Imperial Journal of Interdisciplinary Research (IJIR)
Vol-3, Issue-2, 2017
ISSN: 2454-1362, http://www.onlinejournal.in

Workplace Experience Learning (WEL)- The Tool for Bridging Skill Gaps between Training Institutions and Industries

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Abstract: *The growth of every country depends on the provision of jobs for the people, especially the youth. Government, Training institutions and Industries work together to train trainees to be competent in the performance of their work for their country and also at the international level. Contrary to this, many trainees in Ghana graduate from the Training institutions without the requisite skills that qualify them to work in industry. Expatriates are often hired to fill these positions meant for Ghanaians. Such status quo affects the Ghanaian citizens' pockets and slows the economy growth. The establishment of 'Council for Technical and Vocational Education and Training' (COTVET) was to bridge the skill gaps between Training institutions and industries. COTVET adopted the Competency-Based Training (CBT) model, under it was the tool, Workplace Experience Learning (WEL) which was used in tackling the skill gaps between Training institutions and industries that the existing Industrial Attachment could not tackle. The research analyzed two groups of trainees (WEL and Industrial Attachment) employment history who graduated in 2012 and 2013 having undergone the three year Higher National Diploma program. 95.51% of the WEL trainees have gained employment as compared to 26.47% of those who underwent the Industrial Attachment.*

Key words: *WEL, Industrial Attachment, Trainees, Training Institution, Industry, Workplace, CBT*

1. Introduction

All over the world trainees from various Training institutions play a major role in the development of their countries. These trainees fill in the skill gaps in the country's industries to demonstrate a high level of competencies for sustainability. Inventions through research work have been on a high rise by the cordial relationship that exists between Training institutions and industries.

Contrary to this, trainees in Ghana from various Training institutions are retained by the industries before being employed. The discovery of oil and gas in Ghana positioned the economy among the fastest growing economies in Africa. The economic potential is ultimately to better the lives of all Ghanaians. However, lack of skilled and educated workforce has caused the pocket of potential Ghanaian employees as more often than not expatriates are hired to complement the work done by Ghanaian workers to meet the required standard. This is a growing concern for industries as huge sums of money are spent to retrain trainees coming out of the Training institutions.

To address these growing concerns, the 'Council for Technical and Vocational Education and Training' (COTVET) was established. The council adopted the Competency-Based Training (CBT) model which is an industry and demand driven outcomes-based education and training program based on industry generated standards (Occupational Standards), that integrate Knowledge (Cognitive), Skills (Psycho-motor), and Attitude/Behaviour (Affective) and learning to real-life and real-work situations. Under the CBT model is the Workplace Experience Learning (WEL) which has unique features quite different from the Industrial Attachment.

The study was conducted on two groups of trainees: the CBT trainees who underwent the WEL program and the Traditional education trainees who underwent Industrial Attachment.

1. Workplace Experience Learning (WEL)

Workplace Experience Learning (WEL) is a segment of CBT model that is unitize and must be achieved for certification. It prepares trainees through learning on the real-work situation (workplace). WEL helps trainees develop a range of skills (Planning, Organizational, Interpersonal and Self-awareness), knowledge and understanding of the trade area they study and introduces them to employable situations in a real-work situation.

1.1. Implementation Process of Workplace Experience Learning (WEL).

Effective collaboration between the Training institution and industry can be strengthened through a properly organized WEL program. Implementation process of WEL showed in Figure 1 demands that both Training institution and industry play an oversight responsibility to help develop the trainees to meet the standards set by industries for the job.

Figure 1: Implementation Process of Workplace Experience Learning (WEL)

1.1.1. Workplace Experience Learning Unit Specification Generation Workshop

WEL unit specification (figure 2) is vital to the successfulness of the WEL program. The Standard Generation which forms the basis in writing the Unit Specification is developed and validated by Industry members who are competent in specific fields of specialization. The unit clearly defines the required skills the trainee needs to undertake within a program level.

WORKPLACE EXPERIENCE LEARNING (WEL) UNIT SPECIFICATION

UNIT TITLE: Workshop Process and Practice

LEARNING OUTCOME: Demonstrate knowledge in principle of metrology

PERFORMANCE CRITERIA:

a) Identify standard measuring tools in standard tool room

b) Demonstrate proper handling of standard tools

c) Use standard measuring tools to calibrate work shop tools

RANGE STATEMENT:

Standard measuring tools: Slip gauges, Sine bar, Ball and Roller gauges

EVIDENCE REQUIREMENTS:

Performance evidence of the Trainee's/learner's ability to identify, demonstrate proper handling and use of standard measuring tools as per Performance Criteria (a) to (c) and all the range.

