

## AN EVALUATION OF THE STUDENT INDUSTRIAL ATTACHMENT PROGRAMME IN ZIMBABWE: A CASE STUDY OF CHINHOYI UNIVERSITY OF TECHNOLOGY

GERALD MUNYORO<sup>1</sup>, ZIVANAYI FRANCIS NYANDORO<sup>2</sup> & MUNYARADZI MUSEKIWA<sup>3</sup>

<sup>1,3</sup>Graduate Business School, School of Entrepreneurship and Business Sciences Chinhoyi University of Technology,  
Chinhoyi, Mash West Province, Zimbabwe

<sup>2</sup>School of Marketing and Management, Coventry University, United Kingdom

### ABSTRACT

The student industrial attachment has become an integral part of academic programmes that seek to improve students' career prospects and employability. This study evaluated the attachment programme from the perspective of students and university lecturers. A sample of eighty-seven (87) participants comprising lecturers, students and parents were interviewed using self-administered questionnaires, semi-structured and focus group interviews. Data were analysed using descriptive analysis and content analysis. The majority of the respondents concurred that the student industrial attachment programme helps to bridge the gap between theory and practice. There were perceived variations with respect to the grading of the assessments, mismatch between equipment and technology available in the University and industry. Further, to concerns regarding the administration of the programme, in particular, challenges in securing attachments and student allowances, lack of resources to cover industrial supervisors' transport and accommodation costs. The main recommendations include the need for the University to establish a Unit to coordinate the programme and foster closer liaison with industry, monitor quality assurance procedures, upgrade equipment and technology. In addition to regular reviews of the student attachment programme in line with changing and challenging business environments.

**KEYWORDS:** Industrial Attachment, Assessments, Experiential Learning, Human Capital Theory

### INTRODUCTION

Industrial attachment programmes provide an opportunity for learning through sense experiences (Jarvis, 1995). Davies (1990) traces the origins of industrial attachment to the Second World War and states that the main reason was to bridge the gap between skills demands by industry and the content of traditional undergraduate courses in the advent of technological advances. As a result, graduate students lacked practical skills that they could apply in the workplace which resulted in slow settling in of graduates in the workplace (The Percy Report, 1945). McMahon and Quinn (1995) posit that there is an implied notion in industrial attachment that experience cannot be substituted and that the benefits of attachment programmes vary among students, employers and the training institutions. McMahon and Quinn (1995) state that students saw attachment as helping them improve their communication skills and better understanding of the operations of the respective organisation. For the employers, the programme bridged the gap between theory and practice while academics viewed attachment as helping clarify career objectives as well as enhancing job opportunities for the students. In turn, Leslie (1991) further outlines the following benefits of student attachments: giving students broader knowledge through increased awareness of the opportunities available, the diversity of the industry; personal development, in particular,

communication skills, team-working; self-discipline, presentation of self; and where applicable working away from home and learning to stand on one's feet; an opportunity to examine theory through practice, and enhancing possibilities of integration; experience of working in a particular sector which helps in deciding which sector to choose on completion of the course; the possibility of having received a significant part of the company's training scheme; a reference likely to attract greater interest from potential employers than any gained from any other sources. Similarly benefits for employers according to Leslie (1991) include the opportunity to employ intelligent, able and willing persons; the possibility that the student is more knowledgeable about non-line management practices, for example marketing; students are potential recruits; placement can assist in the graduate selection process; and that experience gained on placements reduces postgraduate training needs.

Lauber et al. (2004) reiterate that students gain confidence through the acquisition of practical skills which are increasingly required for effective job performance and employability. Thus, the Industrial Attachment programme provides a bridge between theory and practice and enhances chances of gainful employment as institutions are able to produce career-focussed graduates with relevant skills for industry (Kwame, 2001; Amankwah, 2011). According to Gault, Leach and Duey (2010) the National Association of Colleges and Employers (NACE) report highlights that economic challenges experienced from 2009 that influenced organisations of all types in the United States to review hiring plans for college graduates. The report states that the resultant outcome of the economic meltdown worried students and parents alike than before, in particular, on the effectiveness of preparation for employment after years of increasingly expensive tuition. However, Gault et al, (2010) point out that competition for jobs remains very high and experience has become key in separating entry-level professionals in global economies during periods of economic boom and decline ([www.nacweb.org/home.aspx](http://www.nacweb.org/home.aspx)). This is supported by Fleetwood and Shelly (2000) who highlighted that experience is becoming a key discriminating determinant for hiring new professionals into the job market. These trends have raised the necessity for student work experience gained through Industrial Attachment a term referred to as internship and placements in the United States and United Kingdom, respectively (NACE, 2008 Experiential Education Survey). Tooley (1997) and Gault et al (2010) report that nine out of ten colleges that offer four-year training programmes have some structured work experience that assists students to gain the much needed experience. Further, a study by Karns (2005) reported that internships were rated highly because of their contribution to the student's learning experience. Whilst, Gault et al (2010) argue that the prime ranking for internships resulted from the students' high commitment and preference for an active, experiential and real world experience. In turn Duke (2002) posits that while studies on student perceptions of industrial attachment are informative there is need for further research into the actual efficacy of Student Industrial Attachment programmes. This study, therefore, seeks to firstly, examine stakeholder perceptions on the effectiveness of the Student Industrial Attachment programme, secondly the challenges faced by students on Industrial Attachment and lastly to identify areas for improvement by Chinhoyi University of Technology (CUT), specifically and by Zimbabwean tertiary institutions in general.

