



**TERTIARY EDUCATION SERIES**

**Editorial Committee**

Professor L. A. Boadi — Chairman  
Professor J. N. Ayertey — Member  
Professor Ohene Adjei — Member  
Dr. G. Afeti — Member  
Mr. G. F. Daniel — Member  
Mrs. Hilda Asante — Secretary

© National Council for Tertiary Education 2016  
ISSN: 2026-6588  
Vol. 8, No. 1

Published by  
National Council for Tertiary Education  
P. O. Box MB 28  
Accra

Tel: 0209989429  
E-mail: [info@ncte.edu.gh](mailto:info@ncte.edu.gh)  
Website: [www.ncte.edu.gh](http://www.ncte.edu.gh)

**PRODUCED IN GHANA**

Typesetting by GertMash Desktop Services, Accra New Town  
Printing by Qualitytype Limited, Accra

## CONTENTS

Perception of the Influence of Training and Development Programmes on Performance by Senior Staff Employees of University of Cape Coast <i>Emmanuel Owusu Afreh and Wisdom Kwaku Agbevanu</i> . . . . .	1
Financing Higher Education in Ghana: The Impact of Ghana Education Trust Fund (GETFund) on the Development of Tertiary Institutions in Ghana <i>Samuel Bewiadzi and Margaret Ismaila</i> . . . . .	15
The Challenges of Implementing Competency Based Training (CBT) in Ghana: The Case of Higher National Diploma (HND) Agricultural Engineering Programme <i>Anthony Mawutor Atsu</i> . . . . .	33



**Perception of the Influence of Training and Development  
Programmes on Performance by Senior Staff Employees  
of University of Cape Coast**

**Emmanuel Owusu Afreh and Wisdom Kwaku Agbevanu**  
*University of Cape Coast*

### Abstract

*This paper examines the perception of senior staff employees of the University of Cape Coast (UCC) on the influence of training and development programmes on their performance. In a case study, senior staff at UCC were asked to respond to questionnaires and interviews about their perception of the programmes available to enhance their job performance. The analysis of data indicates that senior staff largely perceive training and development programmes to have positive and significant influence on their performance. In addition, it emerged that the programmes favoured some categories of senior staff other than the administrative staff. The relationship of these findings to earlier empirical studies is discussed. The paper also points out that the findings largely converge with the theoretical conceptualisations of the influence of training and development programmes on employee performance. The paper concludes that more attention should be given to training and development programmes for administrative staff.*

**Key words:** *Training and Development, Performance, Senior Staff, University of Cape Coast (UCC)*

### Introduction

Staff training and development play a crucial role in the success or failure of every organisation. As human resource management tools, training and development programmes improve staff performance and enable organisations to achieve their goals. Organisations, which are unable to train and develop the skills and knowledge of their human resource, would be unable to improve staff performance and organisational productivity (Harbison, 1973). For Noe, *et al.* (2004, p.3) “the concept of human resource management implies that employees are resources of the employer”. Therefore, argued that through training, experience, judgement, intelligence and insight, the employee adds economic value to the organisation.

The increasing enrolment and decline in resources in many universities in developing countries had led to poor managerial and administrative effective-

ness [(Commonwealth Higher Education Management Services (CHEMS, 1999)]. CHEMS attributed the decline in quality in part to a lack of trained middle level staff to occupy senior positions when experienced administrative staff employees vacate them. In Ghana, until 1998, UCC concentrated on providing training and development programmes only for the teaching staff (Amewudah, 2002). These observations have far-reaching effects on the performance of middle level employees. Thus, until recently, universities were not doing well, regarding training and developing their middle level staff for succession purposes.

Training and development programmes have cost implications for all organisations. Fricker (1994) described training and development of employees as an investment in tomorrow. For Fricker, organisations are thus seeking ways to ensure that money spent on training and development, eventually, make employees more productive. Nfila

(2005) shares Fricker's view by emphasising that training costs money; and therefore, has to add value to the organisation by developing people in the most effective way. However, Kunder (1998) reported that money spent on training and development programmes is not well spent. Kunder stated that most organisations do not assess the training and development needs of their staff nor evaluate the benefits of training programmes to their organisations. Besides, Harris (2000) reported that transfer of training is a big challenge for any organisation.

Although UCC spends considerable amounts of money on training and development programmes for her employees, little is known about senior staff's perception of the influence of the programmes on their performance. In 2007, UCC spent GH¢125,807.89 on staff training and development, excluding salaries paid to the staff on study leave (UCC, Directorate of Finance, 2008). While a substantial amount of this money was spent on training senior staff, it was common to find some of them undergoing training and development programmes that were different from their job functions. This observation raises questions about the influence of training and development programmes on the performance of such staff.

Senior Staff employees of UCC are middle level employees who support top-level management, academic and technical staff (Senior Members) in their various fields of operation. The senior staff employees are categorised into different groups, depending on the nature

of the tasks they perform. These include Administrative Assistants to Chief Administrative Assistants; Research Assistants to Chief Research Assistants; Library Assistants to Chief Library Assistants; Technician Assistants to Chief Technicians as well as teachers and health workers.

This paper reports on an investigation conducted on the perception of the senior staff on the influence of training and development programmes on their job performance at the UCC, to help management make an informed decision on senior staff training and development. In this paper, training and development is defined as any activity, excluding orientation and induction, provided for staff by the University for improving their skills to enhance job performance or to prepare them for higher responsibilities in the future. Staff performance refers to action, thought or activity, which relates to the job of the individual and which ultimately, results in a positive contribution to the realisation of the goals of the organisation.

The paper answered the following research questions:

1. What factors determine the selection of senior staff employees to undergo training and development programmes at UCC?
2. How relevant are the training and development programmes to the actual needs of senior staff employees and the University?

3. What is the perception of senior staff employees on how training and development programmes influence their job performance?

To explore senior staff employees' perception further, we hypothesise that:

- H<sub>0</sub>: There is no significant difference in senior staff employees' perception on the influence of training and development programmes on their job performance.
- H<sub>A</sub>: There is significant difference in senior staff employees' perception of the influence of training and development programmes on their job performance.

## Literature Review

### *Staff Training and Development*

Staff training and development are human resource management tools for improved staff and organisational performance. Staff training is the process of "providing instructions to develop skills that can be used immediately on the job" (Anthony *et al.*, 1999, p.337). Development, on the other hand, "involves providing employees with knowledge that may be used today or sometime in the future" (Anthony *et al.*, p.337). Some writers (Cascio, 1992; Noe, 2005) have attempted to differentiate between staff training and development. However, in human resource management, training and

development are closely connected and often used interchangeably because both activities aim at improving performance. The purposes of staff training and development in organisations are varied. Carrell, *et al.* (2000) identified the following purposes for training and development: (a) improving performance, (b) updating employees' skills, (c) avoiding managerial obsolescence, (d) solving organisational problems, orienting and socialising new employees, (e) preparing for promotion and managerial succession, and (f) satisfying personal growth needs of employees. In other words, organisations hire the services of employees for the purpose of increasing and improving productivity.

Transfer of training is an important element of training and development. Transfer of training refers to the degree to which trainees effectively apply the knowledge, skills and attitudes gained in a training context to the job and maintained overtime (Baldwin and Ford, 1988). However, "One of the biggest problems associated with training programmes is the lack of transfer of training" (Harris, 2000, p.358). The trainees' ability to transfer what they acquire during training programmes is crucial and influenced by several factors. These factors include (1) trainee characteristics such as ability, personality and motivation; (2) training design such as training content, sequencing, principle of learning and methods; (3) the work environment such as support, opportunity to practice and available equipment and (4) transfer climate (Cheng and Ho, 2001; Rouiller and Goldstein, 1993).

### ***Employee Performance and Performance Appraisal***

Employee performance, in the organisational context, is often the extent to which an employee of the organisation contributes to achieving the goals of the organisation. Thus, performance appraisal is the systematic evaluation of the individual, with respect to his performance on the job and his potential for development (Beach, 1980; Dawra, 2001; Noe, 2005). Performance appraisal is a purposeful activity, which aims at staff development for improved performance, conducted to measure, monitor and enhance performance of employees to contribute to the overall organisational performance (Agyenim-Boateng, 2006). Thus, performance appraisal is important to the training and development process in every organisation because it helps to identify the strengths and weaknesses of employees and to improve upon their performance and that of the organisation. However, this is not so in some organisations. Agyenim-Boateng (2000) evaluated the system of appraisal for senior and junior staff of UCC. He reported that the performance appraisal system used in the University aimed at determining salary increment or promotion. Agyenim-Boateng noted that performance appraisal “does not aim at assessing the past performance, identifying training needs of employees, identifying career development opportunities, establishing a more effective communication system nor performance goals for employees” (p.137). His findings revealed the crucial need for staff

appraisal for the purpose of training and development if the University wants to make its training and development programmes more effective.

### ***Training and Development Programmes and Performance in Empirical Research***

Empirical research about staff training and development has focused on different aspects of human resource management and used different methodological approaches. However, Berge, *et al.* (2002) pointed out that training and development are critical means to learning in organisations, which enhance knowledge, skill and attitude of the employees to become effective performers required to gain competitive edge. Thus, Kennedy (2009) evaluated the impact of training and development on job performance of judicial service staff in Ghana. His findings revealed that the staff received very negligible training. He therefore recommended frequent training and development for more employees.

Sultana, *et al.* (2012) found a positive and significant relationship between training and employee performance. They concluded that training is a key element for improved performance; it can increase the level of individual and organisational competency. According to them, training helps reconcile the gap between what should happen and what is happening—standards and actual levels of work performance. Murty and Fathima (2013) found that the training and development practices followed by a public sector unit had deep impact on workers’ psychology and motivate the

workers towards their job in a commendable manner. Besides, their study revealed that the perception and attitude of employees assume paramount importance in the context of present industrial scenario. Murty and Fathima reported that employees perceive the training and development practice in a positive manner.

