learning and industrial practical skills. Perhaps there is lack of proper coordination between the school and the industry.

### Rating of the Program

Seeking the opinion of respondents as to how they rated the program was very necessary. The outcome of their judgment may suggest better organization and success or otherwise of the program hence the reason for establishing that. Table 2 shows the result of their judgment.

Table 2 : Rating of the Program

Rating	Current students	Past students	Total
0	2 (1.5%)	1 (2.6%)	3 (1.76%)
1-3	29 (22.1%)	19 (48.7%)	48 (28.2%)
4-6	56 (42.7%)	19 (48.7%)	75 (44.1%)
7-9	36 (27.5%)	-	36 (21.2%)
10	8 (6.1%)	-	8 (4.7%)
<b>Total</b>	<b>131(77%)</b>	<b>39 (23%)</b>	<b>170(100%)</b>

0-3=Poor

4 - 6 = Average

7 - 9 = Good

10 = Excellent

Table 2 indicates the result on respondents with respect to how they would rate the organization of the SIPSP. Out of a total of 100% (n= 170) of the respondents both current and past students, 1.76% (n = 3) rated it zero (0), 28.2% (n = 48) rated it from 1 to 3, 44.1% (n =75) rated it from 4 to 6 with 21.2% (n=36) rating it as 7 to 9, whilst 4.7% (n=8) gave their rating as 10. Majority 44.1% (n=75) rated it as average with 29.96% (n=51) indicating poor. Those who rated it as poor (0-3) may probably have had difficulties before being placed and also whilst on the job and for that matter could not get what they wanted. With the average ratings (4-6), perhaps they may have gained some new experiences on the program but that might not be all that they wanted not discounting the challenges they may have faced. Those whose ratings indicated either good or excellent may have had easy placement, acquired considerable new skills and knowledge needed for the world of work owing to their places being well endowed and hence rendering the program enjoyable and beneficial to them.

### Benefits of the Program

When the program is well organized it can give considerable benefits to the students, the school (training

institutions) the industries and the nation as a whole. Conversely haphazard organization of the program can affect immensely the students and the training institutions. The output of the industries and the GDP of the nation can also suffer some losses hence affecting national development. Some factors that can be used as determinants of the benefits accrued from the program may be:

- i. Mode of employment of the students in their subsequent jobs.
- ii. Value that the industry place on the program.
- iii. Benefits that employers derive from the program.
- iv. Employer's preference to the employment of employees.
- v. Relationship between trainees and workers at the industries.

### **Mode of Employment of the Students in their Subsequent Jobs**

It is essential to explore how past students who had experienced the programs were employed and whether prior experience on the program was a prerequisite or not. If students who have had prior experience had advantage over those without then it is a good development. It was thus necessary to find out from the respondents as to the criteria upon which they were employed. See fig. 2 for the results.

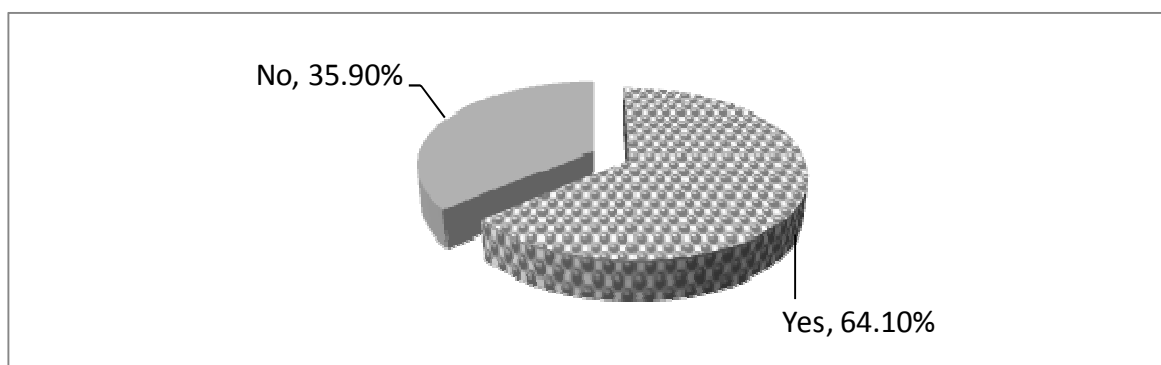


Figure 2: **Results on Respondents' Criteria of Employment**

Fig. 2 indicates the result from respondents as to whether past students were employed based on their experience on the I P S P. Out of a total of 100% (n=39) respondents, 64.10% (n=25) said they were employed due to their experience on the program whilst 35.90% (n=14) said otherwise. This result indicating that majority, 64.10% (n=25) were employed based on their experience on the program lends credence to the importance of the program as it could be explained that the practical knowledge that they had gained was used as a prerequisite for their employment. The remaining percentage (35.9) did not use it as criteria and may have been employed without considering their practical background.