## **THE HISTORY OF CHINHOYI UNIVERSITY OF TECHNOLOGY**

Chinhoyi University of Technology started as a degree programme in 1999 under the University of Zimbabwe. The launch of the programme followed recommendations of the Chetsanga Commission of 1994 to devolve Teacher Training Colleges (Chinhoyi Technical Teachers College included) into institutions that offered degrees (CUT 2012-2014

Academic Bulletins). The mandate of the University is spelt out in the objectives of the Chinhoyi University Act Number 15 of 2001 (Chapter 25: 23). At the core of the objectives is the creation of knowledge for the development and/or betterment of the socio-economic well-being of the people of Zimbabwe. All academic programmes at CUT have a provision for Industrial Attachment that is assessed in two parts, that is, Continuous Assessment and an Industrial Attachment Report. Students are expected to proceed to Industrial Attachment in their third year after passing all first and second year courses. Those in Engineering proceed in their fourth year after passing all courses in the first, second and third years. The minimum period for attachment is eight months and the maximum period is one year. University regulations state that the students should be attached at institutions that are acceptable to the university (CUT General Academic Regulations). However, what is acceptable is not defined. The time the Chinhoyi Degree Programme started coincided with the introduction of Student Industrial Attachment programme for undergraduate students in the Faculty of Commerce at the UZ (Gumbe et al, 2012).

## **LITERATURE REVIEW**

### **Experiential Learning Theory**

According to Bozark (1981) and Brookfield (1983) experiential learning refers to a direct encounter with the phenomenon being studied rather than merely thinking about the encounter, or only considering the possibility of doing something about it. This school of thought emphasises the notion that students have to be given an opportunity to acquire and apply knowledge in a real work situation (Brookfield, 1983). An alternative perspective is advanced by Houle (1980) who portrays experiential learning as education that occurs as a direct participation in the events of life in a less formalised way. This perspective was criticised by Tenant (1995) for being too simplistic with no capacity to measure the degree of integration of learning styles. In particular, that it fails to address the differences in cognitive, communication styles and cultural experiences (Tenant, 1997).

### **Human Capital Theory**

There are different perspectives on human capital theory. Adjei et al., (2014) states that the concept of human capital relates to the stock of productive skills and technical knowledge embodied in labour which serves as a means of production into which additional investment yields additional output. This approach places emphasis on attributes such as knowledge, skills competencies which are deemed to contribute towards and affect economic activity. The inference being that knowledge that does not influence economic activity, hence productivity should not be the subject of enquiry. In many ways, the overriding assumption of this theory is that education and training is critical for improving the productive capacity in people. For the Human Capital theorists, an educated populace is a productive populace (Becker,1962; Cohen and Soto, 2007; Bils and Klenow, 2000).

### **Industrial Attachment: Concept and Rationale**

Leong (2004) defines industrial attachment as on-the-job training where a student learns by actually doing the job using actual tools in a normal working environment. For Industrial Attachment to be effective qualified supervisors should be available in a conducive environment for productivity is to increase (Abiodun (1999). This view is shared by Arikewuyo (1999) and Sivotwa et al (2014). Sivotwa et al (2013) note that internship is an expert supervised process of transferring skills, knowledge, attitudes and information to students as a way of enhancing their efficiency and

effectiveness in their area of specialisation. According to the Industrial Training and Trade Testing Department (ITTTD) Industrial Attachment is a process that moulds a student's knowledge, in particular, the student's ability and understanding of information that every student requires to perform efficiently and effectively (Gumbe et al., 2012). In turn, Leong (2004) defines industrial attachment as on-the-job training in which a student learns while working within a normal working environment, using the actual tools and actually doing the job. As such, it is a process that moulds a student's knowledge. Relatedly, Chinhoyi University of Technology refers to Industrial Attachment as a prescribed period of practical experience in a relevant industrial/commercial/professional or community setting (CUT General Academic Regulations). Oguntimehin (2001) argues that if the process is done in appropriate atmosphere knowledge and skills are improved leading to understanding and positive attitudes. As a result, students would be better equipped to use tools and machines. Others have defined the programme as one designed to close the gap between theory and practice (Lauber and Wood lock, 2004 and Adjei et al, 2014). In addition to the point that the success of the Industrial Attachment programme hinges on placement of students under experienced and skilled supervisors (Arikewuyo, 1990).

### **Benefits of Industrial Attachment**

Ryan and Imel (1996) point out that students gain knowledge through direct participation in the work process. This is supported by Bailey and Merrit (1997) who point out that the process enables to students learn effectively and acquire job experience that reinforces academic instruction. Leslie (1991) outlines the following benefits of attachment to the students: an opportunity to examine theory through practice, and enhance possibilities of integration; a broader knowledge through increased awareness of the opportunities available, understanding the diversity of the industry sector; personal development, for example, communication skills, working with others, self- discipline, presentation of self and where applicable working away from home and learning to stand on one's feet; experience of working in a particular sector which will help them in deciding which sector to choose on completion of the course; the possibility of having been exposed to significant aspects of the company's training scheme; a reference likely to attract greater interest from potential employers than experience gained from other sources.