Figure 2: WEL Unit Specification

1.1.2. Workplace Experience Assessment Instrument Generation Workshop

Assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students (trainees) know, understand, and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning (Huba and Freed 2000). WEL trainees are assessed by industrial assessors to ascertain the level of competencies acquired during the WEL program. The instrument used in gathering this information is generated during WEL Assessment Instrument Generation Workshop.

1.1.3. Mapping and Visit of Industries

Selection of industries is done mostly at the institutional level by both Trainers and Trainees. However, the WEL generated standards serve as a guide in preparing the comprehensive list of industries that meet the requirements to train under

WEL program. During mapping, industries are thoroughly evaluated on the basis of the standard to ensure that they have all the requisite facilities to execute WEL program. Some of the facilities include; Facilitators, Assessors, Centre Manager/Coordinator, Machines, Tools/Equipment and all safety regulations.

1.1.4. Workplace Experience Learning Memorandum of Partnership (MoP) Signing

A MoP is signed with the industry that meets the basic criteria to conduct the WEL program. The MoP enforces a commitment between the various stakeholders (Training Institution, Industry and Trainee) for a successful WEL program. Some of the commitments of the stakeholders have been detailed in Appendix A.

1.1.5. Workplace Experience Learning Facilitator/Assessor Training

Facilitators/Assessors who train and assess trainees at the workplace must have basic knowledge of Competency-Based Training (CBT) concepts on facilitation and assessment procedures.

"Learning is meaningful only when it can be related to concepts that already exist in a person's cognitive structure" (Merriam et. al 2007, p. 286). Facilitation under CBT concept demands a different approach to teaching from the direct instruction approach currently used in the Industrial Attachment (Traditional WEL). The CBT concept of facilitation is mainly based on defined competency standards which are industry oriented and are broken into unit-based or modular. The training method is therefore more learner-centered.

Assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students (trainees) know, understand, and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning (Huba and Freed 2000). Assessment instrument generated from the WEL forms the basis for certification of trainees. The training workshop highlights the cost to industry if assessor falsifying assessment results of trainees as trainees would have to be retrained by industry before meeting standards set by industry.

1.1.6. Pre-Induction of Trainees

During the pre-induction workshop, trainees are made to understand certain work ethic that they have to observe at the industry. The responsibilities of various stakeholders (Appendix A) are presented as well as the credit value of the WEL program that sum up the total credit value for CBT certification. Standard generated unit specification of WEL, Logbook to record activities undertake during the program and letter of introductory specifying the company a trainee is placed are given to the trainees. The Pre-induction workshop prepares the mind of trainees to become self-conscious and responsive at the industry.

1.1.7. Monitoring of Trainees at the workplace

Monitoring is the regular observation and recording of activities taking place in a project or program or check on how project activities are progressing (P. Bartle, 2013).

Monitory is a basic and universal management tool for identifying strengths and weaknesses in a program and subsequently improve its quality. Monitoring discourages trainees who are determined not to attend the WEL program. Though, monitory at the workplace by the selected facilitators from the institution has to be done each month within the successive period at a high cost, the cordial relationship between training institution and industry that this exercise brings cannot be underestimate. Facilitators, Assessors and Trainees at the workplace are able to deliberate with the monitory team the challenges that need redress.

The Logbook which serves as a monitory tool is checked by the Monitory Team from the Training institution to assess that the activities undertaken by trainees conform to the standards in the WEL unit specification. Since trainees record their daily activities in this Logbook and it is signed by the facilitator at the workplace, trainees' attendance can also be monitored.

1.1.8. Post-induction of Workplace Experience Learning

Reflection involves linking a current experience to previous learnings and applying what we have learned to contexts beyond the original situations in which we learned (L. Costa and Bena Kallick, 2008).

At the end of the WEL program a post-induction workshop is conducted for the trainees to reflect on changes that have taken place after the WEL training program. Training through the reflection exercise lists other competencies that are needed to be improved that can make them fully competent for the performance of their work.

1.2. Differences between Workplace

Experience Learning (WEL) and Industrial Attachment

WEL is quite different from Industrial Attachment that is run by various training institutions because Trainees who engage in industrial attachment are given training which often does not have direct bearing on their field of specialty. Table 1 contains some differences that exist between WEL and Industrial Attachment.