From the foregoing, staff training can bring such benefits as Berge, *et al.* (2002) indicated depending on the perception of employees being trained (Khan, *et al.*, 2011). Indeed, employees' perception of the influence of training and development programmes on their performance is critical to organisational success, yet little is known about senior staff employees' perception of the programmes at UCC. This paper argues that investigating senior staff employees' perception is necessary to understand the extent to which training and development influence the job performance of senior staff employees. Thus, the paper assumes that senior staff employees' perception can be directly or indirectly understood or measured from multiple perspectives (Hays and Singh, 2012).

### Methodology

The case study design was used to allow for an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources (Robson, 2002). The design holds that quantifiable realities are equally important as the perception of senior staff who benefited from training and development programmes. It uses multiple

methods of data collection allowing the researchers to triangulate the findings (Robson, 2002). UCC was the case for the study. From a population of 240 senior staff who had undergone training and development programmes, stratified random sampling procedure was used to select a sample size of 151 to complete the questionnaire. In addition, five Heads of Department and one Key Staff from the Training and Development Section (KSTDS) of the University were purposively selected because they were considered a credible source of information to generate the data needed. Three data collection methods were used to collect both quantitative and qualitative data. These methods included questionnaire, interview and documents. The questionnaire used was structured in a 5-point Likert-type scale ranging from strongly agree to strongly disagree with scores of 5 to 1 respectively. Two separate semi-structured interview guides were developed to elicit the opinions of the Heads of Departments/Units and KSTDS. Relevant training and development documents on senior staff were also obtained from the Training and Development Section of UCC and studied. The research instrument (questionnaire) was pilot tested at the University of Education, Winneba, to help in rewording some of the questionnaire items and to address validity and reliability.

Data collected were analysed using quantitative and qualitative analyses methods. Descriptive statistics were used to present responses from questionnaires as frequency counts, percentages and

means with the help of Statistical Package for Social Sciences (SPSS) software. ANOVA was used to determine the level of significance in difference mean values and a *post hoc* analysis using Tamhane T2 test was used to determine where the differences occurred. In addition, the interviews were transcribed verbatim and analysed thematically and holistically. Finally, the study complied with ethical requirements in research by ensuring that respondents' rights to anonymity and confidentiality were respected.

## Results

### *Factors Determining the Selection of Senior Staff to Undergo Training and Development Programmes in UCC*

The factors, which the University management considered in selecting

senior staff for training and development programmes, were investigated. Respondents indicated in a continuum from "Strongly Agree" to "Strongly Disagree" to statements, which influenced their participation in training and development programmes. Table 1 represents the responses of senior staff on the factors that determine their participation in the training and development programmes in UCC.

As Table 1 indicates, several reasons accounted for senior staff's participation in training and development programmes. Thus, majority of senior staff attended training programmes for improving their performance. However, reasons which did not have much influence on why senior staff participated in training and development programmes included (a) because they were compulsory, 28.5 per cent and (b) in

**Table 1: Factors Determining the Participation of Senior Staff in Training and Development Programmes**

<i>Factors</i>	<i>SA</i>		<i>A</i>		<i>N</i>		<i>D</i>		<i>SD</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Encouragements from friends	30	21.9	51	37.2	18	13.1	21	15.3	17	12.4
Recommendations from superiors	23	16.8	58	42.3	22	16.1	18	13.1	16	11.7
For promotion	52	38.0	54	39.4	13	9.5	14	10.2	4	2.9
To improve my performance	72	52.6	64	46.7	1	0.7	–	–	–	–
For further qualifications	54	39.4	50	36.5	11	8.0	17	12.4	5	3.6
For future tasks	71	51.8	62	45.3	3	2.2	1	0.7	–	–
Gain recognition	19	13.9	46	33.6	34	24.8	29	21.2	9	6.6
Compulsory	6	4.4	33	24.1	26	19.0	35	25.5	37	27.0
Institutional needs	14	10.2	32	23.4	21	15.3	30	21.9	40	29.2
Total	137	100	137	100	137	100	137	100	137	100

**Source:** Authors' calculations.

response to identified institutional needs; 33.4 per cent.

### ***Relevance of Training and Development Programmes to Senior Staff's Actual Needs***

In addition, the relevance of the training and development programmes was investigated regarding the relationship between the present and future jobs of staff and the content of training programmes that were provided. The main objective was to find out whether training programmes provided were based on appraisal and needs assessment results of senior staff. Respondents were to indicate their responses in a continuum of "Strongly Agree" to "Strongly Disagree" to the statements provided. Again, Heads of Department/Supervisors and KSTDS responded to interview questions on the issue. Table 2 represents the responses of senior staff.

Table 2 shows that between 70 and 90 per cent of respondents strongly agreed or agreed to all the statements regarding the relevance of programmes to individuals' jobs.

### **Senior Staff's Perception of Influence of Training and Development Programmes on Performance**

The perception of senior staff on the extent to which they had transferred the knowledge, skills and attitudes acquired from the training and development programmes onto their job performance was measured. First, this was determined by identifying different variables, which contribute to overall employee performance. Respondents were required to indicate the extent to which they agreed or disagreed with the statements that the training and development programmes have brought improvement in these performance variables. Table 3 shows

**Table 2: Responses of Senior Staff on the Relevance of Training and Development Programmes to the Actual Needs**

<i>Responses on the Relevance</i>	<i>SA</i>		<i>A</i>		<i>N</i>		<i>D</i>		<i>SD</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Programmes were directly related to my job	58	42.3	54	39.4	5	3.62	18	13.1	2	1.5
I have acquired skills for my present job	42	30.7	69	50.4	4	2.9	20	14.6	2	1.5
I have acquired skills for my future job needs	67	48.9	47	34.3	1	0.7	6	4.4	16	11.7
I have obtained a better understanding of my job	34	24.8	76	55.5	6	4.4	14	10.2	7	5.1
Programmes' objectives matched my expectation	26	19.0	80	58.4	8	5.8	11	8.0	12	8.8

**Source:** Authors' calculations.

senior staff's perception on the influence of training and development programmes on their performance.

As Table 3 shows, senior staff of University of Cape Coast perceived training and development programmes to have a positive influence on their performance. With the exception of prestige, the entire performance variables measured had 70 per cent or more of the respondents indicating that they 'strongly agreed' or 'agreed' that the training and development programmes they attended had resulted in improvement in their performances in those areas.

Besides, the null hypothesis of no significant difference in perception of the various categories of senior staff was tested against the alternative hypothesis that there is a significant difference.

Respondents were grouped according to their categories, that is,

Administrative, Research, Finance/Audit, Technicians, Teachers and Health staff. A one way between groups ANOVA was used to determine the differences in the influence of training and development programmes on staff performance. There was a statistically significant difference at  $p < .05$  for all the variables. Table 4 shows the, ANOVA, results obtained from the analysis of the data.

From Table 4, the null hypothesis of no significant difference in the perception of categories of senior staff on the influence of training and development programmes on their performance was rejected [ $F(5, 131) = 8.514, p\text{-value} = .001 < .05$ ]. A *post hoc* pair wise comparison analysis was conducted using Tamhane T2 test to determine where the difference occurred. The results indicated that the mean score for Administrative ( $M = 3.075; SD = 1.272$ ) was significantly

**Table 3: Senior Staff's Perception on the Influence of Training and Development Programmes on their Performance**

Perception	SA		A		N		D		SD	
	N	%	N	%	N	%	N	%	N	%
New initiatives	38	27.7	74	54.0	3	2.2	13	9.5	9	6.6
Increase in quantity of work	30	21.9	71	51.8	8	5.8	25	18.2	3	2.2
Improved quality	47	34.3	57	41.6	9	6.6	15	10.9	9	6.6
Timeliness	21	15.3	82	59.9	9	6.6	10	7.3	15	10.9
Better motivation	29	21.2	67	48.9	11	8.0	24	17.5	6	4.4
Improved performance	43	31.4	70	51.1	5	3.6	13	9.5	6	4.4
Human relations	57	41.6	54	39.4	18	13.1	8	5.8	–	–
Prestige/respect	16	11.7	60	43.8	32	23.4	14	10.2	15	10.9

**Source:** Authors' calculation.

**Table 4: ANOVA Results of the Differences in Perception of Categories of Senior Staff of the Influence of Training and Development on Performance**

<i>Categories</i>	<i>Sum of Squares</i>	<i>Degrees of Freedom</i>	<i>Mean Squares</i>	<i>F</i>	<i>Level of Significance</i>
Between groups	29.600	5	5.920	8.514	.000
Within groups	91.082	131	.695		
Total	120.682	136			

**Source:** Authors' calculations.

different from all the categories of senior staff except Finance/Audit ( $M = 3.7578$ ;  $SD = .82579$ ).

### Discussion

The study showed that several factors determined the selection of senior staff to undergo training and development programmes. Evidence from the study suggests that the quest for improved performance is the strongest factor, which influences senior staff in the UCC to undergo training and development programmes. This finding supports the claim that “the goal of training and development programmes of all organisations should be to maintain and improve performance of individuals and in so doing, that of the organisation” (Anthony *et al.*, 1999, p.337). From the interviews conducted with the Heads/supervisors, three respondents indicated that their departments/units recommended senior staff for training programmes. For example, one Head of Department reiterated:

“There was nobody to operate one

particular machine so we had to encourage two of our staff to undergo a training programme in Accra for four months, both of them have come and are doing very well. I believe they are also happy because they have been promoted (Health)”.