On the other hand, the benefits for employers, according to Leslie (1991) include the following: the opportunity to employ intelligent, able and willing persons; the possibility that the student will be more knowledgeable about non-line management practices, for example, marketing; students become potential recruits; placement can assist in the graduate selection process and that experience gained on placements can reduce postgraduate training needs. In support, the National Employer Leadership Council (1999) highlights that labour costs are reduced when students are employed after attachment which potentially increases productivity. For the respective universities benefits for placing students on attachment include the opportunity to improve the curricular (Samuel, 2005).

### **Evaluation of Student Industrial Attachment**

A number of factors have been cited in the evaluation of the effectiveness or otherwise of industrial attachments. Baechle and Earle (2008) highlight the importance of linking the academic curricular to the work situation where students get attached. In turn, Olubenga (2009) points out that the quality of available resources is a key success factor, in particular, the need for a match between the technological resources used by students in universities those used while on industrial attachment. As a result, mismatches of resources affect the learning process for the student and diminishes the potential benefits to both parties, that is, student, industry and university. Closely related to the quality of resources is the

expertise and experience of industry trainers who should have up-to-date skills and knowledge that will be imparted to students in a manner that fosters some sense of continuous improvement among learners (Monarth, 2008). Apart from having high skills the trainers in industry should ensure that the training offered is timely and meets the real needs of society (Bottoms and McNally, 2008), a key imperative in rapidly changing global business environments and technological advances.

With respect to the learners, little (2010) draws attention to the need for positive attitudes towards applied learning within the world of business. Learners should be fully committed, engaged and prepared to apply and reflect on how academic learning relates to the world of work. According to Sivotwa et al (2014) the critical elements require positive student attitudes that include being responsible, open, punctual and cooperative. In particular, the aspect of being responsible requires students to be attentive, observant and seek clarity in cases where they do not understand.

A study by Gumbe et al (2012) examined students' perspectives on the Industrial Attachment at the Faculty of Commerce, University of Zimbabwe. The findings showed that the majority of the respondents stated that Industrial Attachment was relevant to the academic training at the institution. Further, the study findings pointed out that the programme was introduced by the University in 2002 in order to bridge the gap between theory and practice. However, the related secondary motive was to counter the competition to the University degree programmes posed by Bachelor of Technology degrees introduced by Polytechnics which had an attachment component which were launched in 2002. This development posed significant levels of competition for University graduates who were viewed as lacking industry experience. In light of these trends, the University of Zimbabwe introduced the Industrial Attachment in phases starting with the Bachelor of Business Studies in 2002 followed by the Bachelor of Business Studies and Computing Science in 2004 and Bachelor of Accountancy in 2006. The main recommendations by Gumbe et al (2012) which support observations by Olugbenga, (2009) were that the University of Zimbabwe needed to upgrade the technology used for practical degree programmes such as Food and Beverages in the Department of Tourism, Leisure and Hospitality Studies. They further recommended that the Industrial attachment should have at least two assessments and that the grades/credits should contribute to the degree classification. Related recommendations suggested changes and improvements in curricula to included courses that resonated with the world of business such as Business Ethics and Corporate Governance, Financial Modelling, E-Marketing, Event Management and Strategic Management for Accountancy students, People Care Management, Branding, Networking, Public Relations as well as Purchasing and Supply Chain Management and that these should be incorporated into the academic curricula by the University of Zimbabwe.

Mupfumira and Mutsambi (2012) evaluated strategies adopted in implementing the Industrial Attachment programme for the clothing programme at Masvingo Polytechnic in Zimbabwe. Their findings reported that the majority of respondents were satisfied with the Industrial Attachment despite the fact that students found themselves using sewing machines and related technology that was not available at the Polytechnic. This supports observations by Gumbe et al (2012). Olugbenga, (2009) notes that the mismatch of equipment and technological cited between the Polytechnic and the attachment organisation affected the students' learning process and experience. As a result, students felt inadequate due to minimal exposure, for instance to organisation's other Departments such as the Cutting Department due to management's fears of wastage of materials by students. Further to the restrictions imposed on students from working on export orders to minimise errors and mistakes. Overall, the findings support Chowdry and Sudha (1995) that the attachment period allows

employers to prepare trainees for specific needs of the future. In turn, Chinyemba et al (2012) investigated industrial attachment supervision and assessment issues faced by undergraduate degree programmes at CUT. The study findings showed that realistic and authentic assessments were possible only when students are attached at credible organizations. On the part of the university and organisations accepting students for attachment, the study recommended the need for professional development of both lecturers and industrial-based supervisors through competence-based assessment approaches for suitable for evaluating students learning within the work place.