### **Value that the Industries Place on the Program**

The program was designed to effectively prepare students for the industries and the world of work. The importance that the industry attaches to the program may suggest the benefit they may get out of it. Undoubtedly, the industries will be prepared to support the program when they see it to be viable and therefore can facilitate their growth. There is therefore the need to find out how important the program is to industry players. The result can be found in figure 3 below.

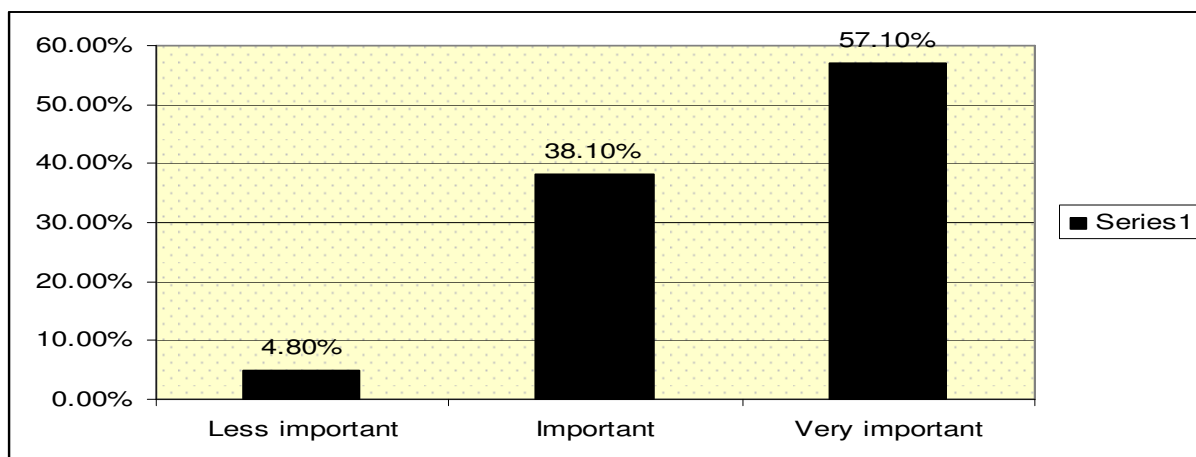


Figure 3: **Importance of Students' Industrial Practical Skills Program (SIPSP)**

Figure 3 displays the results from industry respondents concerning the importance of SIPSP to the industry. Out of the total of 100% (n=21) employers, 4.78 % (n=1) indicated it was less important, whilst 95.23% (n=20) indicated it was either important or very important for the growth of the industries.

#### **Benefit that Employers Accrue from the Program**

Another important factor of the overall benefits of the program is the benefits that employers gain from it. If employers deem the program beneficial they can contribute to it greatly otherwise they will stay aloof. Against this background the researchers found it fit to investigate that aspect. Below is the result of the study as displayed in table 4.

Table 3: **Benefits of the Program to the Employers**

	Level of Benefit			Total
	Not at all	Not much	Very much	
Manager	0 (0%)	3 (30%)	7 (70%)	10(47.6)
Chief Executive	1 (9.1%)	1 (9.1%)	9 (81.8%)	11(52.4%)
Total	1 (4.8%)	4 (19.04%)	16 (76.2%)	21 (100%)

Table 3 refers to the results on respondents as to how much the SIPSP benefits them. Out of a total of 100% (n=21) employers, 4.8% (n=1) said it did not benefit them, 19.04% (n=4) said they did not benefit much from it whereas 76.2%(n=16) said they benefited very much from it. From the result, majority of the respondents admitted that the program benefitted them.

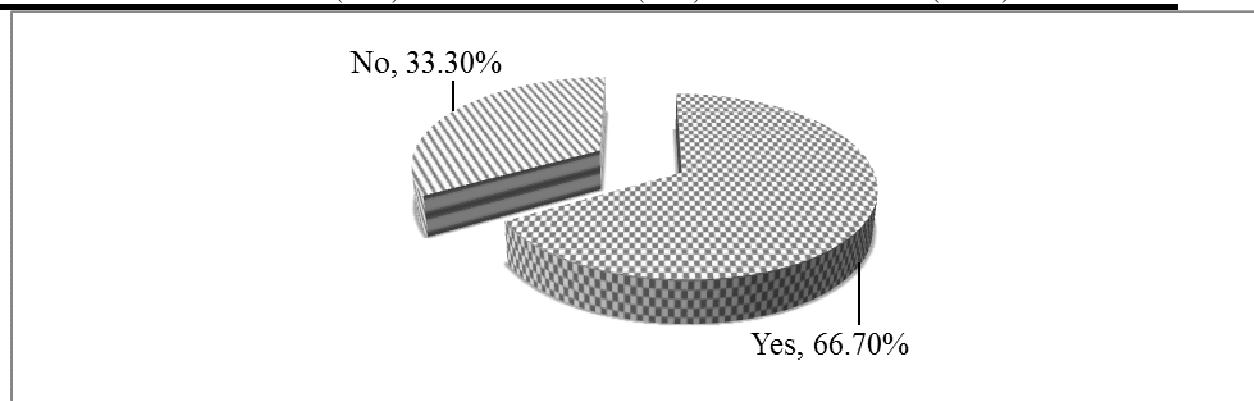
#### **Employers Preference for Employees**

Prior experience of potential employees provides an added advantage for their employment. It gives them confidence and ability to work. This may make them marketable. In this vein, finding out whether employers would prefer engaging those with prior experience on the program on their jobs or not, is very necessary. The figure 3 below answers that.