Other reasons for such recommendations include correcting identified errors, to enable staff adapt to changes, they were mandatory for staff to be able to perform, and to introduce staff to new ideas. Incidentally, the two Heads/Supervisors who were academic heads indicated that they sometimes encouraged senior staff in their Departments/Units to further their education on personal basis. Again, all five respondents agreed that senior staff requested to undergo training programmes but observed that these were mostly long term and academic programmes. However, in their opinion the requests were mainly for self-development and promotion purposes.

Additionally, the KSTDS stated that the University sometimes recommended senior staff for “off-the-job” and “on-the-

job” programmes. The University mostly recommended the “on-the-job” training programmes to equip staff with the requisite knowledge and skills to perform their official schedules. KSTDS shared views of the Heads/Supervisors regarding requests from senior staff for long term or academic programmes, which did not have immediate impact on performance. This finding corroborates Noe’s (2005) claim that while management may make training programmes mandatory because they have immediate impact on performance, staff may have to make personal initiatives to benefit from development programmes, which do not have immediate impact on an organisation.

Moreover, there was evidence that senior staff considered the training and development programmes offered them relevant to their present and future job demands. This finding, perhaps, suggests that the Training and Development Section’s procedures adopted to conduct training needs assessment were appropriate. According to the Heads/Supervisors, the knowledge and skills acquired from the programmes by staff were relevant and related to both the present and future needs of their jobs. Similarly, the KSTDS observed that the programmes offered were relevant to both the immediate and future needs of senior staff. Few staff had undergone programmes, which were not relevant to their jobs and explained that such staff intended to change their job schedules in the near future.

Besides, in determining relevant programmes for staff’s needs, the KSTDS

emphasised that in all cases the needs of the University had been considered. However, the manner in which most heads conducted appraisal of senior staff revealed some weaknesses, which indicated that the heads would require some training to make staff appraisal more effective and reliable. This finding validates Agyenim-Boateng’s (2006, p.140) claim, “... both the employees and their supervisors had not been given enough training to ensure the effective management of the performance appraisal process”.

Finally, the findings revealed that senior staff perceived that the training and development programmes resulted in improvement in their performance. However, the means of responses of the other categories of senior staff did not differ significantly from one another except administrative staff. This finding suggests that training and development programmes influenced the performance of the other categories of senior staff more than the administrative staff. The views of the Heads/supervisors supported this finding. Four out of the five Heads/Supervisors observed that the training programmes had helped staff to improve upon the quality and quantity of output. For example, one head (Health) said, “There has been a significant reduction in dispensing errors due to the regular programmes”. All the Heads/Supervisors agreed that the need for close supervision was no longer necessary after the programmes.

However, one Head/Supervisor (Technical) indicated that not much improvement could be observed in staff

who had participated in long-term training programmes. He attributed the problem to the individual staff concerned and not the programmes. He added that the staff had their own personal interests for undertaking those programmes, which were different from improving their performance on the job. This finding corroborates that of Nfila's (2005) that training does not solve all performance related problems and by Price (2004, p.594) that employees seek training which make them more marketable.

Finally, on quantity and quality of job performed, the KSTDS cited an instance where two staff could now perform tasks, which they were unable to perform before their training programmes. In effect, staff had demonstrated better understanding of their jobs and had become more independent after undergoing training programmes. The views of KSTDS corroborated those of the four Heads/ Supervisors. Perhaps, Amewudah's (2002) finding that the training and development programmes offered by the University had positive impact on staff still applies to senior staff of the University.

### **Conclusion and Recommendations**

This paper provided an insight into the perception of senior staff regarding the influence of training and development

programmes on their performance at the UCC. The findings revealed that the training and development programmes offered to senior staff had a positive influence on their job performance. Therefore, the paper concludes that senior staff employees' perception of the influence of their training and development programmes on performance is necessary if the University seeks to improve job performance of her senior staff employees.

Efforts by the University to train and develop her staff should be aimed at all senior staff employees equally. If the University can arm herself with senior staff's perspectives on training and development programmes, it will contribute to improving the performance of senior staff and the University. Based on the findings presented in this paper, it is recommended that the training and development section of UCC should continue to rely on results of performance appraisal and needs assessment to develop appropriate programmes for senior staff employees. However, needs assessment tools for administrative staff should be redesigned to ensure improvement in the programmes provided for them. Further research is necessary to understand whether training and development programmes are adequate for senior staff employees of the University.

### **REFERENCES**

- Agyenim-Boateng, E. O. (2006). Problems associated with the management of performance appraisal in universities: The case study of Ghanaian public sector universities. *Journal of Educational Management*, 5, 134–152.

- Agyenim-Boateng, E. O. (2000). Towards the development of performance appraisal system for UCC senior and junior staff. *Journal of Educational Management*, 3, 128–141.
- Amewudah, N. D. K. (2002). An evaluation of staff training and development activities at the University of Cape Coast. *Journal of Educational Management*, 4, 164–177.
- Anthony, W. P., Perrewe, P. L., and Kacmar, M. K. (1999). *Human Resource Management* (3<sup>rd</sup> ed.). Orlando: Dryden Press.
- Antwi, M. K. (1992). *Education, Society and Development in Ghana*. Accra: Unimax Publishers Limited.
- Baldwin, T. T., and Ford, K. J. (1988). Transfer of training: A review of directions for future research. *Personnel Psychology*, 41, 63–105.
- Beach, S. D. (1980). *Personnel: The Management of People at Work* (4<sup>th</sup> ed.). New York: Collier Macmillan Publishers.
- Berge, Z., Verneil, M., Berge, N., Davis, L., & Smith, D. (2002). The increasing scope of training and development competency. *Benchmarking: An International Journal*, 9(1), 43–61.
- Carrell, M. R., Elbert, N. F., and Hatfield, R. D. (2000). *Human Resource Management: Strategies for Managing a Diverse and Global Workforce* (6<sup>th</sup> ed.). USA: Dryden Press.
- Cascio, W. F. (1992). *Managing Human Resource* (3<sup>rd</sup> ed.). New York: McGraw Hill Inc.
- CHEMS (1999). *Survey of Training Providers on University Management for Commonwealth University Staff*. Retrieved January 18, 2009, from <http://www.arcc.edu.au/avcc/staffdev/buttetin.htm>.
- Cheng, E. W. L., and Ho, D. C. K. (2001). A review of transfer of training studies in the past decade. *Personnel Review*, 30(1), 102–118.
- Dawra, S. (2001). *Human Resource Development and Personnel Management*. New Delhi: Radha Publications.
- Effah, P. (1998). The training and development of academic librarians in Ghana (Electronic version). *Library Management*, 19, 37–41.
- Fricke, J. (1994). In J. Prior (Ed), *Gower Handbook of Training and Development* (2<sup>nd</sup> ed.). Hamshire: Gower Publishing Ltd.
- Harbison, E. H. (1973). *Human Resources, the Wealth of Nations*. Oxford: Oxford University Press.
- Harris, M. (2000). *Human Resource Management: A Practical Approach* (2<sup>nd</sup> ed.). USA: Harcourt College Publishers.
- Hays, D. G., and Singh, A. A. (2012). *Qualitative Inquiry in Clinical and Educational Settings*. New York, NY: The Guilford Press.
- Kennedy, J. (2009). *The Impact of Training and Development on Job Performance: A Case Study of the Judicial Service of Ghana*. Unpublished master's thesis submitted to the Institute of Distance Learning, Kwame Nkrumah University of Science and Technology, Kumasi.
- Khan, R. A. G., Khan, F. A., and Khan, M. A. (2011). Impact of training and development on organisational performance. *Global Journal of Management and Business Research*, 11(7), 63–68.
- Kunder, L. H. (1998). *Employees' Perception of the Status and Effectiveness of the Training*

- and Development System and the Value of Training and Development*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Virginia.
- Murty, T. N., and Fathima, F. (2013). Perception and attitude of employees towards training and development in public sector unit. *International Refereed Journal of Research in Management and Technology*, 2, 141–147.
- Nfila, C. (2005). *Training Needs Analysis for Bachibanga Company Limited in Botswana*. Unpublished master's dissertation, University of Wisconsin-Stout.
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., and Wright, P. M. (2004). *Human Resource Management*. New York: McGraw Hill.
- Noe, R. A. (2005). *Employee Training and Development* (3<sup>rd</sup> ed.). Boston: McGraw-Hill Irwin.
- Price, A. (2004). *Human Resource Management in a Business Context* (2<sup>nd</sup> ed.). Australia: Thomson Learning Co.
- Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner-Researchers* (2<sup>nd</sup> ed.). Oxford: Blackwell Publishing.
- Rouiller, J. Z., and Goldstein, I. L. (1993). The relationship between organisational transfer climate and positive transfer of training. *Human Resources Development Quarterly*, 4(4), 377–390.
- Sultana, A., Irum, S., Ahmed, K., and Mehmood, N. (2012). Impact of training on employee performance: A study of telecommunication sector in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(6), 646–661.
- UCC (2008). *Final Accounts 2007*. Directorate of Finance, UCC. (Unpublished financial report).

