Restructuring Vocational and Technical Education in Ghana: The Role of Leadership Development

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Abstract

Vocational technical education and training in Ghana is currently undergoing restructuring. Many reforms are in place to improve the quality of provision and learning outcomes to make it more accessible and attractive to all, and to ensure it is relevant and connected to the world of work. The potential success of these reforms will depend largely on the administrators and managers who are responsible for generating ideas and formulating policies ,as well as those responsible for transforming policies into practice. In this regard, effective leadership becomes an important variable that must be considered in the new vocational education environment. There is the need for Ghana to pay attention to providing leadership programs and guidance to current leaders and new and aspiring administrators and managers of vocational technical education. Such leadership development programs should attempt to cultivate in individuals key attributes and characteristics that can predispose successful leadership performance. The availability of leadership development programs and the possibility of being able to acquire certain leadership behaviours and enhance and use certain leadership attributes holds great promise for those participating in and leading vocational educational programs, reform efforts, and the change process in the country.

Key Words: Vocational Technical Education; Vocational reforms; Leadership; Leadership Development; Leadership Development Programs

1. Introduction

Vocational technical education refers to the educational processes that involve the study of technologies and related sciences and the acquisition of practical skills and knowledge aimed at discovering and developing the individual for employment in various sectors of economic and social life. In recent times, the economic, technological, demographic, societal and educational context in which vocational technical education is practised has changed (Moss & Liang, 1990). These changes offer a great challenge to the delivery of vocational technical education. Vocational technical education must respond appropriately to these changes in order to remain relevant in preparing individuals to be able to take advantage of the opportunities for the kind of workforce needed in today's world of work. In this regard, effective leadership becomes an important variable that must be considered in the new vocational education environment.

The challenges facing vocational technical education today include the need for advanced technological skills, collaboration and teamwork, dramatic technological advancement in workplace and changing family structure (McElvey, Hall & Lynch, 1997). Since the 1990`s technological advancements have accelerated beyond expectation. The technology associated with many career fields is constantly changing. Vocational technical education must, therefore, deliver meaningful and relevant programs to learners with future employment as the goal (Bronker, 1993). Again, being technologically educated today is not enough to guarantee job success. The world of work needs experienced, competent and specialized human beings with the ability to learn quickly and understand sophisticated technology. There is the need for vocational technical education to prepare individual with skills necessary to find and maintain employment. This will involve the provision of skills such as critical thinking, problem solving, career development, and lifelong learning (Naylor, 1986). This task is attainable if vocational and technical education in Ghana sees change in terms of structures, programs, processes, and practices in order to be effective in meeting the expectations and challenges in contemporary times.

Over the years a number of jobs have disappeared while others have come into being. The workforce has also changed with a shift from manufacturing to the computer information era (Kappner, 1993). Again, there has been the movement away from manufacturing to service-oriented jobs.

These changes have led to job displacement for some workers. Many of these displaced workers need new skills for new jobs. Without new skills the possibility of obtaining a new job is remote. Kappner stated that many of the newly created jobs are those that require a high level of expertise and technical training. Fortunately**,** many of these jobs are ones in which transfer of learning can be made from the previous work to another. Vocational technical education, therefore, needs to offer a variety of basic skills to trainees. This will enable those trainees to transfer skills from one situation to another when the need occurs.

In the past, skilled workers could expect to work and retire in the same job. Today, in many situations, the same workers must plan to retrain and relocate for new job possibilities several times during their working careers. Workers are expected to remain current with technology and be adaptable in the workforce, and they must also contend with personal demands at home and the society at large (Villafana, 1995). They need tools to enhance their adaptability to the changes in the society and family in order to focus on the job and avoid being preoccupied with problems and pressures of everyday living. Vocational and technical education can offer a source of quality living by teaching job skills, family living skills and individual skills. Villafana also stated that individuals exposed to these skills face the future with more adaptability and hardiness.