**Table 4 : Friendliness of the other Workers at the Industry whilst on the Program**

Level of Friendliness	Students		Total
	Male	Female	
Very friendly	6(54.5%)	5(45.5%)	11(28.2%)
Friendly	16(59.3%)	11(40.7%)	27(69.2%)
Unfriendly	1 (100%)	0 (0%)	1 (2.6%)
<b>Total</b>	<b>23(59%)</b>	<b>16 (41%)</b>	<b>39 (100%)</b>



**Figure 4: Respondents' Preference for Employees**

The figure 4 above revealed the results on respondents as to whether they would prefer employing students with industrial practical skills experience or not. Out of a total of 100% (n=21) employers, close to 67% (n=14) responded Yes whilst 33% (n=7) answered 'No'. The result manifested confirms that of figure 2 which indicated that majority of the respondents were employed as a result of their experience on the program.

**Relationship between Trainees and Workers at the Industries**

Trainees can learn better when there is an enabling atmosphere at the workplace. Their establishing a good rapport with the workers is very essential. This will help improve trainees' communication skills and their interpersonal relationship. Therefore investigating it is very crucial to the study. On this account, the study sought to find out the relationship that existed between the trainees and the workers during the IPSP.

Table 4 shows the results on respondents in respect of how friendly the workers were to them whilst on the program. Out of a total of 100% (n=39) past students, 28.2% (n=11) said they were very friendly, 69.2% (n=27) said they were friendly whilst 2.6% (n=1) said they were not friendly. From the table, most 97.44% (n=38) respondents indicated that workers at the industry were either friendly or very friendly whilst 2.7% (n =1) indicated otherwise. This result illustrates the benefits that the trainees obtain from the program.

**Challenges Students Face whilst on the Program**

In order to establish the challenges that students (attachés) encounter whilst on the program, it was apt to determine their financial challenges, accommodation challenges and whether they were given the due regard or respect at the work place by the workers they met as well as attention challenges and others. It was also essential to explore how much difficulty they faced regarding access to machines /equipment and placements. The results are presented in figures 5 and 6 and table 6 respectively.

Figure 5 illustrates the outcome as shown below. The results of the study indicated that, of 100% (n=131) respondents, 37.40% (n= 49) reported that they faced financial challenges, 30.53 % (n=40) said they faced accommodation challenges, 6.1 % (n=8) faced disrespect from workers, 20.61% (n=27) less attention whilst 5.34% (n=7) faced other challenges.

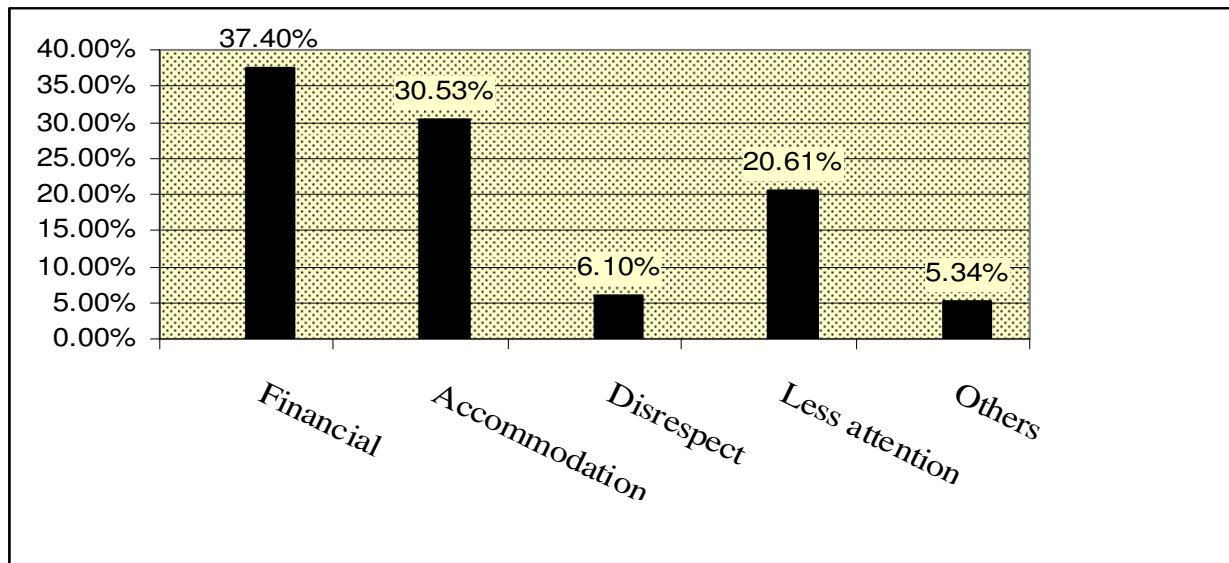


Figure 5: Some Challenges Students Face whilst on the Program

#### Other Challenges on the Program Students' Access to Machines

Attachés' access to machines at the industries may enhance their ability to operate them and therefore increase their degree of competence to work at the world of work. Without access to the required machines and equipment, the core objective of the program cannot be achieved since by virtue of the Fashion and Design program the use of machines/equipment are very crucial. On this account, it was important to establish how accessible the machines were to them.