**Financing Higher Education in Ghana: The Impact  
of Ghana Education Trust Fund (GETFund) on the  
Development of Tertiary Institutions in Ghana**

**Samuel Bewiadzi and Margaret Ismaila**  
*University of Ghana*

### Abstract

*The Ghana Education Trust Fund (GETFund), established in 2000 is supposed to be funded by 20% of the two and half per cent of the Value Added Tax (VAT) to provide funds to support the development of educational institutions in Ghana. This paper examines the impact of Ghana Education Trust Fund (GETFund) on the development of tertiary institutions in Ghana, its challenges and how the Fund surmounts these challenges. Using the qualitative model, the research was conducted by structured and in-depth interviews with respondents across some tertiary institutions pertaining to the contribution of GETFund to the development of these tertiary institutions. Findings from the field revealed that GETFund has contributed to infrastructural development; construction of lecture theatres, library facilities, Information and Communication Technology laboratories, provision of vehicles. The Fund has also promoted faculty development in tertiary institutions by sponsoring lecturers for further studies. However, the Fund faces some financial constraints, which hinders its operation. Finally, some policy recommendations are made to the GETFund on how to overcome these constraints.*

### Introduction

Development of higher education worldwide at the turn of the century has witnessed drastic challenges ranging from affordability, accessibility, financial austerity, faculty recruitment and retention as well as, how to fund the improvement of physical facilities. While these challenges pose a serious threat to the development of quality of higher education, there is no other challenge that affects the core of institutions than that posed by financial stringency (Johnstone, 1998). Considering the seriousness of the problem, a World Bank/UNESCO report (2000: 55) concluded that: “the lack of sustainable financing therefore continues to limit enrollment growth and to skew education toward low-cost, low-quality programmes.”

Funding of education all over the world is a crucial challenge for governments, policy makers, and school administrators. In developed countries, while governments provide some

resources to finance higher education, there is continuous effort on the part of school administrators to mobilise and diversify resources to supplement what governments provide. In most advanced countries, there has been an upsurge in the demand for policy restructuring to reduce the over-reliance on the federal and central governments to financing education, especially higher education. In the same vein, there has been persistent shift from the provision of free higher education in countries to a system of cost-sharing where students contribute towards their education. However, the situation is quite different in most African countries, where the introduction of cost-sharing has generated serious problems between the rich and poor, thereby making higher education the preserve of the more affluent in society (Atuahene, 2006: 2).

In Ghana, like many developing countries, the management and control of universities and other tertiary institutions remain the responsibility of the state. Financing education has been the

responsibility of the government since their inception. Attempts to introduce cost-sharing, whereby students are required to pay part of the cost of their education, has led to strikes, demonstrations, and subsequent disruptions of the academic calendar leading to university closures. Students, led by student leadership, have made claims using Marxian ideology, where the state finances all social and public services in order to let government take full responsibility of education.

Higher education in Ghana since the 1940s was a publicly provided service, but its provision poses challenges to maintaining efficiency, access, quality of programmes, upgrading of physical infrastructure, training of workers and human capital and retention of faculty. All these challenges called for immediate intervention with some policy measures that aimed at salvaging the problem. One of such measures was the introduction of the student loan scheme. According to Sawyerr (2001) a student loans scheme was initially introduced in 1971–1972, but was abolished in 1972. It was later re-introduced in 1975. However, the scheme faced terrible problems in the recovery of loans. Within eleven years of its operation, a total of GH¢33.5 million (US\$375,560) was owed to the scheme by students. In 1989, the policy was modified and the Social Security and National Insurance Trust (SSNIT), an organisation in charge of pension and retirement programmes in Ghana, was added to participate in the scheme.

Later, the National Union of Ghana Students (NUGS) mounted persistent

pressure on the government, regarding the state of education, especially higher education in Ghana. Consequently, multiple ideas were presented to the government and policy makers. The outcome was a suggestion that the private sector should be deeply involved in the cost of education in Ghana. Eventually, a proposal from the NUGS to establish a trust fund to generate income to support higher education became a landmark policy initiative in Ghana (Atuahene, 2006).

In January 1999, President Jerry John Rawlings, incorporated the proposal into his annual address to Parliament, and a technical committee subsequently recommended its broad outlines. Debates over the policy framework of the fund led to a series of parliamentary deliberations until 2000, when the Ghana Education Trust Fund Act 2000 (Act 581) was enacted (Harsch, 2000; Effah, 2003).

The establishment of the GETFund, is supposed to bring some relief to the educational sector in Ghana, in terms of infrastructure and other related developments. This study therefore discusses the Ghana Education Trust Fund as an institution, and its impact to the development of tertiary institutions in Ghana.

## **Theoretical Framework and Literature**

### ***The Neoliberal Theory and Higher Education Development***

Levidow (2001: 1) asserts that the ongoing developments in higher education and the

pressure on universities to generate additional source of income have plunged higher education into “a terrain for marketising agenda”. Levidow’s argument, which is founded on the neo-liberal ideology, forced universities to adopt marketing strategies to generate income to supplement the diminishing state of financial resources earmarked for higher education.

Levidow (2001: 2) identifies the basic features of neo-liberal policies, which include: all constituencies are treated in market terms; educational efficiency, accountability and qualities are redefined in accountancy terms; courses are recast as institutional commodities, student-teacher relations are mediated by the consumption and production of things. The neo-liberal framework has become the reform agenda of the International Monetary Fund (IMF) and the World Bank (WB), which was prescribed to developing nations in the form of Structural Adjustment Programmes (SAP). Colgan (2002: 3) posited that “The basic assumption behind structural adjustment was that an increased role for the market would bring benefits to both poor and rich...The development of a market economy with a greater role for the private sector was therefore seen as the key to simulating economic growth.” To Levidow (2001), the neo-liberal ideology pushed on by IMF and World Bank was designed to ‘recolonise’ Africa. He further argues that the introduction of tuition fees together with the overall economic ramification of SAP conditionalities has made higher education more accessible to the bourgeois than the proletariat.

Secondly, the quality of higher education has worsened with the upsurge in favour of the standardisation of the curricula and the ruthless marginalisation of knowledge. Similarly, Banya and Elu (2001) add that through the IMF conditionalities, sub-Saharan African countries have been advised to adopt market mechanisms to finance higher education.

Abdallah (1986: 1), in a speech as the Secretary for Education in Ghana pointed out that: “Over the past decade, there has been a sharp deterioration in the quality of education at all levels. There has been a virtual collapse of physical infrastructure in the provision of buildings, equipment, materials, teaching aids etc.” Arising from the economic constraints that faced the country in the late 1970s and early 1980s, as well as the bureaucratic bottlenecks and sheer lack of interest and commitment from administrators, education in Ghana was in a mess. There was stagnation and near demise of the experimental Junior Secondary School (JSS) system. By 1983, the education system was in major crisis through lack of educational materials, deterioration of school structures, low enrolment levels, high drop-out rates, poor educational administration and management, drastic reductions in government’s educational financing and the lack of data and statistics on which to base any planning.

Clearly, the market ideology did not only affect universities and other tertiary institutions. It affected all levels of education in Ghana. It brought about increased school drop-outs, inadequacy of teachers and other staff, deterioration

of infrastructure, lack of materials for teaching and learning, high cost of education among others. Obviously, the market ideology brought many problems to the education sector. The challenges of the market ideology, the complications of its implementation, and its effects on educational development in Ghana in the 1980s to the 1990s called for policy reforms that could help salvage these problems. Thus, it could be said that the failure of the neo-liberal policies called for the emergence of the Ghana Education Trust Fund (GETFund) which was aimed at helping bring sanity into the education system in Ghana.

### **Challenges of Higher Education in Ghana and the Emergence of GETFund**

Atuahene (2009: 33) holds the view that following Ghana's independence, various governments, particularly Dr. Kwame Nkrumah's Administration considered education as a tool for socio-economic engineering and national development. Governments have concentrated considerably large budgetary allocations to expanding education, especially at primary and secondary levels (MoE, 1996). This initiative has remained on government's policy agenda and several education reforms. Throughout the period of reforms, the Ghana Poverty Reduction Strategy (GPRS) anticipated an increase in enrollment from 146,000 to 195,000 from 1987–1988 and 1997–1998 academic years and by 2000–2001, it was 204,000 for the age group 16–18. Also, the number of public secondary schools

increased from 40 to 474 (Republic of Ghana, 2004). Unfortunately, Effah (2003) argues that academic facilities and resources at the tertiary education level remained unexpanded to accommodate qualified students. Consequently, only three per cent of people between 18–23 age group qualified to have access to tertiary education. Kigotho (2004) noted that African governments often have few resources to devote to higher education and since 1990, enrolment at Ghana's five public universities has jumped from 12,000 to 65,000 students. At the University of Ghana alone, enrollment has risen from 7,500 to 25,000 students while its physical facilities have remained largely the same. This is due to the lack of financial resources to support institutions to improve and expand their facilities. In effect, the government has to introduce cost-sharing mechanisms to help salvage the situation. Atuahene (2009: 36) bemoans that many attempts to introduce market principles; cost-sharing, particularly in the universities as part of efforts to solve the financial problems facing universities met with serious challenges from students. It was noted that students cited Article 25 of the 1992 Constitution, which states that "higher education shall be made equally accessible to all on the basis of capacity by every appropriate means, and in particular, by the progressive introduction of free education". In the student's opinion, since university education benefits everyone, the government bears the responsibility to support the sector.

The student loans scheme that was introduced as part of the solution to

financial challenges faced by universities was unfavourable (Atuahene, 2009). The high defaulting rates affected some guarantors, whose pension allowances were withheld by the SSNIT. Students' loans were delayed during the academic year, which resulted in several strikes and protests against government, in an extreme case led to the death of a student through demonstration and clashes with the police. The academic calendar also suffered from these events as demonstrations led to closure of universities, which created an admission backlog. These problems and others led to the establishment of the Ghana Education Trust Fund (GETFund) in the year 2000 to help surmount these financial constraints that schools at all levels in the country faced.

### **A Brief History of GETFund**

The Ghana Education Trust Fund (GETFund) is a public trust set up by an Act of Parliament in the year 2000. Its core mandate is to provide funding to supplement government effort for the provision of educational infrastructure and facilities within the public sector from the pre-tertiary to the tertiary level (GETFund Act, 581). Atuahene (2009: 29) argues that "The Ghana Education Trust Fund (GETFund), funded by a percentage of the national Value Added Tax, has had as its purpose, since its establishment in 2000, the enhancement of primary, secondary and particularly tertiary education." Under this fund, 20% of the existing 2.5% of VAT is paid into the GETFund account to support education at all levels (Atuahene, 2009: 31).