A study by Sivotwa et al (2014) in Botswana examined perceptions of industry on the Botho University's student Industrial Attachment programme. The examined the stakeholder perceptions on the Industrial Attachment in Botswana since its introduction in 2011. The study findings showed that the majority of the industry sector respondents highlighted that that the attachment programme was relevant. The main recommendations were that Botho University should consider a six- month's Industrial Attachment period and involve industry in curriculum development. Whilst, Edziwa and Chivheya (2013) examined students' perceptions on the attachment and the quality of supervision/mentorship at the Zimbabwean Agricultural Colleges after the Fast Track Land Reform Programme post 2000. The study findings reported that students found it difficult to secure attachment and the majority reported that they ended up being attached at black-owned commercial farms that had been acquired from the former white farmer during the government-driven land reform programme. The general situation was that most the farmers had neither the resources nor the experience in large-scale farming. Some of the students cited, gender related challenges as female students reported that they encountered challenges in securing attachments than their male counterparts. Further, the study noted that some students perceived the attachment programme as an opportunity for the new farmers and the respective companies to access cheap student labour leading to very little relevant application of theory and practice. The recommendations included the need for Agricultural Colleges to forge permanent linkages and networks with established and viable Agro-Industry and Farmers to improve the students' learning experience. Secondly, that the Colleges should familiarise themselves with the places where students are attached in order to assess the capacity and suitability for student industrial attachments. Lastly, the study recommended that students should be funded by the government through the Zimbabwe Manpower Development Fund (ZIMDEF) given that the new commercial farmers lack financial resources to support students while on attachment.

A study by Adjei et al (2014) in Ghana examined stakeholders' perceptions on the industrial attachment programme in Ghanaian public polytechnics. The findings reported positive stakeholder perceptions in particular role of the attachment programme as a catalyst for the transition from the classroom to the world of work. Further, to enhancing the relationships between industry and the training institutions, integrating practice with theory and building students' confidence levels as well as creating a pool for future recruits. In turn, the main weaknesses identified included inadequate logistics, poor funding and lack of follow-up visits and poor supervision of students. On the other hand, Donkor et al (2009) examined the organisational issues and challenges of the supervised industrial attachment offered by a technical and vocational teacher education program in Ghana. The major findings showed that stakeholders were dissatisfied with inter alia: the weightings of the assessment components, students having to find their own attachment places, programme duration and the absence of an Industrial Liaison Officer. Related challenges cited include lack of free access to equipment and machines, lack of financial resources to assists with transport costs to and from work and the time spent looking for attachment places. The study recommendations were that in order to restore stakeholder confidence in the attachment programme the authorities need address the identified issues.

Gault and Duey (2010) explored the effects of business internships at Northeastern University in the United States of America focusing on job marketability from the employers' perspective. Their study findings showed that there were better employment opportunities for graduates with internship experience than for those without. In addition, high performing interns were more likely to get higher starting salaries than average performing interns without work experience.

### **Student Industrial Attachment: Challenges**

Carlson (2002) identified a number of challenges faced by students while on attachment. Firstly, stiff competition for attachment places from students from other universities seeking placements. Secondly, the gender bias against female students for placements in some male-dominated work environments. This was cited to be prevalent in engineering fields that were previously the domain for males. Thirdly, the lack of a clear policy on supplementary financial support for students on attachment to cover transport and related costs and lastly, high expectations on the part of organisations for students accepted on the attachment programme. On the other hand, McMahon and Quinn (1995) cite the following challenges on the part of the students: lack of knowledge of the nature of the respective industry, lack of employee-organisational fit, resulting in 'hard-knocks' syndrome or literally being thrown at the 'deep-end' and poor employment conditions.

Chinhoyi University of Technology seeks to be a world class centre for excellence through designing and delivering academic programmes that meet the needs of society. This study examines the contribution of the student attachment programmes to the Vision and Mission premised on producing graduates fit for purpose, well-equipped to solve challenges faced by their prospective employers and society at large. To this end, the central research aim is to establish the stakeholders' perspectives on the significance of the Student Industrial Attachment programme to the students' learning experience and to draw out recommendations for university policy makers and industry stakeholders.

## **METHODOLOGY**

The study adopted a case study design to examine the significance of the student industrial attachment programme at Chinhoyi University of Technology. A case study design enables the study of contemporary phenomena within its real-life context (Yin, 2013) and in-depth investigation of phenomena (eg Cavaye 1996). The population comprised all the students studying degree programmes with an attachment component, lecturers who supervise students on attachments (industrial attachment supervisors), lecturers and parents. Lecturers and parents whose children had completed or started the industrial attachment during the period the study was conducted.

A purposive sample of eighty-seven (87) participants comprising sixteen (16) lecturers, fifty-seven (57) students, eight (8) parents and six (6) industrial attachment supervisors. The researchers believed that the participants were best placed to provide insights on the significance of the student industrial attachment programme at Chinhoyi University of Technology. The study used mixed methods to collect data, in particular, semi-structured questionnaires, focus group interviews and semi-structured interviews. Questionnaires are widely used in collecting survey information (Saunders, et al. 2009; Bryman and Bell, 2007). The questionnaire was pilot-tested to check its relevance and validity of the items. All the questions were found to be clear to all the participants. In order to ensure anonymity participants were instructed not to write their names on the questionnaire. In addition, all participants were assured that their responses will be kept

confidential and used only for the purpose of this study. Descriptive statistics were used to analyse the data. The data is presented in frequencies and percentages. While thematic analysis was used to analyse interview and focus group data.