Table 1: Differences between WEL and Industrial Attachment

WEL	INDUSTRIAL ATTACHMENT
Trainees are given introductory letters from their training institutions directing them to industries that they have them placed or to undertake their WEL program.	Trainees are given introductory letters from their training institutions to look for their own places for attachment
Training institutions identify, negotiate and sign MoP with appropriate industries for WEL program.	Trainees identify, negotiate with any industry, and no MoP is sign.
Trainees are given standard/WEL unit specification which they are to rigorously follow	Trainees go for attachment with no training standards/unit specifications, they learn whatever the industries do
Facilitators/Assessors are identify and trained to facilitate and assess trainee at the workplace	No Facilitators/Assessors identified and trained, any type of facilitation and assessment is condoned at the workplace
Trainees are closely monitored on daily, weekly and monthly bases through logbooks, registers, industry's facilitators and assessors to ensure that trainees acquire the requisite competencies for certification	No monitoring of trainees at the workplace as there are no logbooks or any monitoring tools to track the competencies acquired in relation to their field of specialty

2. Result and Discussion

One of the primary advantages of WEL is that the focus is on the success of each trainee to achieve the competencies required in the performance of their work. Through learner-centered approach trainees are more effective and efficient by gaining confidence in mastering specific competencies.

The total number of trainees of the two groups (WEL and Industrial Attachment) used for the study, were 41 and 102 respectively. The numbers represent trainees who graduated in 2012 and 2013. (Ref: Table 2)

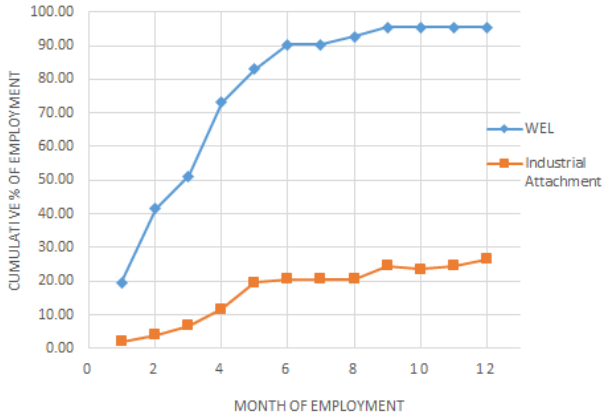
Table 3 shows that eight (19.5%) trainees out of the total 41 trainees of the WEL program had employment before completing the three years Higher National Diploma (HND) Program. According to Graph 1, over ninety percent of total graduated trainees are working in the industry as against over twenty percent of Industrial attachment trainees. The graph also shows that there is rapid increased in the employment rate of the CBT WEL trainees as over ninety-five percent had job within nine month period. This is in adverse to the employment rate of the Traditional Industrial attachment trainees as only twenty-six percent had employment in twelve months period. However, this result cannot be confirmed at 100% as much of the data that could lead to a more statistically sound analysis were not available. In fact acquiring the data on the employment rate of already completed trainees was the most challenging aspect of this work. Though the data collected on the WEL program is representative enough of the total population this is not the case for the Traditional Industrial attachment program. This challenge was as a result of improper measures put in place by the Alumni Department in the Institution to keep track of the trainees on their employment. One of the WEL trainees working in the industry commented that the industry did not have to retrain them and therefore they would like him to recommend more of the CBT WEL trainees for immediate employment.

Table 2: Graduated trainees of 2012 and 2013 Academic year.

Year	WEL	Traditional
2012	19	49
2013	22	53
TOTAL	**41**	**102**

Table 3: Cumulative Rate of Employment for both WEL Trainees and Industrial Attachment Trainees

WEL				INDUSTRAIL ATTACHMENT			
Month Employed	No. of Trainees Employed	% Rate of Employment	Cumulative % Rate of Employment	Month Employed	No. of Trainees Employed	% Rate of Employment	Cumulative % Rate of Employment
1	8	19.51	19.51	1	2	4.88	1.96
2	9	21.95	41.46	2	2	4.88	3.92
3	4	9.76	51.22	3	3	7.32	6.86
4	9	21.95	73.17	4	5	12.20	11.77
5	4	9.76	82.93	5	8	19.51	19.61
6	3	7.32	90.24	6	1	2.44	20.59
7	0	0.00	90.24	7	0	0.00	20.59
8	1	2.44	92.68	8	0	0.00	20.59
9	1	2.44	95.51	9	4	9.76	24.51
10	0	0.00	95.51	10	1	2.44	23.53
11	0	0.00	95.51	11	1	2.44	24.51
12	0	0.00	95.51	12	2	4.88	26.47
	39				29		



Graph 1: Cumulative Percentage Rate of Employment of both WEL and Industrial Attachment Program.