The Fund also provides funding to support the procurement of educational equipment, promotion of staff development and research, especially at the tertiary level. Some funding is also provided to support aspects of the work of agencies and institutions for which the Ministry of Education (MoE) has supervisory responsibility. In serving, GETFund shares information with the public and other stakeholders in a timely manner. In this regard, the organisation uses the social media such as the blog and twitter to exchange ideas and views that help it to execute their mandate to the benefit of the broader Ghanaian society for whom, and on whose behalf it works. As a public Trust, GETFund is committed to serving the educational needs of Ghanaians. The vision of the Fund is to become a trusted public sector educational financing agency by sustainably and responsibly managing the resources made available to it to meet the expectations of the people of Ghana. In addition, the mission of the Fund is to support the delivery of quality education to the citizens of Ghana from the basic to tertiary level through dynamic funding policies aimed at ensuring equitable provision of essential resources for all levels of education to all segments of the Ghanaian population.

### **The Impact of GETFund on the Development of Tertiary Institutions in Ghana**

Higher education expansion, i.e. increasing and opening access cannot be

achieved without concurrent improvement in infrastructural facilities, particularly residential facilities to accommodate students. In order to achieve this objective of expanding access, there is the need to improve academic facilities, renovate offices to accommodate faculty and staff and support institutions with office equipments to facilitate smooth administration (Atuahene, 2006: 142). From this background, the impact of the GETFund on the development of tertiary institutions in Ghana will be assessed.

#### **Construction of Classroom Blocks, Accommodation Facilities and Rehabilitation of Lecture Theatres**

According to the Administrator of the GETFund the Fund annually allocates a greater percentage of the money to the development of infrastructural facilities. This is in compliance of Act 581 which states that “the fund will provide financial support to the agencies and institutions under the Ministry of Education through the Ministry for the development and maintenance of essential facilities and infrastructure in educational institutions”. Based on this, the Board of Trustees allocates funds every year to promote infrastructure development in educational institutions. Reports from the office of the Fund indicates that the Board of Trustees of the Fund allocated 521 billion (US\$1,300,906,365.20) (74.4%) and 517 billion (US\$1,290,918,600.40) (40%) of the total amount in 2004 and 2005 respectively for the development of infrastructure in tertiary institutions. The Administrator noted that in 2013, the

budgeted allocation stood at GH¢691,457,200 (US\$172,652,797.0) and 60% of it was meant to improve upon infrastructure in educational institutions. A journalist remarked that, “GETFund is a major landmark policy in the educational development of Ghana in recent times. As a result of its unflinching support, training colleges, polytechnics and universities have seen improvement in infrastructure development. In effect, these educational institutions have seen increase in enrolment over these years”. Table 1 shows some GETFund accommodation projects.

On the field, the findings revealed that in almost all the tertiary institutions visited, one can find at least one building constructed in the name of GETFund. In Ho Polytechnic, the Fund constructed a hostel facility called “GETFund Hostel”, which accommodates over 1000 students. This accommodation facility has helped reduce the problem of landlords charging exorbitant rent because the hostel charges moderately and students are able to afford it. GETFund is funding the new Language Center of the Faculty of Arts in University of Cape Coast, which is near completion. This facility is a building complex which has lecture theaters, offices for lecturers, library facility, computer laboratory which is intended to be used for students’ oral examination in French, English, Ga, Ewe and other languages. Similarly, data gathered from the field indicate that GETFund supported the construction of two new public universities in Ghana: the University of Health and Allied Sciences (UHAS) in Ho and the University of Energy and Natural Resources (UENR)

**Table 1: Provision of Accommodation Facility (GETFund Hostel) to some Institutions**

<i>Institution</i>	<i>No. of Rooms</i>	<i>No. of Students Accommodated</i>	<i>Facilities in the Hostel</i>
University of Energy and Natural Resources (UENR)	176	668	Volley ball court, Football park, Basketball court, tennis court, restaurant, barbering shop, hairdressing salon
Kumasi Polytechnic	165	660	Junior common room, restaurant, barbering shop, hairdressing salon
Ho Polytechnic	200	1,000	Restaurant, junior common room, hairdressing salon, barbering salon, car park
Koforidua Polytechnic	88	440	Restaurant, junior common room hairdressing salon, barbering shop
Sunyani Polytechnic	88	448	Junior common room, a salon, a barbering shop, a boutique shop, a mini basket ball court, football pitch and a kitchen
Regional Maritime University	75	400	Junior common room, a salon, a barbering shop, restaurant etc.

**Source:** Field interviews (2014); [www.spoly.edu.gh/students/halls-of-residency;uenr.edu.gh/getfund-hostel/](http://www.spoly.edu.gh/students/halls-of-residency;uenr.edu.gh/getfund-hostel/); [www.modernghana.com/news/399948/1/getfund-provides-rmu-with-400-bed-students-hostel.html](http://www.modernghana.com/news/399948/1/getfund-provides-rmu-with-400-bed-students-hostel.html)

in Sunyani. In Ho, GETFund has financed the construction of lecture theatres, offices for lecturers, library and a computer laboratory. In an interview session with one of the lecturers in UENR, GETFund constructed a new administration block for the University. It is currently constructing a library and Information and Communication Technology facility for the University as well as a science laboratory facility for the institution. Table 2 shows the projects in the two new public universities.

In an interview session with an Administrator in the University of Cape Coast, he said, “The GETFund is a blessing to Ghana. It has ensured massive

investment in terms of infrastructural development in all sectors of education in the country. If you visit our senior high schools, polytechnics and universities, tremendous impact has been made by the GETFund”. It was noted that the GETFund had provided money for the rehabilitation of lecture theatres and halls of residence in the University. In 2006, monies were provided by the Fund to renovate and beautify the environs of Casely Hayford Hall in the University of Cape Coast. The administrator pointed out that because of this renovation, students were asked to look for alternative accommodation, as the hall was not available for the 2006/2007 academic year. After the renovation,

**Table 2: Construction of two new Public Universities**

<i>Institution</i>	<i>Location</i>	<i>Projects</i>	<i>Status</i>
University of Energy and Natural Resources (UENR)	Sunyani	New Administration block Lecture halls Science laboratory ICT laboratory	Completed Yet to be completed Yet to be completed Yet to be completed
University of Health and Allied Sciences (UHAS)	Ho	Lecture halls, Offices for lecturers, ICT laboratory, Auditorium, Science laboratories, Library	All completed

**Source:** Field Interviews (2014).

it was reopened during the 2007/2008 academic year. The Faculty of Science was also renovated. New urinal pots and water closet pots were installed, louver blades were changed and new air-conditioners installed in the offices of lecturers. Table 3 shows some GETFund infrastructural projects in some institutions.

### **Provision of Water Tanks to some Tertiary Institutions**

Findings from the field further revealed that the GETFund has also provided money for the purchase of water reservoirs and tanks to solve the problem of perennial water shortages. Halls of residence such as Casely Hayford Hall, Kwame Nkrumah Hall, Valco Hall, Atlantic Hall all in the University of Cape Coast were provided with water tanks to store water. In Ola College of Education, polytanks were also provided to store water. Similarly, the Commonwealth Hall in the University of Ghana was also provided with water tanks to store water. In a focus group discussion held with some

students in Cape Coast and Legon, they noted that water shortages always affected academic work and so, they channeled their grievances through the student leadership and the result was the provision of the tanks. By extension, the Fund has also provided water tanks to Senior High Schools such as Wesley Girls, Adisadel College, and St. Augustine College among others to ease the problem of water shortages. Table 4 shows the breakdown of the distribution of water tanks to these institutions.

### **Provision of Computers/Laboratories to Institutions**

In an interview session with one of the officials at the GETFund headquarters, the Fund has done a lot in terms of information and communication technology education. In both Ho and Accra Polytechnics, the Fund has provided the polytechnics with computers to facilitate the teaching of information and communication technology. This is to enable these institutions to start degree programmes. In Accra Polytechnic, a computer

**Table 3: Construction of new Structures within Tertiary Institutions**

<i>Institution</i>	<i>Number of Projects</i>	<i>Project Title</i>	<i>Status</i>
University of Cape Coast	3	The New Faculty of Education Complex	Completed
		The New Language Centre	Yet to be completed
		The New Administration complex	Yet to be completed
Regional Maritime University	3	2000-seater Auditorium Administration block Library	All completed
University of Ghana	13	School of Performing Arts Office complex	Yet to be completed
		Department of Earth Science Extension (Phase One)	Yet to be completed
		Extension of Physics laboratory	Yet to be completed
		Faculty of Arts building Stadium Building, Faculty of Engineering Sciences, Central Science laboratory, Information Center, Faculty of Law Building	Yet to be completed
		New N-Block Lecture Hall–Accra City Campus Lecture Hall–Faculty of Agriculture Laboratory and Offices–SIREC, Kpong	All completed
University for Development Studies	8	Administration block, Library, Classroom blocks, Bungalows, Clinic, Science laboratory, 3-Storey ICT center, Vice Chancellor's lodge	All completed
Kwame Nkrumah University of Science and Technology	3	Lift for administration Construction of examination halls, Construction of office complex	All completed
Kumasi Polytechnic	3	Academic block complex, Staff bungalows, Classroom blocks	All completed
Accra Polytechnic	2	Construction of 5-storey 15 flat (1 bedroom), Construction of 5-storey 15 flat (2 bedroom)	All completed

**Source:** Field Interviews (2014); [www.modernghana.com/news/399948/1/getfund-provides-rmu-with-400-bed-students-hostel.html](http://www.modernghana.com/news/399948/1/getfund-provides-rmu-with-400-bed-students-hostel.html); <http://www.ghanaweb.com/GhanaHomePage/economy/artikel.php?ID=50907>; Performance Audit Report of the Auditor General on the GETFFund funded Infrastructural Projects in Public Tertiary Institutions. Ref. No. AG.01/109/Vol.2/67–2013

**Table 4: Provision of Water Tanks to some Institutions**

<i>Institution</i>	<i>Hall/Department</i>	<i>Number of Tanks</i>	<i>Location</i>
University of Cape Coast	Casely Hayford Hall	6	Cape Coast
	Valco Hall	5	
	Kwame Nkrumah Hall	4	
University of Ghana	Commonwealth Hall	8	Legon–Accra
Ola College of Education	Administration	3	Cape Coast
Wesley Girls Senior High School	Administration	2	Cape Coast
Saint Augustine’s College	Administration	2	Cape Coast
Adisadel College	Administration	2	Cape Coast

**Source:** Field Interviews (2014).

laboratory has been provided to enhance information and communication technology. In Ho Polytechnic, a modern computer laboratory has been constructed and equipped with internet facilities to promote teaching and learning. Currently, these two polytechnics are running Bachelors degree programmes for their students. Table 5 gives a breakdown of some of these projects.