Vocational technical education has always been planned and implemented with the external environment in mind. The external environment is comprised of the local community, the industrial community and the world of work at large. The external environment serves as excellent source of employment for product from vocational technical institutions. Vocational technical educators have to work collaboratively with people in government, industry, and in other disciplines. Through collaborative effort, vocational education can become relevant to the needs and interest of the learners and the interests of the society it is to serve (Villafana, 1995).

In this paper, vocational technical education is assessed in general looking at the challenges confronting its delivery. Specifically, however, the vocational technical education system in Ghana is the focus of discussion in the paper. The main objective is to critically analyze the vocational technical educational system in Ghana with the aim of recommending ways of restructuring the educational system for effective teaching and learning experiences.

2. Nature of Vocational Technical Education

As one moves from country to country, vocational technical education is given different names: vocational education and training (VET), technical and vocational education (TVE), technical and vocational education and training (TVET), vocational technical education (VTE), or vocational and technical education and training (VOTEC). They all mean the same thing. Traditionally, vocational technical education refers to studies in area of technology, applied sciences, agriculture, business studies, industrial studies and visual arts. The universal justification for vocational technical education has been to provide occupational skills for employment (Strong, 1990). However, this keeps changing and vocational technical education has been assuming different meanings and purposes due to global demographic, social, technological, economic, and political developments (Pucel, 1990). These developments put pressure on governments and policy makers to keep expanding the purposes and expectations of vocational technical education. Lewin (1997) reported that, there are now five justifications for governments' worldwide to invest in vocational technical education. These are:

1. To increase relevance of schooling by imparting individuals with skills and knowledge necessary for making the individual a productive member of the society.
2. To reduce unemployment as a result of provision of employable skills especially to the youth and those who cannot succeed academically.
3. To increase economic development due to the fact that it improves the quality and skill level of the working population.
4. To reduces poverty by giving the individuals who participate access to higher income occupations.
5. To transform the attitude of people to favour occupations where there are occupational prospects or future.

Various approaches have been adopted around the world to provide vocational technical education. Lillies and Hogan (1983) identified four different approaches to vocational technical education. The first approach is where the whole school curriculum is re-oriented towards providing occupational skills. There is also the parallel system approach, where vocational technical institutions exist alongside a general school system with a conventional academic orientation. This is the most widely used approach.

The third approach is called the core curriculum option approach. This approach provides vocational technical programs within the structure of general school curriculum as a minor but substantial system. The vocational subjects are incorporated into the system as compulsory core subjects or as options. The fourth, is the non-formal system approach which provides opportunities for out of school youth to acquire vocational technical skills, which may be used either to obtained employment in the formal sector or for promotion of self- employment and the development in the informal sector. These approaches are used either individually or in combination, depending on what policy makers think is suitable. From one country to the other, vocational technical education is provided from a broad range of institutions: vocational technical institutions, polytechnic institutions, universities, institutes of technologies, and apprenticeship centres.

3. Challenges Facing Vocational Technical Education

The nature and characteristics of vocational technical education presents unique challenges to institutions and administrators. Vocational technical institutions require workshops, tools, equipment, and materials. Vocational technical subjects require more instruction and practical time than arts and science education. Vocational technical subjects need to be allotted sufficient time to satisfy their practical goals. Methods of assessing vocational technical subjects, especially the form of assessment require the training of assessors who can assess students` competence in the classroom and in the workplace. All these make vocational technical education more expensive than other types on education.

Vocational technical education requires skilled and proficient teachers. Teacher preparation is therefore very important. There is the need for constant in-service training for teachers to upgrade their skills. Teachers need industrial training periodically in order to ensure that they are abreast with technological changes in industry. Vocational technical institutions must also develop strong cooperative linkage between the school and industry in other to design and implement programs that will meet the needs of industry. Another most important challenge facing vocational technical education is the fact that planners have to design programs and train individuals for future jobs on the basis of past and present labour market information. These notwithstanding, the intense need for economic growth and development and international competitiveness associated with the rise of concerns for market- oriented education continue to make vocational technical education essential. This is because a country cannot achieve economic and social development and remain competitive on the global scene without skilled and productive labour force. The biggest challenge facing vocational technical education therefore is how to provide quality training programs that will ensure the development of productive and efficient workforce capable of meeting international competitiveness in spite of all the above.