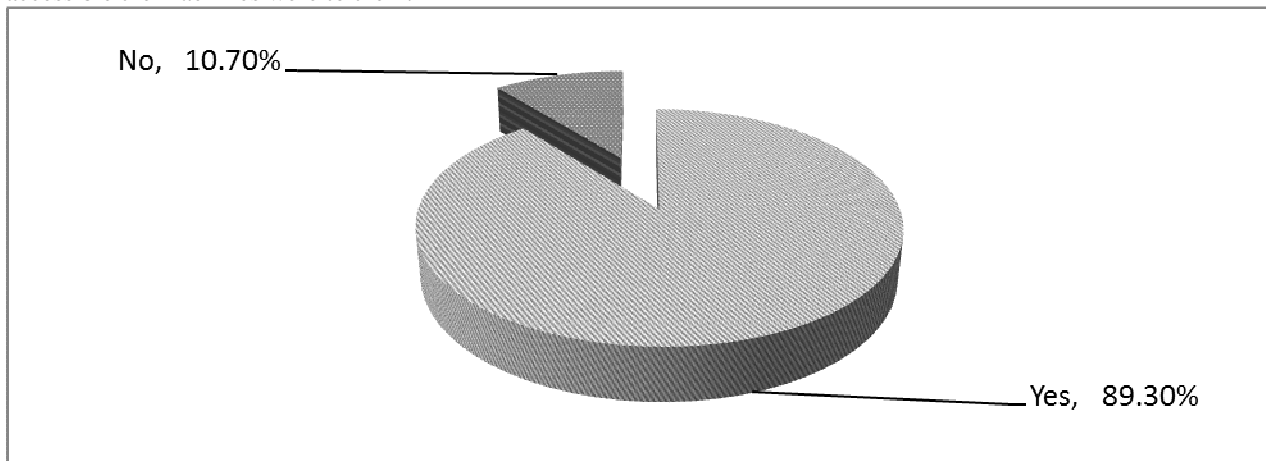


Figure 6: Students' Access to Machines

Figure 6 shows the result on respondents' access to machines/ equipment whilst on the training program. Out of a total of 100% (n=131) students, 89.30% (n=117) indicated 'Yes', whilst a few 10.69% (n=14) said 'No'.

### Difficulties in Placement of Students

Easy access to well-equipped industries for the program is very vital. This is because trainees will be privileged to work on the state of art equipment that will facilitate their competence. Difficulty in finding the right places to undertake the program will be a disincentive to students' performance in the industries or the world of work at the later date. For this reason the study sought to find out how difficult it was to find the right placements for industrial practical skills. Table 6 showed the following report.

**Table 5 : Difficulty in Placement of Students**

Level of Difficulty	Present Students		
	HND 3	HND 2	Total
Very difficult	13 (35.1%)	24 (64.9%)	37 (28.2%)
Difficult	21 (45.7%)	25 (54.4%)	46(35.1%)
Don't know	6 (75%)	2 (25%)	8 (6.1%)
Easy	7 (28%)	18 (72%)	25 (19.1%)
Very easy	4 (26.7%)	11 (73.3%)	15 (11.5%)
<b>Total</b>	<b>51 (38.9%)</b>	<b>80 (61.1%)</b>	<b>131 (100%)</b>

Table 5 indicates the result on respondents as to how difficult it was to find places for the industrial practical skills program. Out of 100% (n=131) current students, 28.2% (n=37) said it was very difficult, 35.1% (n=46) said it was difficult, 6.1% (n=8) said they don't know, 19.1% (n=25) said it is easy, whilst 11.5% (n=15) said it was very easy to find a place for the program. This result also shows an overwhelming majority saying it is difficult finding places for the placements.

### Satisfaction of the Program

The satisfaction of the trainees in relation to the program is very important. It is an indicative of the overall performance of the program by the trainees, training institutions, industries and the nation as a whole. It can be used as a barometer to assess the ultimate level of satisfaction of the program. When the trainees and the other stakeholders such as the government and industries gain nothing from the program it is an indication of a bad result and therefore the failure of the program. In this wise, finding out the degree of satisfaction of the program from the Students both past and current were in the right direction hence the reason for the study. The results according to table 6 indicated a total respondents of 100% (n=170). Of the total, most 67.65% (n=115) reported of being satisfied with the program followed by 31.19% (n=53) very satisfied, 0.58% (n=1) dissatisfied whilst another 0.58% (n=1) reported being very dissatisfied. On the whole, majority (98.83%) were either satisfied or very satisfied with the rest 1.16% either being dissatisfied or very dissatisfied.