Our findings revealed that GETFund provided computers to many institutions in the country. Computers have been provided to senior high schools, colleges

of education, polytechnics and universities, including some private universities. Colleges of Education such as Amedzofe, Akatsi, Saint Francis, Peki all in the Volta Region have been provided with computers and other accessories. In Greater Accra and Central Regions, Ola College of Education, Accra College of Education, Assin Fosu College of Education among others have been provided with computers and accessories. This is meant to equip teacher trainees with skills in ICT so that they impart ICT knowledge to pupils on completion.

**Table 5: Construction of Computer Laboratories**

<i>Institution</i>	<i>Number of Projects</i>
All Colleges of Education	38 laboratories
Sixty two (62) Nursing and Midwifery Training Colleges	62 laboratories
Three (3) Agricultural Colleges (Ohawu, Kwadaso, and Pong-Tamale)	3 laboratories
University of Health and Allied Sciences	Ultra modern computer laboratory
University of Energy and Natural Resources	Ultra modern computer laboratory
Ho Polytechnic, Accra Polytechnic, Sunyani Polytechnic	Ultra modern computer laboratory each for these institutions
University for Development Studies	Ultra modern computer laboratory

**Source:** Field Interviews (2014).

### **Provision of Vehicles to Tertiary Institutions**

GETFund has contributed to the provision of vehicles to some tertiary institutions in Ghana. The administrator of the Fund argued: “We have purchased vehicles for all the second cycle girl’s institutions and a good number of Senior High Schools. Also, we have provided vehicles for public universities as well as some accredited private universities”.

Findings from the field reveal that GETFund has provided almost all the public universities with 60-seater buses. The Fund donated these buses to institutions such as University of Ghana, University of Cape Coast, University of Education, Kwame Nkrumah University of Science and Technology, Ghana Academy of Arts and Sciences among others. With the private universities, the Fund donated 50-seater buses embossed with the logo of the Fund to Ashesi University College, Valley View University, and Central University College among others. Similarly, all the ten polytechnics have also been provided with 60-seater Tata Buses. Colleges of Education such as Ola, Accra, Amedzofe, Peki, Ada, Assin Fosu have also benefited from the Fund’s Tata buses. Table 6 gives a summary of some of the vehicle distribution.

The provisions of buses by the Fund have been very beneficial. In University of Cape Coast for instance, the bus is used to run shuttle services to and fro in the old and new sites. It is also used for other activities such as conveying students to sporting activities, especially the inter-

university sports and games. In Central University College, students noted that the buses carry students to and from Dansoman to Prampram where the new campus is located. In all, the vehicles serve so many purposes in the university community.

The role of the GETFund on the infrastructural development of our tertiary institutions is summed by Atuahene (2006) thus:

*“If you go to our basic schools, second cycle institutions, universities and polytechnics, you will appreciate the wonderful job that the Ghana Education Trust Fund is doing. The GETFund has reformed most of these institutions especially the polytechnics. It has really reformed them and put new faces to them. In fact, some of the polytechnics, which used to look like technical schools are now gaining their reputation as tertiary institutions.”*

From this statement, it is obvious that the GETFund is doing a very good job in promoting the development of our educational institutions.

### **Faculty Development and Research**

Benneh (2002) argues that “African universities have a tripartite mission: teaching, research and service. Although it is the teaching mandate of universities that is better appreciated by the public, the research function distinguishes the university from other educational

**Table 6: Provision of Vehicles to some Institutions**

<i>Institution</i>	<i>Department</i>	<i>Number of Vehicles</i>
University of Cape Coast	Transport Section	Two 60-seater air-conditioned buses
University for Development Studies	Central Administration	Two 60-seater Tata buses One BMC Cargo Truck and One Nissan Urvan bus
University of Ghana	College of Basic and Applied Sciences	Two 60-seater Tata buses
	Physical Development and Municipal Services Directorate (PDMSD)	One 60-seater air-conditioned bus
	Students' Welfare	One 60-seater Tata bus
Kwame Nkrumah University of Science and Technology	School of Veterinary Medicine	One Nissan Coaster bus
University of Education	Transport Section	Two 60-seater air-conditioned buses
All Colleges of Education	Administration	38 Tata buses in all (one each to each college)
All Polytechnics	Administration	10 Tata buses in all (one each to each polytechnic)
Ashesi University College	Administration	One 50-seater air-conditioned bus
Valley View University	Administration	One 50-seater bus
Central University College	Administration	One 50-seater bus
Ghana Academy of Arts and Sciences	Administration	One Nissan Coaster bus

**Source:** Field Interviews (2014); <http://www.ghanaweb.com/GhanaHomePage/economy/artikel.php?ID=50907>

institutions.” However, research has been a major problem in our universities right after independence due to financial stringency. The World Bank/UNESCO (2000: 32–33), posits that “The disappearance of research agenda from these universities has serious consequences. The inability to pursue research isolates the nation’s elite

scholars and scientists, leaving them unable to keep up with developments in their own fields.”

In response to this problem, the GETFund contributes towards faculty development and research. The administrator of the Fund revealed that the Fund annually sponsors some lecturers from some public universities to do

further studies and others to conduct researches. A university administrator in Cape Coast also reiterates that faculty members are being sponsored to pursue their doctorates in different disciplines both here in Ghana and abroad—United Kingdom, Norway, United States, and Germany among others. Some of the people being sponsored are required to come back and complete their programmes in Ghana. The financial sponsorship of this programme comes from the Ghana Education Trust Fund and other related avenues.

The findings also indicate that the GETFund has instituted research allowances to the teaching staff of the university to promote research. The GETFund provides funds for scientific research in our tertiary institutions. According to some reports accessed at the headquarters, in 2004, 18 billion cedis (US\$44,944,941,60) was allocated to the National Council for Tertiary Education (NCTE) for the support of research. Some lecturers in the University of Cape Coast and University of Ghana confirmed this in an interaction. They noted that two lecturers from the Faculty of Arts in the University of Cape Coast are currently pursuing their doctoral programmes abroad through the faculty development programme and other faculty members are currently conducting researches into various fields to contribute to knowledge production.

#### **GETFund and Financial Deficiency**

The GETFund inspite of these achievements has some challenges and the major

one is inadequate financial resources. The study revealed that the Fund has financial difficulties. This is because of the huge task that it performs in Ghana.

In an article published in the *Daily Graphic* on December 19, 2013, it was reported that the Ghana Education Trust Fund (GETFund) will not send any student outside the country to study unless the fund is adequately resourced to cater for the needs of students it sends outside. According to the article, this is to prevent the recurring situation of students on GETFund scholarships outside the country getting distressed because of the government's failure to pay both their tuition fees and other allowances. The paper added that the decision follows delays in the payment of GETFund allocations. The paper stated further that in 2013, the budgeted allocation stood at GH¢691,457,200 (US\$172,652,797.0) but GH¢88,723,193 (US\$22,153,659.6) was received for only January and February. Accordingly, the Public Relations Officer informed the *Daily Graphic* that the Fund had been compelled to re-strategise to ensure that students on scholarships did not suffer. On this note, the fund has decided not to send students out unless it has money for their living allowances and fees.

The article continued that although the Minister for Finance and Economic Planning had, in a letter dated November 4, 2013, instructed the Controller and Accountant-General to pay the Fund, an amount of GH¢240,294,897.69, (US\$60,000,222.85) which, when added to the GH¢88,723,193 (US\$22,153,659.6)

earlier released will amount to GH¢ 3 6 2 , 4 3 9 , 1 0 9 . 3 1 (US\$90,498,914.45), less than the total budget allocation for the Fund in 2013, the money is yet to be credited to the GETFund account. While in 2012, the budgeted allocation stood at GH¢545,440,000 (US\$136,193,160.8) the fund received GH¢505,549,121 (US\$126,232,642.8). The article also noted that with the fund operating with a shallow pocket, several projects at the pre-tertiary level especially are now in limbo. The contractors have abandoned the various project sites, while awaiting payment for work done. The article noted that, some of the abandoned sites included the Potroase Presby Primary and Bomponso M/A Primary, both in the East Akim Municipality of the Eastern Region; the Yeji Senior High Technical School in the Pru District in the Brong Ahafo Region; the Guakro Effah Senior High School at Offoman in the Techiman North District of the Brong Ahafo Region; the Navrongo Senior High School and the Zorkor Senior High School both in the Upper East Region (*Daily Graphic*, 19/12/2013).