## FINDINGS

The results of this study are presented in tables below:

**Table 1: Profile of Respondents (n=87)**

Category	Number of Respondents	Percentage
Lecturers	16	18%
Students	57	66%
Parents	8	9%
Industrial Supervisors	6	7%

Table 1 above shows that students constituted the majority (66%) of the respondents in the study.

**Table 2: Is the Industrial Attachment an Essential Component of Degree Programmes? (n=87)**

	SA	A	PA	DA	SDA
Lecturer	10 (11.00%)	3 (3%)	2 (2%)	1(1%)	0
Student	30 (34%)	15 (17%)	5 (6%)	2 (2%)	5(6%)
Industrial Supervisor	4 (6%)	3 (3%)	1 (1%)	0(0%)	0(0%)
Parent	0 (0%)	6 (7%)	0(0%)	0(0%)	0(0%)
<b>Total</b>	<b>44 (51%)</b>	<b>27 (31%)</b>	<b>8 (9%)</b>	<b>3(3%)</b>	<b>5(6%)</b>

**Key:** SA = Strongly Agree; A= Agree; PA= Partly Agree; DA= Disagree; SDA= Strongly Disagree

Table 2 above shows the majority of the respondents (91%) were of the view that the industrial attachment was an essential component of the respective degree programme. In turn 9 % of the respondents disagreed that the attachment programme was essential for all degree programmes while others cited lack of experience on the part of industrial supervisors which compromised the attachment programme.

**Table 3: Relationship between Theory and Practice for Students on Industrial Attachment (n=87)**

	SA	A	PA	DA	SDA
Lecturers	15(17%)	1(1%)	0(0%)	0(0%)	0(0%)
Students	44(51%)	13(15%)	0(0%)	0(0%)	0(0%)
Parents	4(5%)	1(1%)	1(1%)	0(0%)	0(0%)
Industrial supervisor	8(9%)	0(0%)	0(0%)	0(0%)	0(0%)
<b>Total</b>	<b>71(82%)</b>	<b>15(17%)</b>	<b>1(1%)</b>	<b>0(0%)</b>	<b>0(0%)</b>

**Key:** SA = Strongly Agree; A= Agree; PA= Partly Agree; DA= Disagree; SDA= Strongly Disagree

Table 3 above shows that all the respondents (100) highlighted that the attachment component of the degree programme offers students opportunities to apply theory to practice.

**Table 4: Benefits of Industrial Attachment to Industry (n=87)**

	SA	A	PA	DA	SDA
Lecturers	15(17%)	1(1%)	0(0%)	0(0%)	0(0%)
Students	50(57%)	6(7%)	1(1%)	0(0%)	0(0%)
Parents	5(6%)	0(0%)	1(1%)	0(0%)	0(0%)
Industrial supervisor	3(3%)	5(6%)	0(0%)	0(0%)	0(0%)
<b>Total</b>	<b>73(84%)</b>	<b>12(14%)</b>	<b>2(2%)</b>	<b>0(0%)</b>	<b>0(0%)</b>

**Key:** SA = Strongly Agree; A= Agree; PA= Partly Agree; DA= Disagree; SDA= Strongly Disagree

Table 4 above shows that all the respondents agreed that the industry benefitted from the industrial attachment programme, in particular, the point that this reduces future training costs as students will have gained some skills and aptitudes.

**Table 5: Industry has More Sophisticated Equipment than the University (n=87)**

	SA	A	PA	DA	SDA
Lecturers	3(3%)	1(1%)	11(13%)	1(1%)	0(0%)
Students	1(1%)	52(60%)	4(5%)	0(0%)	0(0%)
Parents	0 (0%)	2(2%)	4(5%)	0(0%)	0(0%)
Industrial supervisor	1(1%)	5(6%)	1(1%)	1(1%)	0(0%)
<b>Total</b>	<b>5(6%)</b>	<b>60((69%)</b>	<b>20(23%)</b>	<b>2(2%)</b>	<b>0(0%)</b>

**Key:** SA = Strongly Agree; A= Agree; PA= Partly Agree; DA= Disagree; SDA= Strongly Disagree

Table 5 above shows that the majority of the respondents (98%) were of the view that there was a huge gap between the type of equipment and technology available in industry and that at the University. As noted by one respondent contrary that:

*Most companies in Zimbabwe (during the period the study was conducted) are struggling just like the university. All resource mobilisation efforts should be aimed at equipping our laboratories, otherwise not much comes out of industry that we don't have*

**Table 6: Time Taken to Secure Attachment (n=87)**

	SA	A	PA	DA	SDA
Lecturers	0(0%)	1(1%)	9(10%)	6(7%)	0(0%)
Students	0(0%)	9(10%)	41(47%)	2(2%)	5(6%)
Parents	0(0%)	1(1%)	5(6%)	0(0%)	0(0%)
Industrial supervisor	0(0%)	5(6%)	2(2%)	1(1%)	0(0%)
<b>Total</b>	<b>0 (0%)</b>	<b>16(18%)</b>	<b>57(66%)</b>	<b>9(10%)</b>	<b>5(6%)</b>

**Key:** SA = Strongly Agree; A= Agree; PA= Partly Agree; DA= Disagree; SDA= Strongly Disagree

Table 6 above shows that the majority of the respondents agreed that securing attachments for students was tedious and often takes time to be confirmed by respective companies. This has consequences for meeting the attachment timetables and logistics.