4. Vocational Technical Education in Ghana

Education in Ghana is believed to be the vehicle for accelerated economic and social growth and development. This has been the philosophy of governments from the colonial era till today. On the accounts of the belief in the benefits of education, successive governments of Ghana have being using education to implement developmental policies and programs. Vocational technical education had been emphasised in Ghana's education system since the colonial era. The purpose then was to train the youth in various trades such as catering, needlework, carpentry, masonry, blacksmithing, and others to become skilled craftsmen and useful citizen (McWilliams & Kwamena-Poh, 1975). Between 1914 and 1927, the Governor of the Gold Coast, Sir Gordon Guggisburg proposed 16 principles for education. This proposal called for the provision of trade school. As at 1922, there had been four trade schools established in the country.

After the country's independence in 1957 however, it was realised that the type and quality of education inherited from the colonial government did not address the country's needs and critical problems. Various review committees emphasised this fact and proposed remedies. Significant among them were the Kwapong Committee Report in 1968 and the Dzobo Report in 1973. These set the pace for reforms in Ghana's education system. However, it was not until 1987 that a new structure and content became operative. Under the 1987 educational reform, the objective has been to ensure that all citizens regardless of gender or social status are functionally literate and productive. The current structure under operation consist of six years of primary school, three years of junior secondary school, making up the basic education level; three years of senior secondary school, forming the secondary level; and two to four years of tertiary level education. Vocational technical education is organised at all the three levels in the country: primary level, secondary level and tertiary level. Three different types of vocational technical education are organised. These are the pre-vocational, vocational and technical.

The pre-vocational type of vocational technical education occurs at the basic school level. The aim here is to expose pupils at the basic education level to a range of practical activities in the vocational field in order to make them familiar with, and stimulate their interest in vocational subjects; This gives pupils at this level equal opportunity to choose their future careers in either the vocational technical or general field. Also, it equips them with basic occupational skills that will enable those who do not seek further education to enter into gainful paid or self-employment in industry, agriculture and commerce. Graduate from the basic level could also enter the informal sector for apprenticeship training. Currently, there are 6,418 junior high schools in the country. All pupils in these institutions are to take courses in both pre-vocational and pre-technical subjects (Government of Ghana, 2007).

At the secondary level, training is vocational in nature. Ghana uses a combination of two approaches to organise vocational technical education at this level:

1. There is the parallel system where vocational technical institutions exist alongside the senior high school system. Graduates from the basic level can enter the technical institutes or the senior high schools. In the technical institutes, the aim is to train and impart practical training and skills leading to the provision of artisans, craftsmen, technicians, and other middle -level personnel in commerce, agriculture, technology, science, and industry.
2. The core curriculum approach is also used in the conventional senior high school system. For those who enter the senior high school after the basic level education, there exist a core curriculum and a cluster of elective subjects, which could be vocational technical in nature. Any student interested in a career in vocational technical could select at least three elective subjects in any particular vocational technical field, which the individual will have to study in addition to the four core liberal subjects.

At the secondary level, vocational technical education aims at equipping young men and women with relevant productive skill training that will enable them fulfil the country's manpower needs in the field of technology, industry, commerce, agriculture, and business (Baiden, 1996). There are 503 senior high schools, 23 public technical, and 29 vocational institutions in the country that are involved with the delivery of vocational technical education at the secondary level. These are supported by about 700 vocational technical intuitions, which are operated by individuals, religious bodies, and non-governmental organizations; and a vibrant but unregulated apprenticeship system.