Critical analysis of activities of the GETFund shows that GETFund has financial challenges. Perhaps the expansion in the number of projects that the GETFund now funds has overstretched the budget of the Fund to the extent that many projects have been abandoned and for some time now, some heads of second cycle institutions have been complaining about delays in the execution of their GETFund projects.

These school heads are not alone in the appeal to the government to release the statutory funds to the contractors to complete their work on the projects. Other beneficiaries of Ghana government scholarships are also complaining because the GETFund has not provided the grant to the Scholarships Secretariat to support gifted but needy students locally and abroad. Metropolitan, municipal and district chief executives in the Western Region are bemoaning the delays in the completion of GETFund-funded projects scattered all over the region, thereby denying children access to education.

### Conclusion and Policy Recommendations

The study concludes that the GETFund has contributed tremendously to the development of our tertiary institutions both public and private. It has contributed to the construction and rehabilitation of lecture theaters, provision of vehicles to facilitate easy transportation, promoting ICT education through the construction of computer laboratory and provision of computers, enhancing faculty development and research among others. However, the Fund is in financial difficulties because it has overstretched its activities and it will be better to remain within its budgetted allocation. The Government should as a matter of policy try to refund all monies owed to the Fund to enable it perform better. Therefore, it is recommended that the Tax authorities should ensure that the 2.5% VAT allocations stipulated by law are paid into the GETFund account on time so that it could be used to support development

projects in our institutions. The Government of Ghana on behalf of the Fund should also liaise with other donor partners, Non-Governmental Organisations, the European Union and other

development partners in order to get financial assistance to supplement what is generated internally. This will go a long way to, if not totally; salvage the financial constraints of the Fund.

## REFERENCES

- Abdallah, A. (1986). Speech on the State of the Education System in Ghana, Address to the Nation. Ministry of Education (MoE), Accra, p.1.
- Atuahene, F. (2006). "A Policy Analysis of the Financing of Tertiary Education Institutions in Ghana: An Assessment of the Objectives and the Impact of the Ghana Education Trust Fund". Unpublished PhD thesis presented to College of Education, University of Ohio; Ohio, p.256.
- Atuahene, F. (2009). Financing Higher Education through Value Added Tax: A Review of the Contribution of the Ghana Education Trust Fund (GETFund) in Fulfillment of the Objectives of Act 581. *Council for the Development of Social Science Research in Africa. JHEA/RESA*, Vol. 7, No. 3, 2009, pp. 29–60.
- Banya, K. and Elu, J. (2001). The World Bank and Financing Higher Education in Sub Saharan Africa. *Journal of Higher Education*, 42(1), 1–34.
- Benneh, G. (2002). "Research Management in Africa". *Higher Education Policy*, 15(3), 249–262.
- Colgan, A. (2002). "Hazardous to Health: The World Bank and IMF in Africa". *African Position Paper*. [www.africaaction.org/action/sapo](http://www.africaaction.org/action/sapo)
- Daily Graphic*, "GETFund Suspends Scholarships Until..." 19/12/2013; [http://www.adomonline.com/new\\_details.php?article=2476#sthash.qC9BVTpj.dpuf](http://www.adomonline.com/new_details.php?article=2476#sthash.qC9BVTpj.dpuf)
- Dzobo, N. K. (1987). Address at the National Workshop on the 1987 Educational Reforms. Ministry of Education (MoE), Accra, p.1.
- Effah, P. (2003). "Ghana". In D. Tefferer & P.G. Altbach, (eds). *African Higher Education: An International Reference Handbook* (pp. 338–349). Bloomington: Indiana University.
- Ghana Education Trust Fund Bill, Act 581 (2000). Assembly Press, Accra.
- "GETFund Provides RMU With 400-bed Students' Hostel". <http://www.modernghana.com/news/399948/1/getfund-provides-rmu-with-400-bed-studentshostel.html>. 7 June 2012. Last updated at 13:02 CET
- "GETFund Presents Four Vehicles to UDS", General News of Friday, 30 Jan. 2004. <http://www.ghanaweb.com/GhanaHomePage/economy/artikel.php?ID=50907>
- Harsch, E. (2000). "Ghana Grapples with University Fees: National Debate Launched Over 'Cost Sharing' Dilemmas". *Africa Recovery*, 14(2), 22.
- Johnstone, B. D. (1998). "Patterns of Finance: Revolution, Evolution, or More of the Same?" *The Review of Higher Education*, 21(3), 245–255.
- Kigotho, W. (2004). "A 'Swarthmore' Grows in Ghana: Unexpected Wealth led an American-Educated Businessman to Start a Small Private College". *The Chronicle of Higher Education*, 51(11), A36.

- Levidow, L. (2001). "Marketing Higher Education: Neo-liberal Strategies and Counter Strategies". *Education and Social Justice*, 3(2), 12–24.
- MOE (1996). Basic Education Sector Improvement Programme Policy Document; Free Compulsory Universal Basic Education by the Year 2005. Accra, Ministry of Education
- Performance Audit Report of the Auditor General on the GETFFund Funded Infrastructural Projects in Public Tertiary Institutions. Ref. No. AG.01/109/Vol.2/67–2013 (Office of the Auditor General), Accra.
- Republic of Ghana (2004). "The Development of Education National Report of Ghana", A Paper presented by the Basic Education Division—Ghana Education Service at the Forty-Seventh Session of the International Conference on Education (ICE), Geneva, Retrieved in October 2014 from <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operation/Gh-2003-096-EN-ADF-BD-WP-REV-AR-EDUCATION-III.PDF>
- Sawyer, A. (2001). "The Students Loan Scheme: Two Decades of Experience in Ghana. National Council for Tertiary Education". *Tertiary Education Series* 1(3), 1–12.
- World Bank/UNESCO (2000). "Higher Education in Developing Countries: Peril and Promise". Washington D.C.: The World Bank. <http://www.tfhe.net/report/downloads/report/whole.pdf>  
[www.spoly.edu.gh/students/halls-of-residency](http://www.spoly.edu.gh/students/halls-of-residency); [uenr.edu.gh/getfund-hostel/](http://uenr.edu.gh/getfund-hostel/)



**The Challenges of Implementing Competency Based Training  
(CBT) in Ghana: The Case of Higher National Diploma (HND)  
Agricultural Engineering Programme**

**Anthony MawutorAtsu**  
*Tamale Polytechnic*

### Abstract

**C**ompetency Based Training (CBT) is a new learning methodology in the Ghanaian context. The CBT curriculum places more emphasis on practical training rather than theory. The project which converted the traditional curriculum of the Agricultural Engineering HND programme in Ghana to a CBT one was a NUFFIC initiative entitled 'Strengthening Agricultural Engineering Education and Training (SAEET) at Wa, Ho, Bolgatanga and Tamale Polytechnics for Rural Development and Poverty Reduction' in 2005. The purpose of this paper is to find out how the project has fared and assess the success and challenges. Questionnaires were administered to the implementers and students of the CBT methodology; the teachers were interviewed, and on spot observations were made during CBT lessons. All the respondents agreed that the CBT curriculum was a good one, but there were challenges such as insufficient training materials for practical training, lack of motivation in the form of incentives for teachers despite the fact that most teachers put in extra hours of instruction. It also came to light that due to lack of training materials, teachers were gradually going back to the traditional curriculum which was defeating the aim of the CBT methodology that was meant to help students develop skills and competencies for the world of work. Recommendations are made for the establishment of a fund solely for CBT, and for teachers to develop innovative ways of conducting practical lessons.

**Keywords:** Competency Based Training, Agricultural Engineering, Learning pathways, HND

### Introduction

**T**he world is in the early stages of a learning revolution. New learning pathways have been forged by intense competition from organisations whose sole purpose is to deliver learning (anytime and anywhere) and by rapid advances in information technology. Forged by expediency, these learning pathways no longer lead automatically to institutions of higher education. Instead they lead most directly to learning opportunities that are intensely focused and are populated by learners and employers who are chiefly interested in the shortest route to results (Voorhees, 2001). Competency based training is a new phenomenon in the Ghanaian context. This is a curriculum where more emphasis is placed on practical training rather than theory. The curriculum emphasises the

delivery of specific tasks (Agodzo and Songsore, 2004). CBT is an approach to vocational education and training that places emphasis on what a person can do in the workplace as a result of completing a programme of training (Keating, M, 2012). CBT is a significant departure from the classroom-based model and focuses on serving students in a more personalised fashion (Irakliotis and Johnstone, 2014). Competency-based education is perceived by some as the answer to the improvement of education and training for the current complex world (Hargraves, G. 1995). Watson (1990) states that the competency-based approach "appears especially useful in training situations where trainees have to attain a small number of specific and job-related competencies".

The project which converted the traditional curriculum of the Agricultural

Engineering HND programme in Polytechnics in Ghana to a CBT one was a NUFFIC initiative entitled “Strengthening Agricultural Engineering Education and Training (SAEET) at Wa, Ho, Bolgatanga and Tamale Polytechnics for Rural Development and Poverty Reduction” in 2005. The Polytechnics have been mandated to emphasise applied technology, thus requiring them to design programmes to reflect the CBT policy objective of government (Agodzo, 2007). The purpose of this paper is to find out how the CBT curriculum for HND Agricultural Engineering in the four Polytechnics running Agricultural Engineering has fared assess the success and challenges and the way forward.

### Methodology

Purposive sampling was used to obtain information from those involved in the implementation of the CBT curriculum for the HND Agricultural Engineering programme in the four Polytechnics. A structured interview was conducted for five teachers from each of the Polytechnics. Interviews were also conducted for five students from each of the Agricultural Engineering Departments to seek their views on the topic. Also, questionnaires were administered to the four Heads of Department of the Agricultural Engineering Departments at the Polytechnics to find out their views about the CBT curriculum, the challenges they are facing, and the future of CBT in Ghana. All the four questionnaires sent to the HODs were received.

