

Industrial Attachment: Perspectives, Conceptions and Misconceptions of Students at Cape Coast Polytechnic, Ghana

Eugene Owusu-Acheampong¹ A samoah Appiah Williams² Theodora Dedo Azu³
1.School of Business and Management Studies, Department of Secretaryship and Management Studies, Cape Coast Polytechnic, P.O. Box AD 50 Cape Coast, Ghana

2. School of Business and Management Studies, Department of Secretaryship and Management Studies, Cape Coast P.O. Box AD 50, Cape Coast Ghana

3. Faculty of Allied and Health Sciences, School Of Nursing, Department of Midwifery, University of Cape Coast, Ghana

E-mail of the corresponding author: kodwo33@gmail.com

Abstract

The general objective of the study was to evaluate the perspectives, conceptions and misconceptions of students on Industrial Attachment. The study employed the descriptive research design. In all one hundred and seventyone (171) students participated in the study. Questionnaire was the main instruments for data collection. Descriptive statistics and inferential statistics including chi-square tests and correlation analysis were used to ascertain the associations and relationships between variables. The study revealed that students benefit immensely from industrial attachment. The study also found out that students were interested, happy and also had good perception about the Industrial Attachment activity, however; they wished that the duration for Industrial Attachment could be extended to two months or more. Moreover, the study discovered a strong positive correlation between student field of study and industrial experience. Notwithstanding the benefits, it was discovered that greater percentage of the students had difficulty getting an industry for attachment. It is therefore recommended that the polytechnic review and extend the period or duration for attachment to enable students familiarize themselves better with the operations of the industry. Since the study revealed that students found difficulty in securing industrial placement, it is recommended that the polytechnic take-up the responsibility by assisting students to search for places for attachment. This can be achieved through a closer working relationship with the industry. Beside, the polytechnic should also ensure that students are placed in institutions or industries where they can have a practical feel of their study fields.

Keywords: Attachment; Experience; Perception; Competencies and on-the-job Training

Introduction

The industrial attachment exercise is an indispensable module of the prospectus of any establishment of advanced learning. It has extensively been accepted that Industrial Attachment forms a vital component in learning predominantly in Polytechnic Institutions in Ghana (COTVET, 2013). Learners' Industrial Attachment programme is a "work-based familiarity plan" providing a real-life organizational background for students to build explicit or basic skills, necessary to their specialized development. Sumathi, Zainal, Karim & Li, (2012), hypothesize that the essence of Industrial Attachment was to develop the practical and competence of trainees and provide them with the requisite knowledge to contribute their quota towards developing society.

The Industrial Attachment programme is held to be a unique career pathfinder programme designed to lend a hand to students unearth and develop their careers through industrial attachment opportunities in organisations in Ghana while on vacation (COTVET, 2013). An Industrial Attachment is a well thought-out, credit-bearing employment experience in a professional work situation for the duration of which the learners relate theory to practice and get hold of knowledge and skills. It necessitates the appliance of academic skills in an organisation linked to the students' main areas of schoolwork. An Industrial Attachment ought to dare the student to scrutinize the ideals of the organization concerned in the experience and to evaluate the student's education as it relates to the industry (Directorate of Training, 2007). In the course of this, students can experience the swiftness, discipline and mood of an industry and gain insight into the operational and managerial aspects of the host company (Career Services, 2004).

The rationale of industrial attachment take account of investigating line of business interests, learning innovative skills, gaining occupational related experience, increasing a professional set of connections and appreciating workplace expectations (Connor & Shaw, 2008). Buor (2012) indicated that industrial attachment was a system on-the-job training for white collar and professional careers therefore; students are expected to practice the things they learned in school. It likewise develops the competencies and aptitudes of trainees, reinforce industrial/institution partnership, present a nation-wide mechanism to deal with key skill demand, make available a means for training institutions to act in response to acknowledged areas of national key skill needs (Ayakwa, Adinyira & Osei-Asibery, 2012), build up the trainees' persona and understanding of individuals and groups in work circumstances. It also offers the trainee, background information and experience in professional



choice. From end-to-end industrial training, students gain knowledge of and become skilled in order to appreciate the importance of human relationships and work attitudes, welcome the restriction of working life and purposeful relationships, inside and between organizations and turn out to be conversant with work processes (Van Dorp, 2008).