**Table 6 : Satisfaction of the Program**

Type of Respondents			
Satisfaction level	Current students	Past students	Total
Very dissatisfied	0 (0%)	1 (2.56%)	1(0.58%)
Dissatisfied	0 (0%)	1 (2.56%)	1(0.58%)
Satisfied	81 (70.4%)	34 (87.18%)	115 (67.65%)
Very satisfied	50 (94.3%)	3 (7.70%)	53 (31.19%)
Others	0 (0%)	0 (0%)	0 (0%)
<b>Total</b>	<b>131 (77.06%)</b>	<b>39 (22.94%)</b>	<b>170 (100%)</b>

## DISCUSSION OF FINDINGS

The discussion of the findings was based on the study which was to find out how the industrial practical skills program organized by the Ghanaian polytechnics impact on Fashion Students. Against this background, analysis was made on data collected through the administration of questionnaires to current and past students, liaison officers and employers coupled with interviews. Findings from the study were discussed based on how well the program was organized, the benefits that accrued from the program and lastly the challenges emerging from the program as well as the overall satisfaction.

### Organization of the Program

The research sought to find out how well the program was organized. In so doing those factors such as frequency of attendance, the duration, sources of funding and placement issues were considered. The rest included accommodation and feeding of trainees, the disparities between lecture halls taught courses and that of industrial practical training and lastly program rating were also looked at.

With respect to how often students attend the program, the study revealed that of the total of 100% (n=131) respondents, 90.1% (n=118) had attended the program twice with a few 9.9% (n=13) experiencing either once or thrice in their lifetime in the school hence satisfying the minimum number of times students are required to embark.

Another factor being indicative of how well the program was organized was the duration. Interactions with the liaison officers indicated a duration of 1 to 6 months depending on the year of the student. Elsewhere in the world such as UK, USA, Nigeria, Germany and Singapore, the durations differ. In the case of Nigeria, Odugbesan, (2010); Singapore (Singapore Polytechnic, 2009), the duration is from 3 to 4 months. With UK the duration is from 4 to 10 weeks (UK Students' Internship Guide). Therefore if the duration is from 1 to 6 months in the case of Ghana then it is in line with majority of the others around the globe.

The sources of funding for the program were also paramount in the study. In the interview with the liaison officers and department coordinators, it emerged that it is mainly financed by the schools and students themselves as well as the government and NGO's. But the issue is the quantum of funds earmarked for it. Inadequate funds for the program will over burden the students thus making it expensive however; with enough funds from the government, the NGO's and industries the full potential of the program could be realized.

Again, the data for students' placement on the program revealed that both the polytechnics and the students helped in this regard. However further interviews indicated that more than 75% of the students often comb round to look for places for the SIPSP with introductory letters from the schools. In spite of the letters from the school, students find it very difficult moving from one place to another in search of places with the attendant cost and time wasting. The effect is that some students give up the efforts when there is no sign of securing a place and this confirms what Donkor *et al*, 2009 said that students spend a lot of time in looking for placement for industrial practical program. The schools on their own efforts normally are able to place less than 20% of students based on already established contacts with well- equipped centres. Their inability to do more is due to location proximity making it unbearable for attaches to bear the high cost of transportation and accommodation associated with long distances from their homes. This issue would not arise if the school liaison officers liaise with industries which are well equipped and ready to accept students for the program. By so doing the difficulties that students go through which resultantly affect their enthusiasm for the program could be curbed. Elsewhere in the world such as Singapore, New Zealand, Nayang Polytechnic and so on it is the school that sends students to the industry for the program ([www.speedwing.org](http://www.speedwing.org), 2011). In the UK, (Student Summer Internship Guide), Nigeria([nairaland.com](http://nairaland.com)), USA (SIC scholars summer,2011) companies advertise to declare vacancies for attachment and invite prospective students to apply. On the program, they are given allowances unlike in Ghana. Looking for places for attachment is very difficult in Ghana. Companies don't like to train students on the job, because they see it to be a waste of time and resources. However, in the countries mentioned above students are trained with state of the art equipment with the view that, when they are well trained, the industries will benefit from them but that is different from Ghana. The government should therefore support the industries to help train students on the program for better results. This will invariably help the students to acquire the needed skills required for the world of work.

Furthermore, data on accommodation and feeding of trainees on the program in Ghana showed that these costs are borne by the trainees themselves unlike what happens in Nigeria. In Nigeria, the trainees are given accommodation and some allowances ([nairaland.com](http://nairaland.com)). (An interaction with the trainees in Ghana showed that huge sums of monies are paid for hostel facilities (i.e. those who have no place or relative in the place of attachment), feeding and transportation and this undoubtedly takes a great toll on parents and the students themselves.