**Table 7: Effects of Allowances on Choice of Attachment Places (n=87)**

	SA	A	PA	DA	SDA
Lecturers	4(5%)	10(11%)	1(1%)	1(1%)	0(0%)
Students	1(1%)	6(7%)	50(57%)	0(0%)	0(0%)
Parents	5(6%)	0(0%)	1(1%)	0(0%)	0(0%)
Industrial supervisor	1(1%)	2(2%)	0(0%)	5(6%)	0(0%)
<b>Total</b>	<b>11(13%)</b>	<b>18(21%)</b>	<b>52(60%)</b>	<b>6(7%)</b>	<b>0(0%)</b>

**Key:** SA = Strongly Agree; A= Agree; PA= Partly Agree; DA= Disagree; SDA= Strongly Disagree

Table 7 above shows that the majority of the respondents were of the view that the availability or otherwise of student allowances affects the choice of where the attachment is taken. In particular, in interviews respondents noted that the availability of allowances affects self-sponsoring students whose guardians may not have adequate financial resources to support a student on attachment away from home.

### **Industrial Attachment Assessment and Related Issues**

The issues raised in interviews related to the consistency and validity of some of the grades that were being awarded to students for the attachment component. The CUT assessment of the attachment component comprises two parts, that is, the continuous assessment and the industrial attachment report. The overall view was for the need for Quality Assurance Directorate to constantly monitor the quality of the attachment assessments as variations within and across degree programmes may affect the degree classifications and verification of intended learning outcomes.

There were comments to the effect that the University tends not to pay close and monitoring students' welfare concerns while on industrial attachment. The majority of the students reported that they felt neglected as there was no platform to address their grievance in particular with issues to do with payment of allowances and the number of working hours. Issues raised by lecturers and attachment supervisors related to inconsistent policies and financial support regarding accommodation and transport for lecturers' visits and follow-ups on students on attachment. Further to incidents of the image portrayed by industrial supervisors who at times use public transport and inappropriately dressed for such visits compared personnel from some universities.

## **DISCUSSIONS**

### **Is The Student Attachment Programme an Essential Component of Degree Programmes?**

The study results show that the majority of the respondents agreed that the attachment is an essential component of academic degree programmes. This supports observations by Adjei et al (2014) who reported the importance of the student industrial attachment for students pursuing degree programmes. However, there were sentiments on the need to ascertain the appropriateness of the attachment component and avoid a 'one-size fit all' approach. In turn some respondents raised issues with the apparent inferiority complex demonstrated by Industrial attachment lecturers when conducting attachment follow-ups to the point that they failed to challenge the industry supervisors on the student learning experience. In particular, the point that some students spent a great part of the attachment period doing menial work and running errands for in-company supervisors. These were some the issues which were cited as requiring industrial supervisors to challenge and rectify during the scheduled visits to students on attachments. Further to the point that some of the industrial supervisors lack practical understanding of the nature and type of work students are supposed to be undertaking during the

attachment period. This observation highlights suggestions by Adjei et al (2014) that industrial supervisors (lecturers) also needed to be attached so that they sharpen practical skills.

### **The Relationship between Theory and Practice for Students on Industrial Attachment**

All the respondents viewed the attachment programme as bridging the gap between theory and practice. This finding supports observations by Svatwa et al (2014) in Botswana who reported that the attachment programme serves as “an alignment between theory and practice.” Further, the findings concur with Gumbe et al (2012) who found reported the contribution of the attachment programme to the application of theory to practice.

### **The Benefits of Industrial Attachment to Industry**

The study findings showed that all the respondents cited reduction of future training costs when the graduates enter the job market as one of the key benefits. However, Adjei et al (2014) caution on the need for adequate time that in Ghana industrialists pointed out that:

*There is no way a student after going through just 3-6 months' attachment can be recruited as a surveyor without going through the professional training and successfully passing prescribed examinations. This is a specialised area and we do not just recruit for recruiting sake.*

However, Little (2010) and Svatwa et al (2014) point out that after attachment students possess a positive attitude towards work and can develop high levels of commitment towards work.

### **Industry Has More Sophisticated Equipment than the University**

The study findings showed that the majority of the respondents were of the view that in general, industry had sophisticated equipment and technology than those available in the university. This observation concurs with the assertion by Finch and Crunkilton (1999) and Svatwa et al (2014) that institutions of higher learning always lag behind industry due to financial challenges.

