

Challenges Facing Technical And Vocational Education In Ghana

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Abstract : Technical and vocational education and training (TVET) in Ghana is facing a number of challenges. The problems ranging from the limited number of technical institutes available in the country, lack of facilities and materials for training students, inadequate technical teachers or facilitators, limited number of training institutions for technical teachers and difficulty in career progression to the negative public attitudes and perceptions towards technical and vocational education and training in Ghana. In this paper, these challenges confronting TVET and the pertinent issues are discussed with the aim of recommending ways of addressing them.

Index Terms : Technical and Vocational Education and Training (TVET), College of Technology Education (COTE), Ghana Institute of Technology (GIT) and Technical Institute (TI)

1 INTRODUCTION

It is a fact that no country can develop without quality technical and vocational education and training (TVET) sector. Over the years, three different forms of TVET have evolved in Ghana [4]. These comprise the formal system, the non-formal system and the informal system. The formal system includes primarily time-bound, institution-based, graded, and certified training. It is offered by institutions such as the NVTI (National Vocational Training Institute), Ghana Education Service (GES) technical institutes, youth training institutions and a variety of private vocational training schools. Non-formal TVET typically has structured learning objectives, learning times and learning support but will normally not lead to certification. Workshops, short courses and seminars are typical examples of non-formal learning. The informal system includes a wide range of flexible programmes and processes by which individuals acquire skills and knowledge from designated training venues outside of the home and, in some cases, at home. Traditional apprenticeships make up the majority of the informal sector. Technical vocational education affords an individual the chance to acquire practical knowledge and requisite skill training needed in the job market or for immediate self employment [9]. Almost all the technical skills we need to develop as a country are run by the technical and vocational schools across the country. Some of the courses mounted at the technical institutes are motor vehicle mechanics, electrical works, welding and fabrication, carpentry and joinery, block laying and concreting or masonry, plumbing, tailoring and dressmaking, just to mention a few [4].

Lewi [10] reported that there are five justifications for governments' worldwide to focus and invest in technical and vocational education and training TVET. 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 reduce 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 for future.

However, TVET in Ghana faces a lot of challenges. The problems are so serious that a survey in 2002 of public TVET teachers found that none of the 87 respondents wanted their own children to study TVET programmes [1]. Because of these problems, government of Ghana through an Act of Parliament in 2006 established a Council for Technical and Vocational Education and Training (COTVET) which will have overall responsibility for skills development in the country, co-ordinate and oversee all aspects of technical and vocational education and training in the country. Like a policy maker puts it "I think TVET has a future, provided COTVET lives up to its mandate [4]."

2 LIST OF PROBLEMS IN TVET IN GHANA

Technical education in Ghana is bedeviled with problems. Some of these problems are

- limited number of technical institutes,
- lack of facilities and materials for training students,
- inadequate technical teachers or facilitators,
- limited number of training institutions for technical teachers
- and difficulty in career progression.

There are other challenges enumerated by Atchoarena and Delluc [2] which include

- mismatch between acquired skills and market needs,

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- widespread concern about poor quality training and training environments, and
- negative public attitudes and perceptions regarding technical and vocational education and training.

3 DISCUSSION OF PROBLEMS FACING TVET IN GHANA

The total number of technical institutes (TI) available in Ghana is woefully inadequate and statistics by Ministry of education [11] indicate that currently they are about twenty one (21). The regional breakdown of technical institutes is very worrying compared to the number of senior high schools (SHS) available in the regions. For example, Greater Accra and Volta regions can only boast of four (4) and five (5) public technical institutes as against 54 and 75 senior high schools respectively. These numbers are woefully inadequate, looking at the population and the number of junior high schools (JHS) graduates in these regions. The existing technical institutes lack facilities and materials for training students in the various vocations. Technical school is a place to acquire practical knowledge and hands-on experience in addition to the basic theory in the chosen field of specialization. And if the training materials or the tools needed to achieve these are lacking or inadequate then the products of these institutes will have deficiencies in their areas of specialization. This will eventually prevent them from practicing well on their own and working effectively in the industries. The teachers or the facilitators in these institutes are not enough and when they are more, majority of them have shortfalls in practical experience. Some of them have not worked in the industries to enrich their skills before coming to the classroom and therefore find it very difficult to deliver or make the necessary impact as far as acquisition of practical skills are concerned. Formerly, some institutions are established to train technical teachers only, but now it is only the Kumasi campus of the University of Education, Winneba (UEW-K) that is training pure technical graduates to become technical teachers in their areas of specialization. The rest of the technical training colleges train technical teachers from those who have completed senior high or finished secondary technical schools and not from pure technical institutes. These categories of technical teachers are trained to teach pre-technical skills or Basic Design and Technology (BDT) in the junior high schools (JHS) and even if these technical teachers progress into the university, they don't teach in pure technical institutes since they are weak in both theory and practical which is the main focus of technical and vocational education and training. The biggest challenge facing technical education in Ghana is the progression of students from one level to another vis-à-vis their counterparts from the senior high schools. After three years in the technical institute, one has to pursue advanced craft course or technicians part 1& 2 or 3 in the polytechnic before offering the Higher National Diploma (HND) in the same polytechnic. Whilst their colleagues from the senior high or secondary schools proceed to offer the HND. For a technical student acquiring degree in Ghana the least talk about the better. One has to add a pass in English language and Mathematics from "O" level, SSCE or WASSCE to the plenty 'degrees' one acquired in the polytechnic before qualifying to do a degree course in the University specifically at the Kwame Nkrumah University of Science and Technology, Kumasi (KNUST). Even some polytechnics started requesting for credit in English and Mathematics