Vocational technical education at the tertiary level is technical in nature. It is organised within post secondary institutions or tertiary institutions. This is the highest level of vocational technical education in the country. The Universities, Polytechnics, and other post-secondary pre-service training institutions, under sector Ministries provide it. The other post–secondary institutions include: Health Training Institutes, Nursing Training Colleges, Agricultural Colleges, Schools of Forestry, Teacher Training Colleges, Institute of Journalism, School of Communication, and Institute of Professional Studies. Courses generally last between two to four years and result in the awarding of a certificate, diploma or a degree. Vocational technical education at the tertiary level provides personnel with the technical knowledge and vocational skills necessary for agricultural, industrial, commercial, scientific, technological, and economic development; while at the same time, pays attention to environmental issues. It aims at training human resources to match supply of skilled labour with demand.

Vocational technical education systems in Ghana continuous to undergo reform designed to build on the inherent strengths of the system. Recent major reform concern the setting up of national training bodies, and the enactment of laws to strengthen national vocational training programmes. Government Ghana has recently passed an Act of Parliament that establishes a Council for Technical and Vocational Education and Training (COTVET) which will have overall responsibility for skills development in the country.

5. Challenges Facing Vocational Technical Education In Ghana

Vocational technical education in Ghana faces a lot of challenges as in other countries. In 2003, the Government of Ghana commissioned a body to review the general educational system for strategic planning for the year 2003-2015. The committee reported a serious deficiency in the present public educational system as the neglect of the vocational technical education sub-sector (Government of Ghana, 2003). The report stated that, the reforms introduced in 1987 ignored completely the vocational technical education sub-sector.

This has resulted in poor condition of the infrastructure and training facilities of the institutions, inadequate number of institutions, and outdated training content. Consequently, the quantity and quality of the stock of trained national workforce have been affected. The committee also found out that while the government manages and resources 500 and over senior high schools in the country, only 21 technical and 29 vocational institutions are managed and resourced by both the Ministry of Education and the Ministry of Manpower Development and Employment, the two main bodies responsible for education and training in the country. The report further mentioned that in spite of the fact that vocational technical education is considered more expensive as compared to general education, the Ministry of Education spends only one percent of its annual budget, and the Ministry of Manpower Development and Employments spends 12% of its budget on vocational technical education sub-sector. The government has no significant involvement in apprenticeship training either. Allsop, Attah, Cammack & Woods, 2010 reported that government's budget allocation grew to 2.4% in 2007 and was 1.9% in 2008.

Another challenge facing vocational technical education in Ghana is perception that it is a route for those who are not able to function within an academic setting; this perception is compounded by a lack of progression routes from vocational technical education into ,higher education (African Union, In fact this negative perceptions are not limited to those who have little understanding of vocational education . In 2002, a survey of public TVET teachers found that none of the 87 respondents wanted their own children to study TVET programmes (Anamuah-Mensah, 2004) . Aside inadequate financing and negative perceptions, the socio-economic environment and the contextual framework within which vocational education is delivered in Ghana is characterised in general by other factors such as huge numbers of poorly educated, unskilled and unemployed youth, uncoordinated, unregulated and fragmented delivery systems, low quality gender and economic inequities, weak monitoring and evaluation mechanisms, and poor management and ill-adapted organisational structures (African Union, 2007).

To address the numerous challenges facing vocational technical education in the country, both Ghana's Vision 2020 and the Education Strategic Plan, 2003-2015 recognise the need for urgent action. Some of the priorities identified were:

1. Government to make a major shift in its state education policy in favour of the vocational technical education, in order to build the nation's stock of human capital and give employable skills to the numerous youth all over the country.
2. All Technical and Vocational Institutes to be rehabilitated and upgraded as a matter of urgency to the level of the model institutions-Accra Technical Training Centre and Biriwa Vocational Institute. Additionally, new vocational technical institutions to be built in all Region within the next 10 years
3. Vocational technical institutions to review and update programs to bring them in line with modern trends and practices in industry. The ultimate aim is to make vocational technical education demand-driven and relevant to the needs of Ghanaian industries.
4. Government to formalise Apprenticeship Training, and establish a National Apprenticeship Training Board with membership from various sectors of the economy, to regulate apprentice-training in terms of registration of apprenticeship providers, content, duration of training programs, and certification.
5. A National Council for Technical and Vocational Education and Training (NCTVET) to be established under the Office of the President, to co-ordinate pre-tertiary vocational technical education in the country; since there are several ministries and private sector organizations which provide vocational technical education independently of each other.
6. A National Policy Framework for a nationally coordinated vocational technical education system be formulated.
7. Technical Teacher Training facilities in the country be expanded to cater for the training of more technical and vocational teachers.
8. Government to organise in-service courses for teachers in both public and private vocational technical institutions to improve upon their pedagogical skills.
9. Improve the linkage that exists between vocational technical institutions and industries in order to bring training more in line with the requirements of national industry and commerce.
10. Strengthen leadership and management capacity at both national and institutional levels.