### **Time Taken to Secure Attachments**

The study findings showed that the majority of the respondents reported that the process of securing attachments for students was tedious and lengthy in some cases. During follow-up interviews lecturers pointed out that securing attachment places on time depended on a number of factors that included the specific degree programme, student pass grades and industry perceptions of the respective university. The issue of pass grades was reported to involve preferences for at least lower second (2.2) passes and timely availability of transcripts, in addition to the challenges resulting from delays in communication between students and departmental heads or attachment coordinators when they faced challenges in securing places for attachment. These findings support Edziwa and Chivheya (2013) who showed that students struggled to secure attachment places. Whatever the reasons for securing attachment places the situation seems to be endemic and persistent (Chinyemba et al 2012).

### **The Effects of Allowances on Choice of Attachment Places**

Notwithstanding the variations on this point amongst the respondents, the overall view was that allowances to cover transport and subsistence affected the choice of the acceptance of an attachment place. However, a study by Svatwa

et al (2014) in Botswana showed that 80% of industry respondents were prepared to pay stipends to students. In turn, Chigoriwa (2016) noted that some managers were of the view that students should actually be grateful since they receive training without paying tuition to companies at which they would be attached. Despite this point, Chigoriwa (2016) reports that the Ministry of Higher and Tertiary Education is of the view that companies should pay allowances to students on Industrial Attachment.

### **Industrial Attachment Assessment Issues**

Documentary evidence showed discrepancies between degree programmes with respect to assessment as some programmes recorded 100% pass rates for the continuous assessment component. However, the trend was variable for the Industrial attachment report where some students who failed within supplementary range (40-59%) had to resubmit and repeat the project if they failed below the supplementary range. There might be need to research further on the relationships between the experience and expertise of industrial supervisors and the passes obtained on the Industrial attachments programme.

## **CONCLUSIONS AND RECOMMENDATIONS**

The industrial attachment programme has become a permanent component of most degree programmes in Zimbabwe and elsewhere. As the number of degree programmes with an attachment component increases administrative challenges emerge that need attention. There is for the University address the pertinent administrative and quality assurance issues. Further to strategic positioning of its student attachment programme and build networks and rapport with key stakeholders in industry and commerce. The main recommendations include the need for the university to establish a fully-fledged unit that manages and coordinates the student attachment programme. The Unit will play the boundary spanning role between Faculties, students, and industry and commerce which will enhance the effective coordination of student attachments across the University and resolving any challenges and problems. Internally, the Unit will liaise with Faculties and the Quality Assurance Directorate to ensure that quality standards comply with the University regulations. In many ways, this Unit will go a long way in attending to the administrative issues cited in the study – while mediated the acquisition and upgrading of University equipment and technology that enhances effective adaptation of students while on attachment. In the midst of increasing competition for student attachment places among the state and private universities in Zimbabwe, CUT needs to refocus its student attachment component in line with its Vision and Mission to become a world-class centre for excellence in producing graduates fit for purpose and well-equipped to solve challenges faced by prospective employers and society at large.

## **REFERENCES**

1. Abiodun, E. J. A. (1999). Human Resources Management: an overview. *Concept Publication, Shomolu, Lagos*, 110-121.
2. Adjei, N. K. A., Nyarko, D. A., & Nunfam, V. F. (2014). Industrial Attachment in Polytechnic Education: An approach to Polytechnic-Industry Nexus in Human Capital Development of Selected Polytechnics in Ghana. *Journal of Education and Practice*, 5(33).
3. Adeji N. A. K. (2013) Evaluation of the industrial attachment programme of Ghanaian public polytechnics. PHD Thesis, Institute for Development studies, University of Cape Coast.

4. Amankwah, E. (2011). Relevance of competency based training in polytechnic education for national development. *Journal of Education and Practice*, 2(6), 49-59.
5. Arikewuyo, O. (1999). *Improving Teachers' Productivity in Nigeria: Basics of Education*. Lagos: Triumph Book Publishers.
6. Bailey, T., & Merrit, D. (1997). Industry skill standards and education reform. *American Journal of Education*, 401-436.
7. Becker, G. S. (1962). Investment in human capital: a theoretical analysis. *The Journal of Political Economy*, 9-49.
8. Bils, M., & Klenow, P. J. (2000). Does schooling cause growth? *American Economic Review*, 1160-1183
9. Bottoms, G. & McNally, K. (2008). Actions States can take to place a highly qualified career/technical teacher in every classroom. High Schools that Work Series. *Southern Regional Education Board (SREB)*.
10. Bozark, L. (1981). *Field study: A source book for experiential learning*. Sage Publications
11. Bryman, A., & Bell, E. (2007). *Business research methods*.
12. Carlson, A. C. (2002). The Benefits of Work-integrated Learning, ITE Teachers' Conference, Malaysia
13. Cavaye, A. L. (1996). Case study research: a multi-faceted research approach for IS. *Information Systems Journal*, 6(3), 227-242.
14. Cohen, D., & Soto, M. (2007). Growth and human capital: good data, good results. *Journal of Economic Growth*, 12(1), 51-76.
15. Chowdry, A. J., & Sudha, R. (1995). Introduction to clothing production management. *Oxford: Blackwell Science*.
16. Chinhoyi University of Technology 2012-2014 Academic Bulletin
17. Chinyemba, F., Chirimuta, C., Sithole, L., Bvekerwa, S. T., and Gwangwava, E. (2012) Assessment of Industrial Attachment: Issues and Concerns of Chinhoyi University of Technology's Undergraduate Degree Programme, Zimbabwe. *US-China Education Review* 12, 985-996
18. Davies, L. (1990) *Experience-Based Learning within the Curriculum: A Synthesis Study*. London: Association of Sandwich Education and Training/Council for National Academic Awards.
19. Donkor, F., Nsoh, S. N., & Mitchual, S. J. (2009). Assessment of supervised industrial attachment of a technical and vocational teacher education program in Ghana. *Asia-Pacific Journal of Cooperative Education*, 10(1), 10-17.
20. Duke, C. R. (2002). Learning outcomes: comparing student perceptions of skill level and importance. *Journal of Marketing Education*, 24(3), 203-217.
21. Edziwa, X., & Chiveya, R. (2013). Farm attachment as a training methodology for Zimbabwe agricultural colleges' students post land reform: challenges encountered. *Journal of Emerging Trends in educational Research and Policy Studies*, 4(1), 74.
22. Fleetwood, C., & Shelly, K. (2000). The Outlook for College Graduates, 1998-2008: A Balancing Act.