before technicians can be admitted into the HND programme; meanwhile it is the institution that is established to train technical students. This puts technical students at a disadvantaged position and only few people were able to make it to the top. But the rhetoric question is what about those colleagues who are better than those people when it comes to their area of specialization. The reality on the ground is that those who made it to the university with pure technical background perform very well in the job market as far as their area of specialization is concerned. When even the HND holders are given the chance to read the degree or do the top-up, pure technical graduates holding the HND are excluded due to insistence by the universities on English language and Mathematics. The question is, as a country, is it the English language and the Mathematics we are looking for or the advancement in science and technology? Hitherto, technical students have been studying English Language, Mathematics and Science in the various schools. The only problem is that they don't write it as part of their final exams. The fact also remains that the medium of instruction in the technical and vocational schools is English Language and the examinations are written using lingua franca. So, it is not clear the reason why technical graduates are expected to write English and Mathematics before climbing the educational ladder knowing very well that their direction is known and their area of specialization is defined from the scratch. Whilst countries in Asia are making inroads in Science, Engineering and Technology because they use their native languages, in Ghana English and Mathematics are being used to impede the progress of those who will do the re-engineering. To partly solve the English and Mathematics problem, the National Board for Professional and Technician Examinations (NABPTEx) has designed a programme that create the opportunity for students with technical and vocational educational background to pursue one-year access course in English Language, Mathematics and Science. The final examination will be conducted by NABPTEx after which successful students shall proceed to enroll in the Higher National Diploma (HND) programme. For a candidate to qualify to be admitted to the HND programme he or she must obtain a minimum pass of 50% in each of the three subjects namely, English language, Mathematics and Science. This means that a successful candidate will in effect use four (4) years to acquire a certificate in HND after technical education. What happens to the unsuccessful candidates? What other alternatives are available for them? Does it mean they can't excel in their various vocations? The Council for Technical and Vocational Education and Training (COTVET) of the Ministry of Education now wants technical students to write English language, Mathematics, Science and Social studies in addition to their trade areas so they can be admitted into the HND programme straight. The trade area, we all know, is conducted by the Technical Examination Unit of the Ghana Education Service. The core subjects to be examined by NABPTEx. Though with this combination, they cannot still qualify for the universities, one because of the body conducting the core subjects and secondly because of the elective courses being run in the technical schools. It is a laudable idea. But the bigger question is what about those who cannot and will never pass the core subjects? What provision have we made for them to progress up to Doctor of Technology (D.Tech) level without English and Mathematics being a barrier?

4 CONCLUSION AND RECOMMENDATIONS

It is about time the COTVET sat down with the stakeholders in technical education and in particular, NABPTEX, Technical Examinations Unit of GES, WAEC, Principals of Technical institutes, Directors of NVTI Centres, Rectors of Polytechnics in Ghana, Vice-Chancellors of Technology Universities in Ghana, professional bodies (Ghana Institution of Engineers, Ghana Institute of Surveyors, etc.), professionals from the industries, educationists, policy makers and civil society groups to look at this problem of progression and cure it once and for all so that Ghana will have a national policy on technical and vocational education. They should take cue from other countries especially Australia and study how their technical and vocational education is run. Regarding the limited number of technical institutes in Ghana, the government should build more technical institutes in the country at least twenty (20). Each of the ten regions should have one. The other ten dispersed in the regions looking at the population and economic activities in the regions. This is about ten percent (10%) of the new 200 community senior high schools the government intends to build in the country. This will be solving our unemployment problems in the country since the products of technical schools have better employment opportunities than their counterparts from the senior high schools [8]. To whip up interest among students and the public towards technical education, technical education should be progressively free. Just as we have colleges of education, nurses training college etc. which take students after secondary school and later on post them to work in the public sector, we should have something like Ghana Institute of Technology (GIT) that will absorb technical institute graduates straight from school. The GIT should be specialized institution providing training in all technical areas or vocations. Students from GIT after training should be absorbed by the public sector like Ghana Highway Authority, VRA, ECG, VALCO, TOR, Ghana Water Works etc. On the issue of lack of training colleges for technical teachers, the government as a matter of urgency must establish one College of Technology Education (COTE) where students from technical institutes will be trained and take up teaching as their career or profession. The college should be four years with two years in the industry and two years in the classroom. It should be IN-OUT-OUT-IN. According to Anamual-Mensah [1] the negative public attitudes and perceptions towards technical and vocational education and training TVET can be improved by government promotion of TVET as an alternative route for school leavers, media promotion of the role of TVET in wealth creation, the provision of awareness weeks, exhibitions and open days by TVET institutions and improved salaries for TVET graduates.

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