Regardless of the prominence of Industrial Attachment as a cardinal part of the Polytechnic Education, there have been several concerns by students and industries about its effectiveness. It is perceived that students are 'damped' at industries for attachment because it is just a requirement in their curriculum. The students also complain of being exploited by the industry who views them as cheap labour. Other issues of concern are the nature of work given to the students and length of the attachment period as well as the timing of the industrial attachment (Directorate of Industrial Training, 2007). These challenges are felt indiscriminately among the students involved, their lecturers as well as the industry professionals, and may compromise industrial attachment as a meaningful learning experience. Studies done Van Dorp (2008) showed that the provision of experiential learning activities such as industrial attachment do not necessarily provide a meaningful learning experience due to various challenges that significantly affect the overall quality of the programme. Coupled by the fact that no known study has been done in this country, it is imperative to evaluate the perspectives, conceptions and misconceptions of students on industrial attachment. The study therefore, seeks to: assess the perception of students on Industrial Attachment, examine the link between Industrial Attachment and students' field of study, identify the challenges students encounter during Industrial Attachment and determine copying strategies students employ during Industrial Attachment.

Methodology

The population was all students at Cape Coast Polytechnic. The study population however, was students in the Secretaryship and Management Studies Department. The participants were first, second and third year students who have had at least one and half months period of industrial attachment. Questionnaires were used to collect information for the study. A total of 182 questionnaires were distributed and 171 were returned fully completed representing 94 percent. Data retrieved from respondents were subjected to rigorous analysis using SPSS software. The analysis involved included descriptive statistics and chi-square tested and correlation analysis set at 95% confidence level.

3. Discussions

3.2 Duration of attachment

Elicited responses about the duration of industrial attachment showed that (8.2%) of the participants indicated that the duration for industrial attachment falls below one month while majority constituting (91.8%) showed that the duration of attachment is one month. It can be concluded that a good number of the students carry-out their attachment for one month. Data on preferred duration of attachment from respondents showed that (12.3%) preferred one month attachment while (72.6%) preferred 2 months attachment and 26 (15.2%) preferred that attachment duration be extended to 3 months. From the obtained responses, it is shown that most of the participants preferred that attachment duration be extended to two months or beyond instead of the usual one month attachment duration.

3.3 Number of times students embark on Industrial Attachment

Participants were made to show the number of times they have embarked on Industrial Attachment. Fourteen (8.2%) indicated that they have been on Industrial Attachment once, one hundred and fifty-three representing (89.4%) pointed out that they have had attachment twice while the remaining 4 (2.3%) responded they have not been on attachment before. From the discussions above, it can be inferred that most of the students had been on attachment twice.

The study however investigated the relationship between the number of times students had been on attachment against the benefits associated with Industrial Attachment at 5% significant level. The investigation revealed that there was a significant positive correlation between the number of times students had embarked on attachment and the insights they gained into the operational aspects of the industry with p-value (.023) compared to alpha of (0.05). The implication is that the increase in gaining insight into operational aspect of an industry comes as a result of the number of times students are engaged in Industrial Attachment Programme.

The study also revealed that the number of times students go on attachment significantly related to students being exposed to the real world challenges of work. The investigation obtained a p-value of (.017) compared with alpha of (0.05). This implies that the more students embark on industrial attachment the likelihood for them to get exposed to the challenges of real world of work. Moreover, there was a significant positive correlation between the number of times students go on attachment and increased in professional set of connections with a p-value of (0.000) compared with alpha of (0.05). The implication is that the more students go on attachment, the probability for them to establish work related connections with professionals on their field



of study.

3.4 Opinions on Industrial Attachment

Participants were asked to share their opinions on whether Industrial Attachment was either an excellent activity, very good, good or poor. Seventy-six (44.4%) were of the opinion that Industrial Attachment is an excellent activity, sixty-three (36.8%) indicated that industrial Attachment is a very good activity while 16 (9.4%) responded it is a good activity and another 16 representing (9.4%) showed that it is a poor activity. From the data gathered, it can be concluded that the largest part of the students were of the view that industrial attachment was an excellent exercise.

Opinions on whether students were happy about the Industrial Attachment activity or not interested showed that one hundred and forty participants who constitute (81.0%) indicated 'Yes' while (18.9%) responded 'No'. The discussions above illustrate that most of the participants were happy about the Industrial Attachment activity. On the matter as to whether Industrial Attachment should be maintained or not to be maintained, elicited responses obtained indicate that (78.9%) showed it should be continued while (21.1%) signified that it should not be continued. Conclusively, majority of the students were of the opinion that industrial attachment should be continued.