- Occupational Quarterly*, 44(3), 2-9.
23. Gault, J., Leach, E., & Duey, M. (2010). Effects of business internships on job marketability: the employers' perspective. *Education + Training*, 52(1), 76-88.
  24. Gumbe, S. M., Svatwa, T. D., & Mupambireyi, F. P. (2012). Students' Perspectives of the Industrial Attachment Programme: A study of University of Zimbabwe, Faculty of Commerce (2010-2011). *International Journal of Physical & Social Sciences*, 2(9), 12-36.
  25. Houle, C. (1980). *Continuing learning in the professions*. San Francisco: Jossey Bass.
  26. Jarvis, P. (1995). *Adult and continuing education: theory and practice*. Psychology Press.
  27. Karns, G. L. (2005). An update of marketing students' perceptions of learning activities: structure, preferences and effectiveness. *Journal of Marketing Education*, 27(2), 163-171.
  28. Kwami, F. O. (2001). *Strategic Plan 2013-2017*. Kumasi: Kumasi Polytechnic.
  29. Lauber, C. A., Ruh, L., Theuri, P. M., & Wood lock, P. (2004). Road to the future: Use internships to contribute the younger generation and get a good look at potential hires. *Journal of Accountancy*, 198(1), 1.
  30. Leong, S. (2004). *How to Develop Talent for Training*. New York: Management Books.
  31. Leslie, D. (1991). The hospitality industry, industry placement and personnel management. *Service Industries Journal*, 11(1), 63-74.
  32. Little, B. (2010). Competency capers. *Training and Development Journal*, 10(3), 32-47.
  33. McMahon, U., & Quinn, U. (1995). Maximizing the hospitality management student work placement experience: a case study. *Education + Training*, 37(4), 13-17.
  34. Monarth, H. (2008). Trainers: Superstars of the Organisation. *Training and Development Journal*, 6(4), 63-71.
  35. Mupfumira, I. M., & Mutsambi, T. P. (2012). An evaluation of demonstration and industrial attachment as strategies in implementing clothing curriculum: a case study of a Masvingo Polytechnic in Zimbabwe. *Journal of African Studies and Development*, 4(4), 114.
  36. Oguntimehin, A. (2001). Teacher Effectiveness: Some Practical Strategies for Successful Implementation of Universal Basic Education in Nigeria. *African Journal of Educational Management*, 9(1), 151-161.
  37. Olubenga, A. F. (2009). Toward Effective SIWES Curriculum Development in Applied Sciences for Adequate Skills Utilisation: A case study of the School of Applied Science, Nuhu Bamali Polytechnic, Zaria. *Journal of Science and Technology*, 10(1), 234-239.
  38. Outlook, J. (2009). National Association of Colleges and Employees, 2008.
  39. Percy, E. (1945). Higher technological education. *Report of the Committee on Higher Technological Education*, London: HMSO.
  40. Ryan, R. D., & Imel, S. (1996). School-to-work transition: Genuine reform or the latest fad. *The ERIC review*,

4(2), 2-11.

41. Samuel, F. (2005). *SIWES Orientation Programme of the Federal University of Technology*. Paper presented by the Industrial Training Fund. Minna, Nigeria, July.
42. Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research methods for business students*.
43. Sivotwa, T. D., Rudhumbu, N., & Chikari, G. (2014). Perception of industry in Botswana towards Botho University student industrial attachment (SIA) programme. *The Business and Management Review*, 5(2), 205.
44. Tennant, M. (1997). *Psychology and adult learning*, 2<sup>nd</sup> ed. London: Routledge.
45. Tooley, J. (1997). Choice and diversity in education: a defence. *Oxford Review of Education*, 23(1), 103-116.
46. [www.nacweb.org/home.aspx](http://www.nacweb.org/home.aspx) [accessed 20102015]
47. Yin, R. K. (2013). *Case study research: Design and methods*. Sage Publications.