Data was analysed and presented using descriptive statistics.

### Results and Discussion

#### *Responses of HODs*

The results in Table 1 show that all the respondents, that is the HODs of the four Polytechnics running the Agricultural Engineering Higher National Diploma (HND) programme (Bolgatanga, Ho, Tamale and Wa Polytechnics) answered ‘yes’ to the question whether the CBT curriculum is a good one. CBT involves the acquisition of knowledge, skills and attitudes in its approach. The positive responses in terms of the success of implementation of CBT curriculum is an indication that the CBT curriculum has seen some success and has prospects. However, the success is not without some challenges as indicated by all respondents (Table 1). This suggests that there were some challenges with the implementation of the CBT curriculum in the Polytechnics in Ghana. The research revealed some of the challenges as: insufficient training materials, which is very important. As stated by Afeti, *et al.* (2003), ‘teaching materials need to be developed so as to make the student able to study on his own. In other words the teaching methodology must promote self directed enquiry’; also, teachers who have been trained to teach the CBT curriculum are moving from the Polytechnics to find greener pastures elsewhere. As stated by Betts and Smith (1998), ‘In organisational life, all innovations foster resistance. Competency-based learning models are certainly no

**Table 1: Responses from the implementers, Heads of Department (HODs)**

<i>Item</i>	<i>Yes</i>		<i>No</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
The CBT curriculum is a good one	4	100	0	0
The practical content is good	4	100	0	0
Has the CBT seen any success in terms of implementation?	4	100	0	0
Are you facing any challenges?	4	100	0	0
Are you using the curriculum as you should?	2	50	2	50
If no, is it because of funds?	2	50	2	50
Do you have enough materials for practicals?	2	50	2	50
Is it easy to teach CBT without practical materials?	0	0	4	100
Is there any innovative way you can teach practicals?	2	50	2	50
The CBT is different from the traditional curriculum	4	100	0	50
Is the government in agreement of the curriculum?	4	100	0	0
Did you face any resistance during the implementation period?				
Is the government supporting the curriculum in terms of providing materials?	0	0	4	100
Do you have over time in CBT teaching?	4	100	0	0
If yes, do you have any incentive for this overtime?	0	0	4	100
Do you think there should be a special fund for CBT?	4	100	0	0
Do you think the CBT curriculum should be scrapped?	0	0	4	100
Should we go back to the traditional syllabus?	1	25	3	75
Do you have a separate budget for CBT?	0	0	4	100
Do you need a separate budget for CBT?	4	100	0	0

exception. Opponents view the movement toward competency-based systems, especially in general education areas, as reductionist and prescriptive’.

On the question of whether the curriculum is being used as it should, 50 per cent of the respondents answered ‘yes’ while the other half answered ‘no’. This

shows that there was no unanimity on this issue, but when questioned further, those who answered yes, said, ‘they are managing to use the curriculum as it should, though they had some material constraints’. There is also the need for the Polytechnics to provide the required materials for training. This means that the

Rectors need to understand CBT and should be willing to support it against all odds, even in the face of financial constraints. The other half who answered 'no' said that they are finding it difficult to teach the CBT as they should, because of lack of funds. Whenever it was time for practical lessons, training materials were not available, so they were tempted to go back to the traditional methodology where theory is dominant. Most often, they use the practical hours for theory lessons. There is therefore the need to allocate enough funds for procurement of CBT practical training materials, so that effective practical training can take place.

When asked whether the CBT curriculum is different from the traditional syllabus, all of the respondents answered in the affirmative. This shows that all the Heads of Department know that the CBT curriculum where emphasis is on practical training is different from the traditional approach where the emphasis is on theory. To the question whether the government supports the implementation of the CBT curriculum or not, all the respondents answered 'yes', because accreditation was given for the implementation of the CBT curriculum which has been in existence in Ghana since 2005, but the curriculum is not getting the needed assistance in terms of provision of training materials.

To the question as to whether or not there were extra hours involved in teaching the CBT curriculum, all the respondents answered in the affirmative. This goes to support the earlier assertion that the CBT curriculum has more contact hours than the traditional curriculum, but

there were no incentives for teachers who do over time. This gives an indication of the need to institute some incentive package for the teachers. In responding to the question of whether there should be a special fund for the CBT curriculum or not, all the respondents answered positively, showing that there is the urgent need to set up a special fund solely for promoting and implementing CBT.

On the question of whether the CBT should be scrapped, all of the respondents answered no, meaning, the curriculum is a good one with prospects and HODs are not willing to scrap it. In answering the question whether there should be a reversal to the traditional curriculum, 75 per cent responded no while 25 per cent responded 'yes'. When asked 'why yes?', the Heads of Department said, since there was not enough funds for training materials, it would be better to reverse to the traditional syllabus. All the respondents said they do not have a separate budget for CBT, suggesting the need for the creation of a separate budget for the CBT curriculum, distinct from the main departmental budget.

### **Responses of CBT Teachers**

During the survey, twenty teachers, that is, five from each of the four Polytechnics running HND Agricultural Engineering programme with CBT curriculum, were interviewed. Their responses were not different from that of the Heads of Department. When asked about their views about the CBT curriculum, almost all of them said the curriculum is a very good one because, during their time as

students, they only saw pictures of tools and equipment in books, but this time round, the students handle the tools and equipment. Furthermore, the CBT students put into practice whatever they learn, leading to a better understanding of the lessons. In some cases, they do practical before coming to the classroom. The students sometime work on live engines. It was added that the CBT curriculum is student centered, so students learn at their own pace and practice the skills needed for a specific job. When asked about the challenges they face as teachers, their responses were the same as those enumerated by the HODs, in particular concerning insufficient funds and materials for practical training. One teacher said that in some cases, the materials were provided very late towards the end of the semester. Sometimes students are sent to private workshops for practical training if the necessary equipment are not available.

In asking the teachers to give their final comments, most of them said it would be very good if a special fund is created for CBT delivery. Another teacher lamented the teaching of mathematics and applied science which is missing totally from the CBT curriculum, and said there is the need to look at that again. Although the practical component is good, the students need to have some minimum background knowledge of mathematics and science in order to be practically proficient.

### **Responses of CBT Students**

In doing the research, students were also

interviewed. Five students from each of the four Polytechnics were interviewed and the following were their responses: When asked about their views on the CBT curriculum, all the students said that it was a very good curriculum which should have come earlier, but better late than never. A student said, it was very helpful because, they did more practical work which helped them to better understand the lessons, and since CBT is student centered they are always considered first, understand one task before moving on to another. Another student said the most interesting part of the curriculum was the Personal Development Plan (PDP) where the student was helped to know his or her strengths and weaknesses, how to improve on weaknesses, setting goals and achieving them, and above all prepare the student for the world of work, in terms of job search, how to prepare a winning Curriculum Vitae (CV), attending interviews and many more. One CBT student also said, the students of other departments which are still running the traditional syllabus do envy them because they do not do as much practical as the CBT students. When asked about the challenges students face, it was revealed that CBT was time consuming, because, after lectures, they come back to do routine and individual studies. They also complained about inadequate training materials. Sometimes students have to buy their own fruits for post harvest practical lessons. In answering the question about the future of the CBT curriculum, one student said he can see a bright future for the curriculum, no doubt about that.

### Conclusion and Recommendations

In conclusion, it was revealed that the CBT curriculum was a good one, but there were some challenges of inadequate supply of training materials. They also suggested the incorporation of Mathematics and Science into the curriculum. It is possible that if the suggested recommendations are implemented, it will go a long way to reduce the numerous challenges facing implementation of the CBT curriculum in Ghana.

The following recommendations are made for stakeholders in CBT and TVET to consider:

- There should be a special fund set up purposely for CBT.
- Teachers should develop innovative ways of teaching practicals, in the absence of training materials (e.g. send students to a functioning workshop for practical lessons).
- Students should be charged a fee towards the procurement of training materials.
- There is the need to review the curriculum to include Science and Mathematics which are currently missing from the curriculum.

### REFERENCES

- Afeti, G. Baffour Ewuah and Budu-Smith, J. (2003). *Baseline Survey for the Introduction of Competency Based Training in Polytechnics*, National Council for Tertiary Education (NCTE)/Japan International Cooperation Agency (JICA).
- Agodzo, S. K., and Songsore, J. (2004). *Competency-Based Learning: The Case of Wa Polytechnic of Ghana*. National Council for Tertiary Education Series Vol. 2(2): 12. ISSN 0855–4722.
- Agodzo, S. K. (2007): *A Discussion of the Programmes and Activities of Polytechnics in Ghana*. Journal of Polytechnics in Ghana (JOPOG), Vol. 2(2). ISSN: 0855–8760.
- Betts, M., and Smith, R. (1998). *Developing the Credit-Based Modular Curriculum in Higher Education*. Bristol, Pa.: Falmer Press.
- Hargraves, G. (1995). The influence of the European communities on the emergence of competence-based models of vocational training in England and Wales. *British Journal of Education and Work*.
- Irakliotis, L., and Johnstone, S. M. (2014). *Competency-Based Education Programs versus Traditional Data Management*. EDUCAUSE, Minnesota.
- Keating, M. (2012). Competency Based Training, Introduction and Definition. <http://www.batchelor.edu.au/biite/wp-content/uploads/2012/06/CBT-Overview.pdf>
- Voorhees, R. A. (2001). *Competency-Based Learning Models: A Necessary Future*. New Directions For Institutional Research, no. 110, Summer. John Wiley & Sons, Inc.
- Watson, A. (1990). *Competency-Based Vocational Education and Self-Paced Learning*. Monograph Series, Technology University: Sydney, Australia. ERIC: ED 324443.