Additionally, the data on the disparities between the lecture rooms taught lessons and the industrial experience showed that 76.9% (n=30) strongly agreed whereas 23.1% (n=9) agreed that there are times that differences exist between the lessons in schools and that of the industrial experience (Figure 1). This result could be attributed to

the lack of collaboration between the industry and the school as the curriculum for the school more often is drawn without any consultation with the industry as stakeholders thus accounting for that gap. The program must thus be designed to directly enhance the skills, knowledge, attitudes, competencies and capabilities of the individuals required to undergo gainful employment as in the case of TVET in Germany (tvet-portal.net). There should be a clear linkage between the curriculum of the TVET schools and the practices of the industries so to ensure relevance of the students on the program (SIPSP). As the main aim of the program is to give enough exposure to students concerning industrial practices and also to provide the students opportunities for taking their own initiative to translate theories acquired from the classrooms to practical experience, any such linkage gap will defeat the very essence of the program and may not auger well for the nation.

Lastly on the program's organization, respondents were asked to rate the program and the data gathered revealed that out of a total of 100% (n= 170) of the respondents both current and past students, 1.76% (n = 3) rated it zero (0), 28.2% (n = 48) rated it from 1 to 3, 44.1% (n =75) rated it from 4 to 6 with 21.2% (n=36) rating it as 7 to 9, whilst 4.7% (n=8) gave their rating as 10. Majority 44.1% (n=75) rated it as average (Table 2). Those who rated it as poor (0-3) may probably have had difficulties before being placed and also whilst on the job and for that matter could not get what they wanted. With the average ratings (4-6), they may possibly have gained some new experiences on the program but that might not be all that they wanted not discounting the challenges they may have faced. Those whose ratings indicated either good or excellent may have had easy placement, acquired considerable new skills and knowledge needed for the world of work owing to their places being well endowed and hence rendering the program enjoyable and beneficial to them. From the result, the overall assessment of the program is good since most students appreciate the program. The result indicates a clear majority for those who rated the program as average over the good rating. This could be explained that there are some challenges that the organization of the program poses to the attachés that need to be addressed. Challenges like placement, accommodation, feeding and transportation among others which have resulted in increasing the burden of the attachés are pressing issues that must be tackled.

### **Benefits of the Program**

The study wanted to know how beneficial the program was to the participants. In determining that, factors such as mode of employment of the trainees in their subsequent jobs, value that industries place on the program and the benefits employers derive from the program were considered. The rest were employers' preference for would be employees and the relationship between trainees and workers at the industries and the world- of –work.

As regards the mode of their employment, 64.1% (n=25) of the past students said they were employed based on their prior experience on the program, as against 35.9% (n=14) indicating otherwise (Figure 2). Undoubtedly, if the program is well organized there could be a situation in the near future when those without industrial experience may find it very difficult to be employed as it happens elsewhere in UK (Students Internship Guide) and Germany (tvet-portal.net) where attachés are offered greater opportunities of employment.

In the case of the value that industries place on the program, (95.23% (n=20) of the employers said it was either “important” or” very important” for the growth of the industries whilst only 4.77% (n=1) said it was “less important” (Figure3).With such a substantial percentage appreciating the importance of the program, it is presumed that they will be prepared to provide the needed help for its sustenance but that is not the case on the ground.Perhaps they do not have the requisite equipment to putthem at their disposal.Elsewhere in Germany, the companies see training of the products of the school as very necessary to their growth and survival. Owing to that they provide voluntary training at their own cost to the trainees (tvet-portal.net). If industries would sacrifice to help train products from the training institutions, they will be well equipped to perform as expected. The government should not pay only lip service to the essence of the program but help as many industries as possible with the requisite equipment fit for sharpening the skills of the attachés. Not only will they work for the companies if they are well trained, they can as well set up their own businesses and when they succeed they can help reduce unemployment in the country which in effect will also help increase the Gross Domestic Product (GDP) of the nation.

In respect of the benefits that the industries derive from the program, 76.2 % (n=16) reported benefitting very much from the program whereas 24.2 % (n=5) either did not benefit much or not at all (Table 3). This could be explained as that the attachés most often are made to participate in the daily activities that go on at the industries like, sewing, batik making, embroidery, weaving and so on, which otherwise would have been done by the industrial workers alone. The results thus agree with Adeaba, (2007) which reported that trainees either assist industrial workers or do the work of transferred workers whilst on the program.

Additionally the study found out that 67% (n=14) of employers would like to employ students with practical experience as against 33 % (n=7) indicating otherwise (Fig 4). This result confirms that of fig. 2 showing that majority of the employees were employed due to their prior experience on the program. The responses of the majority underscores the fact that many employers prefer engaging the services of employees who can readily be of service to them and these are people having experience on the job. This is because they think such employees

have the ability and the skill essential to work without necessarily training them (Fryer, 1992). Lastly on the benefits, the research found that 99.4% (n=38) of the past students were unanimous to point out that the industrial workers were either friendly or very friendly to them whilst on the program (Table 4). This result adds to the benefits that the trainees obtain from the program. As they embark on the program, there may be opportunities for acquiring communications skills worthwhile for working environment; indeed one of the aims of industrial training program in Singapore is that industrial attachment provides new skills of managing relationships. It is an opportunity to improve social, communication and technical skills needed for working life, and enhance the ability to keep abreast with the dynamic changing industry (docstoc.com/docs). Again, the friendly nature of the workers in the industry will create an enabling environment essential for learning. It can also create an opportunity of long friendship that may lead to partnership of some kind in future. This result however does not confirm Donkor *et al* (2009)'s assertion that industries and firms are suspicious of the students and therefore become a challenge to them (students). This perhaps may be due to the different settings as well as the period within which the researches were conducted.