Other benefits of the WEL program is the immerse relationship that now exists between the Training institutions and Industries. This relation has addressed largely the issue of skill gaps that exist between Training institutions and industry. As both the Training institutions and Industries together play respective roles in ensuring that trainees are trained to acquire the competencies in the performance of their work. In fact Training institutions through this cordial relationship had recorded massive increase in tools/equipment and machines given by the Industries to help in the training so that trainees could perform on the job.

3. Conclusion and Recommendation

After the Workplace Experience Learning training program, most trainees have acquired competencies of the standard set by industries. This is adverse to industrial attachment undertaken by trainees or graduates on the Traditional program as no additional money is used in retraining. These lead to increased employment and economy growth as more trainees are able to gain the requisite skills for the job.

Recommendations:

- COTVET, Training Institutions and Industries collaborate and adopt the WEL concept under CBT model
- Government for that matter COTVET should setup an institution to liaise fully with the Training institution and the industries to effectively implement the WEL program.
- Government should subsidize the WEL training program for industries by introducing tax exemptions for all industries that opt to be part of WEL program.
- All stakeholders must adhere to their responsibilities for smooth implementation of the WEL program
- Alumni services at Training institution should be strengthened to collate information on past Trainees.

4. Acknowledgements

My gratitude to Mr. A. Akakpovi for his immerse support on the Traditional data of Industrial attachment trainees. Also Mavis Okwabi who help in the word processing of this research.

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Appendix A: Responsibility of Stakeholders

TRAINING INSTITUTION

1.1 To adhere to any assessment and certification rules/procedures by the Awarding Body and Industry for the contracted vocation.

1.2 That the trainee shall be covered by an insurance policy during the period of his or her Workplace Experience Learning.

1.3 To appoint a contact person who will visit and liaise with the Industry for effective implementation of the Workplace Experience Learning program.

1.4 That the contact person will visit the company where trainees are placed at least once during the period of the Workplace Experience Learning.

INDUSTRY

1.1 To offer the trainee placement for the purpose of providing Workplace Experience Learning in accordance with approved Training Standards as per CBT Workplace Experience Learning Unit Specification (**Figure 1**) so that the trainee may achieve the necessary competencies in the enrolled vocation.

1.2 To ensure that the trainee is not engaged on work unconnected with the vocation for which he/she is being trained, this and other vital information shall be given to trainees during time of orientation.

1.3 To set basic hours of work which are the same as those for other employees who have qualified in the vocation.

1.4 To respect the right of the trainee to all the public holidays observed in the industry in which he/she is engaged, however, the trainee should be made to understand to make him/herself available if need be for emergency jobs that fall on public holidays and weekends.

1.5 To provide the trainee sufficient tools and materials necessary for the practical training in the vocation.

1.6 To provide contact person of Training institution or Awarding Bodies access to information as may be required with regard to the progress of the trainees' training.

1.7 To assess the learner on the basis of the Unit Specification attached and report the results to the trainees' training Institution.

1.8 Any dispute between the trainee and the industry arising out of or in connection with this MoP shall be reported to the training Institution's contact person responsible for the trainee(s) training.

TRAINING INSTITUTION & INDUSTRY

1.1 Training records specifying minimum training requirements in the form prescribed by the Officer responsible for learner training shall be created and maintained.

1.2 That the agreement may be transferred to another industry in the circumstances indicated in the MoP and with the consent of the Officer responsible for the learner's Workplace Experience Learning.

1.3 To extend or reduce the duration of the MoP in the circumstances agreed between the industry and training institution.

1.4 That the employer shall not be bound to offer employment to the trainee after completion of Workplace Experience Learning provided in accordance with this agreement.

TRAINEE

1.1 To obey all instructions given by the industry or by any other person (facilitator/assessor) designated by the industry.

1.2 To work and study conscientiously and diligently.

1.3 To take good care and be responsible for all tools, machinery and equipment entrusted to him or her and to take all necessary steps to avoid damage to machinery or waste of materials.

1.4 To keep confidential any professional information acquired concerning the affairs of the company.

1.5 To attend work at the times specified and not be absent without the prior permission of the employer.

1.6 To refrain from engaging in any activity which shall interfere with assigned duties and training.

1.7 To reach the required standard in practical and theoretical knowledge of the vocation necessary to achieve the relevant assessments. However, failing to achieve the required standard, the training period may be extended or terminated in accordance with the Regulations and other rules determined by COTVET or the Awarding Body.

1.8 To abstain from participation in any type of industry strike/dispute directly or indirectly.

1.9 To observe safety rules and regulation of the establishment.