3.5 Link between field of study and industrial experience

Study participants were asked to indicate by responding either 'Yes' or 'No' as to whether their field of study relates or has a link with attachment activities or experience. One hundred and fifty-five (90.6%) participants pointed to the fact that their field of study has a link with their industrial experience while the remaining (9.4%) were of the judgment that there was no link between industrial attachment experience and their field of study. The above discussions suggest that majority of the students Industrial Attachment activities have link with their field of study. Chi-square test was conducted to ascertain the association between students programme of study and industrial activities. The result showed that attachment activities were in line with students' programme of study. Chi-square and p values of 16.703 and .001 respectively were obtained. The implication is that the two variables are statistically associated.

3.6 Challenges associated with Industrial Attachment

The obtained data also discovered that (76.6%) of students were faced with the problem of getting an industry for the attachment, (62.6%) also indicated that the long distance from place of residence to industry poses a very big challenge to them while (35.1%) believed uncooperative attitude of some industry based supervisors made them find it difficult to participate fully in the attachment process. In addition, a fraction of the participant constituting (49.1%) showed that inadequate supervision by school authorities is a challenge. Others constituting (38.8%) alleged they are either used as errand boys or girls which made them uncomfortable during attachment. This finding supports that of (Directorate of Industrial Training, 2007) who found that students are exploited by the industry who view them as cheap labour. Thirty-six percent (36%) explained that inadequate work to do during Industrial Attachment as their main challenge. Only (4.8%) gave response that the industries work they are involved did not relate to their field of study at school and a fraction constituting (3.4%) complained of sexual harassment as challenge for them during industrial attachment.

3.7 Coping mechanisms during Industrial Attachment

Participants for the study were requested to indicate coping mechanisms they employ to meet the challenges they face on the field of experience. Sixty-three representing (36.8%) responded they sought advice from their respective industry based supervisors, (14%) specified that they made phone calls to their lecturers to ask for guidance, (7%) fell on the School's Industrial Liaison Office to ask for guidance and directions. Sixty (35%) pointed toward to the fact that they learn to adjust to the situation in the industry's environment while others (7%) sought counsel from their parents/relatives. From the forgone discussions, it is evident that most of the participants sought guidance and directions from their industry based supervisor as a way to cope with the challenges on the field of work.

3.8 Suggestions to improve Industrial Attachment

Responses obtained from data collected pertaining to suggestions to improve Industrial Attachment showed that 80 (46.8%) indicated that Industrial Attachment be extended to cover a period of two months, (32.7%) were of the view that the School's Industrial Liaison Office should help students in the placement process, (14.6) indicated that industries should assist students with allowances while others constituting a percentage of (5.8%) opined that lecturers should visit them at least twice during the attachment period. From the discussions, most of the students wished the period of attachment be extended to two months or more.



3.9 Lessons learnt during Industrial Attachment

On issues pertaining to lesson learnt during attachment, information gathered showed that 98 (57.3%) indicated that they learn to use machines and equipment while on the job. Twenty-one (12.3%) showed that they also learn to participate in group and team activities, (18%) showed that they learn basic work ethics during the attachment period while another (12.3%) responded they learn about good human relations skills. It can therefore be concluded that the largest part of the students learn to use machines and equipment for the work they do during attachment.

3.10 Benefits of industrial attachment experience

The analysed responses made known that (87.7%) of the participants indicated Industrial Attachment helped them gained insight into the operational aspect of the industry, (94.2%) were of the view that Industrial Attachment exposed them to real work challenges, (90.1%) indicated, industry experience helped them acquire additional knowledge and skills, (80.1%) pointed out that industrial experience improved their interpersonal and communication skills, (76.7%) showed that Industrial Attachment experience helped them gain occupational related experience, (87.4%) confirmed that industrial experience increased their professional set of connections, (91.2%) responded that industrial attachment experience made them conversant with work processes, (90%) pointed to the fact that Industrial Attachment provided them with background information and experience in professional choice and (94.7%) designate that industry experience helped them to practice what was learnt at school. This finding supports the argument of (Van Dorp, 2008) that states that the rationale of Industrial Attachment is to equip students to gain occupational related experience increase one's professional set of connections and appreciating workplace expectations.

Summary

Key findings

The findings of the study revealed that most of the students have been on Industrial Attachment twice. It can also be inferred from the analysis that nearly everyone was of the view that Industrial Attachment was a good exercise. The study also discovered that majority of the participants were happy about the Industrial Attachment activity. Furthermore, most of the study sampled were of the belief that industrial attachment should be continued.