### **Challenges of the Program**

In order to ascertain the challenges that confronted the trainees on the program, it was essential to consider financial challenges, accommodation challenges and attention challenges. The rest are students' access to machines and placement difficulties. The study presents the stated challenges as follows:

37.40% (n= 49) of the respondents reported that they faced financial challenges, 30.53 % (n=40) said they faced accommodation challenges, 6.1 % (n=8) faced disrespect from workers, 20.61% (n=27) less attention whilst 5.34% (n=7) faced other challenges (Fig 5). When the trainees encounter such challenges it becomes very difficult participating fully in the program. Consequently, they become inactive, lose interest and start absenting themselves from the program. There is thus the need for a fund to be instituted to cater for such challenges as it is done in Nigeria where an Industrial Training Fund (ITF) has been set up in that respect (Odugbesan, 2010). After all when the program becomes successful the students (trainees), industries and the school (training institutions) will also benefit hence the economy of the nation will grow as expected. Conversely, the failure of the program may also cause the failure of the industries, training institutions, the students themselves, middle level manpower and the nation as a whole. Donkor *et al*, (2009)'s report on attachment challenges confirms the results.

In relation to students' access to machines, it was reported that 89.3 % (n=117) had access to machines whilst on the program as against 10.69 % (n=14) indicating the opposite (Fig 6). This result is very encouraging. Nonetheless, we should not discount the response of the minority (10.69%). The necessity of trainees' access to machines/equipment at the industries cannot be underestimated since that is the sure way of boosting their competence. In Europe specifically Germany, trainees are allowed free access to modern and state of the art equipment which resultantly make them better prepared for the world of work and no wonder they are now advanced (tvvet.portal.org). It stands to reason therefore that if the state in Ghana and the other stakeholders will stop paying lip service to the program and get hands on deck by taking pragmatic approaches to sustain the program, the nation will benefit immensely.

With placement difficulty, 63.36% (n=83) reported that looking for placement was either difficult or very difficult, 30.53% (n=40) said it was either easy or very easy and a few 6.10% (n=8) did not know (Table 5). This result also shows an overwhelming majority confirming the inherent difficulties in finding placements on the program. As already discussed, students in their quest for finding places for the program go through a lot of difficulties moving from one factory/industry to another. Some of them who may not be lucky eventually end up at places which are not well equipped and in the end do not acquire enough skills expected after going through the difficulty in looking for placements, they become demoralized and in effect lose interest in the program. This situation will not arise if there is an effective connection between the schools and the industry such that the schools themselves will place students in special industries where attachés will derive maximum benefit from as it is done elsewhere in Nayang, New Zealand and the like (www.speedwing .org, 2011). An interview with the liaison officers confirmed what the students reported and added other challenges such as administrative bottlenecks and busy schedule of lecturers culminating in their inability to visit and observe the students the number of times expected.

### **Satisfaction of the Program**

Having discussed the organization, benefits and challenges of the program, there was the need to determine the overall satisfaction of the program from the standpoint of the students. The study thus found out that, majority (98.83%) were either satisfied or very satisfied with the rest 1.17% either being dissatisfied or very dissatisfied (Table 6). The results portray an encouraging figure which indicated that an overwhelming majority were satisfied with the program. The result may mean that the program was well organized and that trainees were able to obtain what they wanted. Comparing the result with the rating in table 2, there is corroboration between the

two results. The satisfaction of the trainees on the program almost corroborates their ratings which showed that about 70% either rated it average, good or excellent. The fact that the program rating is encouraging and respondents' registering a remarkable satisfaction of the program does not imply that all is well and therefore the challenges that has to do with placement, finance, accommodation and transportation emanating from the organization and implementation of the program must be properly addressed. Pragmatic measures must be taken to restructure the program so as to increase the duration. There must be a formidable linkage between the training institutions and the industries whereby the industries as stakeholders will adopt some training institutions for training of their products. On the other hand, the training institutions can also support industries in research work and also provide them with the theoretical principles essential for the growth of the industries. On this score, government should do well to see to the growth of training institutions and industries by devising pragmatic ways of supporting their activities. If possible, part of the GETFund must be set aside for the organization and implementation of the IPSP.