6. The importance of Leadership in Vocational Technical Education in Ghana

Inferring from the challenges above, one cannot but conclude that effective leadership will be a critical success factor and should be one of Ghana's main priorities to revitalizing vocational technical education. The right things to do have been identified, what is left is doing things right. With effective and efficient leadership, the right policies could be formulated, relevant goals could be set, strategic programs could be implemented, and effective measure could be put in place to monitor and evaluate programs to ensure that their expected goals will be achieved. This is essential in view of the enormous importance of vocational technical education to the ultimate survival and competitiveness of the Ghanaian economy on the global stage.

As leadership and leadership development became an important and long-standing concern in many disciplines and fields of practice, vocational and technical education was not an exception (Wonacott, 2001). The concern about leadership and leadership development in vocational technical education arise from the fact that there are series of changes that are rapidly and significantly altering the educational and economic environment in which vocational technical education exists. The nature of work is changing; technology keeps changing rapidly; there is increased public demand on vocational technical education system to produce individuals with more opportunities for present and future prospects in multiple industries, and offer the individuals with enough skills for personal development and success in the changing society (Moss & Liang, 1990).

Based on findings of studies done in other fields that leadership is critical to organizations in unsuitable situations where changes in the environment makes the usual ways of conducting the affairs of the organization unsuitable and irrelevant, Moss and Jensrud (1994) suggested that vocational technical education must begin its own transformation if it is to remain a viable form of education in the new environment. They argued that, as the context in which it is practised changes, vocational technical education needs leaders who can chart new directions and influence others to believe and follow. This clearly emphasises the need for the restructuring of vocational and technical educational leadership development in Ghana.

In fact**,** the ability of vocational technical education to adapt constructively to its changing context resides to a large extent on the quality of leadership that is found in the field (Daughtry & Finch, 1997). Lutz (1986) also pointed out that because of the vast changes in human expectations and needs, as well as the rapidly changing technology, vocational technical education requires efficient and effective leaders as never before. Moreover, many people in the area of vocational technical education have come to realize that vocational technical education urgently needs astute and creative leaders at all levels in order to adapt to changes. It is the leaders who will provide the needed stimulus for the change (Bennis & Nanus, 1985).

7. *Conclusion and Recommendations*

Ghana's vocational and technical education system requires leaders who understand the broad scope of vocational technical education. They must be skilled communicators, they must move easily among people from government, education, and industry to establish partnerships that will enhance both the quality and quantity of TVET outcomes . They must be shareholders in the unifying vision. They must be able to links the internal world of TVET and the external world of the labour market. The system requires good quality leaders who can exert influence , set goals, prioritize the course for action, create new ideas, visions and policies and provide direction to ensure that the reforms lead to effective delivery of viable vocational and technical education in the country.

There is therefore the need to provide the current administrators and managers as well as new and aspiring leaders with programs and guidance. Finch, Gregson, and Faulkner (1989) reported that any program designed to prepare vocational technical administrators and managers should attempt to cultivate in individuals key attributes and characteristics that can predispose successful leadership performance. The available of leadership development programs and the possibility of being able to acquire certain leadership behaviours and enhance and use certain leadership attributes holds great promise for those participating in and leading vocational educational programs, reform efforts, and the change process in the country.

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