Also, from the analysis, greater part of the students looked for places for industrial attachment by themselves. Moreover most of the students carry-out their attachment within month period. The study also revealed that the students wished attachment duration be extended to two months or beyond instead of one month. It is also noteworthy that participants seek guidance and directions from their industry based supervisor as a means to cope with the challenges on the field of work. The study also among other findings discovered that students learn to use machines and equipment for the work they do during attachment. Finally, industrial attachment activities was found be statistically associated with students' programme of study. The study also revealed that the number of times students embark on attachment increases their chances of getting more experience on the field of work.

Notwithstanding, the study also revealed that students benefits immensely from the Industrial Attachment activity. Statistics obtained showed that more than ninety percent (90%) of the participants gained a lot of exposure and practical work experience through industrial attachment. However, despite the enormous benefits associated with Industrial Attachment, students face lot of challenges notably amongst them include the difficulty in securing placement in industry for attachment and long distance from place of residence to industry.

Conclusion

Following the findings of the study, Industrial Attachment plays a very significant role in equipping students with necessary skills and experiences to meet that challenges in the world of work. It likewise develops the competencies and aptitudes of trainees, present a nation-wide mechanism to deal with key skill demand, make available a means for training institutions to act in response to acknowledged areas of national key skill needs. It also builds-up the trainees' persona and understanding of individuals and groups in work circumstances and offer to the trainee background information and experience in professional choice. Notwithstanding the enormous benefits connected with industrial attachment measures need to be taken to forestall the challenges related to the Industrial Attachment in order to ascertain its relevance to national development.

Recommendations

Based on the findings, it is recommended that:

The short period of industrial attachment did not allow students to familiarize themselves with operations of industry. Therefore, it is recommended that the polytechnic review and extend the period or duration for Industrial Attachment to two months or more to enable students familiarize themselves



well with operations of industry and gain the required competencies for real world of work.

Since the findings showed that industrial attachment activities extremely benefit students, it is recommended that the polytechnic commits more resources to the Industrial Attachment activity by allocating adequate funds essential for effectively managing the required industrial visits or supervision by lecturers and coordinators.

Since the study revealed that students found difficulty in securing industrial placement, it is recommended that the polytechnic should take it upon themselves to assist students in searching for the attachment places. This can be achieved through a closer working relationship with the industry. Beside, the polytechnic should also ensure that students are placed in institutions or industries where they can have a practical feel of their study fields.

In the light of the foregoing, it is deemed fit that polytechnic programmes should contain workplace experience component worthy of consideration. Consequently, they must incorporate workplace training into their curriculum to provide workplace experience for learners. Besides, work-integrated learning could help to address the effect of educational institutions inability to acquire specialized equipment needed to prepare their students for the world of work.

In view of the fact that the industry-based supervisor plays a critical role during students attachment programme, the immediate on-the-job supervisor should be given more authority and responsibility for the students' education during the attachment. To make this viable, the educational institution should provide these supervisors with the appropriate resources for managing the student industrial experience. In addition, these supervisors should be trained through specific pre-attachment seminars, the cost of which could be subsidized by the government through COTVET.

References

Ayarkwa, J Adinyira, E Osei-Asibery, D (2012) "Industrial training of construction students: perceptions of training organizations in Ghana" *Education and Training* vol. 54 iss:2pp.234-249.

Career Services, (2004) "12 Essentials for Success: Competencies Employers Seek in College Graduates, MSU Career Services Network", East Lansing, MI.

Connor, H Shaw, S (2008) "Graduate training and development: current trends and issues, *Education and Training Journal*", vol50 p.357-365

Council for Technical and Vocational Education and Training (2013) "TVET Policy and System-Industrial Attachment Policy, Ghana

Directorate of Training, (2007) "Guidelines for the National Industrial Attachment Training Scheme, Nairobi: Government Press.

Garavan, N. T and C. Murphy, C (2001) "The Co-operative Education process and organizational socialization: A qualitative study of students" perceptions of its effectiveness". *Education and Training Journal*, Vol.43 (6), pp. 281-302.

Sumathi R, Zainal A, Karim, C & Li, S (2012) "Students' Perception of Industrial Internship Programme" *Education and Training Journal*, Vol. 54 Iss: 2 pp. 180 –191.

Van Dorp, C. A, (2008) "Stimulating Employability Through Cross Sector Virtual Mobility". European Funded Research on Flexible Modality Internships, *European Association of Distance Teaching Universities* (EADTU), Heerlen

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

