### SUMMARY

The main objective of the study was to find out the impact of IPSP on fashion students in Ghanaian polytechnics. The study applied both qualitative and quantitative methods to collect data with the use of questionnaires and interviews. In all, a total of 200 questionnaires were administered and 195 were returned. The population comprised Students (both current and past), Employers and ILO's as well as the Department Coordinators of the program. Data was presented using both qualitative and quantitative methods in the form of tables, charts and texts. The findings were as follows:

1. It was reported that the duration for the program was from 1 to 6 months.
2. The program was funded by students, the school, government and sometimes NGO's.
3. Students on the program catered for their own feeding, accommodation, transportation and the like.
4. Industrial placement was by both the students' effort and the school through the efforts of the liaison officers.
5. Majority (63.3%) rated the program as either good or average followed by 28.2% rating it as below average whereas only 4.7% gave their rating as excellent.
6. More than three out of four employers admitted benefiting very much from the program with the rest indicating that they either benefitted not much or not at all.
7. Majority 64.1% of the past students who had benefitted from the program were employed based on their prior experiences.
8. More than two-thirds of the employers preferred employing potential employees with prior experience on the SIPSP.
9. Majority 97.4% of the trainees indicated that workers at the workplace were either friendly or very friendly with them with only a few (2.6%) reporting otherwise.
10. About 90% of the trainees on the program had access to machines and equipment.
11. There was still the challenge of industrial placement. 35.1% of the respondents reported that finding places for the program was difficult, 28.2% indicated it was very difficult, 30.6% were of the view that it was either easy or very easy to locate a place for the program whilst only 6.1% did not know what to say.
12. Students on the program faced challenges such as financial (37.4%), accommodation (30.53%) disrespect from workers at the industry (6.1%), less attention from the workers and employers (20.61%) whilst other challenges recorded (5.34%).
13. Majority 67.65% of the respondents were satisfied about the program with (31.2%) being very satisfied.

### CONCLUSION

Training students to be conscious of their entrepreneurial culture and to become self-employed is expected from the polytechnics (Gatsi, 2010). Additionally, graduates from polytechnics are expected to provide middle level manpower needs for a nation (Ochiaga, 1995). Therefore there is the need for Industrial Practical Experience to equip them with the necessary practical skills to balance the theory acquired in the schools so as to render them fully mature for the task lying in wait for them in the world of work and in the industries. Through the review of the related literature, the authors gained a sufficient understanding of the relevance of the program and its impact on students worldwide. However, a preliminary study conducted in the Kumasi Polytechnic revealed some apparent lapses in the organization of the IPSP. Some of these were associated with poor organization, difficulties in finding placements and insufficient supervision which could be traced to lack of sufficient funding among others. In consequent of those, issues have been raised about the quality of polytechnic students turned out annually by the polytechnics in Ghana in respect of their practical capabilities and confidence as they are the very people in whose hands the middle level manpower of the nation ultimately lies. Based on the program's impact on the students, objectives were set to help verify how well the program was organized, its benefits and

the inherent challenges that tend to affect its success. With a sample size of 200, the population included Current Students, Past Students, Employers and Liaison Officers / Department Coordinators of the Polytechnics. Data collection was done using interviews and questionnaires (Frankael & Wallen, 2003) and the research was conducted with the use of case study (Sheying, 1998).

The results brought to the fore challenges that hinder the success of the program. These included placement, finance, accommodation and differences in the curriculum for the Training Institutions and what goes on at the industries amongst others. On the whole, students who were respondents indicated overwhelmingly their satisfaction with the program.

### RECOMMENDATIONS

- i) As it is done in Nigeria, a special fund must be set aside to finance the program. This fund could be contributed to by the government, industries and NGO's who may be direct beneficiaries of the program.
- ii) There should be better collaboration between the training institutions and the industries. The curriculum of the training institutions should be prepared in consultation with the industries.
- iii) The LO's in the training institutions should be up and doing in search for well-equipped industries where the trainees can get maximum exposure to practical work.
- iv) The problem of students travelling far and wide to look for placement on their own must be curbed. Rather the institutions must send the students to the industries for industrial exposure.
- v) If possible trainees on the program should be arranged to be given a percentage of the minimum wage so as to support their expenses.
- vi) At the end of the training program, certificates should be issued to trainees which will be a prerequisite for their future employment.
- vii) The government should not pay only lip service to the essence of the program but help as many industries as possible with the requisite equipment fit for sharpening the skills of the attachés. Not only will they work for the companies if they are well trained, they can as well set up their own businesses and when they succeed they can help reduce unemployment in the country which in effect will also help increase the Gross Domestic Product (GDP) of the nation.
- viii) Pragmatic measures must be taken to restructure the program so as to increase the duration.
- ix) There must be a formidable linkage between the training institutions and the industries whereby the industries as stakeholders will adopt some training institutions for training of their products. On the other hand, the training institutions can also support industries in research work and also provide them with the theoretical principles essential for the growth of the industries. On this score, government should do well to see to the growth of training institutions and industries by devising pragmatic ways of supporting their activities.
- x) The Institutions should organize a post Industrial Training Program (ITP) seminars for their students to share their work experiences and give feedback on their attachment.

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