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Challenges TVET Graduates Face During School to Work Transition in Selected Technical Universities in Ghana

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ABSTRACT

Technical Vocational Education and Training (TVET) has fundamentally been the avenue for creating technically skilled graduates whose skills were meant to have been fused into Ghana's industrial sector to improve and ensure performance at the highest level. For this reason, technical universities have been established in each of the ten (10) regions to provide targeted skilled education to students. Unfortunately, certain challenges have hindered the ability of these technical universities to live up to its core function in Ghana by preparing students to take up entrepreneurship activities. The crust of the study was to identify the transitional challenges and suggest actionable strategies that can be adopted to improve the fortunes of technical universities towards creating a more sustainable education system that can make School-work transition easier for graduates. The study objectives covered from identifying the transitional challenges, strategies that can be adopted to remedy these challenges and the benefits of TVET as a strategic means of reducing the rate of graduate unemployment. The study adopted a mixed-method research design and used both qualitative and quantitative methods to collect primary data using questionnaires and interviews. Even though other challenges were identified, the findings revealed the most peculiar challenge is the lack of supportive systems during transition and the disconnection between curriculum and business needs. The study therefore recommends government to formulate policies for the smooth transition of these graduates, employ professionals and develop work-based courses to enhance the attractiveness of Technical universities.

Keywords: Employment, Strategies, transition, graduate, school-work.

1. Introduction

Education is recognized by most countries as a tool to accelerate economic growth, development and a means of bridging the gap between the rich and the deprived. Economic growth is the qualitative change and reorganization in a country's economy in connection with technological and social progress (World Bank, 2004). For Sen (1999) overpowering deprivations is key to growth. The deprivations can be overawed by gaining employment and by accessing the skills that Technical Vocational Education and Training (TVET) provides but not restricted to unemployment but also starvation, famine, unfamiliarity, an unsustainable economic life, obstructions to economic fulfilment

by majority of the young people in most emerging countries like Ghana where opportunities are extremely limited.

The importance of TVET in nation building especially in emerging countries like Ghana cannot be over-emphasized. TVET has been acknowledged as constituting a vital fragment of Ghana's educational system and human resource development initiative for creating the necessary skilled manpower needs for Ghana's overall development (Baah-Wiredu, 2008). It cannot be debated that, TVET is a major avenue for industrialized growth, economic and social growth of any country. Baah-Wiredu (2008) contends it is TVET that creates the acute mass of the essential skilled, technical and expert manpower needs for Ghana's development. It also serves as an alternative form of tertiary education to other students who for one reason or the other cannot get access to senior high schools or the universities.

Technical and Vocational Education and Training (TVET) should therefore be an area of paramount importance to countries as it enables youths to acquire employable skills (both human and physical) needed for economic development. In this paper, the use of the term "TVET" trails the 1997 UNESCO International Standard Classification of Education meaning education and training to "acquire the practical skills, know-how and understanding the necessity for employment in a particular occupation, trade or group of occupations or trades" (UNESCO, 2009, 2). TVET has been accepted the world over as one of the utmost important means of providing employment but unfortunately Ghana like many other developing countries does not invest in it to a significant degree.

In Ghana, the TVET institutions with Technical Universities inclusive still face so many challenges such as lowly infrastructure and out-dated materials and curriculums, and many others. Some of the other challenges that have an inadequate number of technical universities have been identified as inadequate facilities and technical teachers, materials for training students and difficulty in career progress relatively to employment (Morris, 2013). Even though the educational sector in Ghana has over the years suffered as an outcome of some of the above-mentioned challenges, the TVET continuous to be the most affected (Government of Ghana, 2003). These challenges which have seemed to be going on for long have in no uncertain terms affected negatively the smooth development of TVET. Other countries like Germany, Switzerland, Japan and China developed partly because of their good educational system, in particular TVET (Seng, 2004). However they have their unique challenges and their efforts towards making TVET better have yielded good results.

This is therefore to mean that Ghana has to pay more to invest in and give added attention to TVET to achieve the full benefits thereof that other countries have achieved.

From the past years, the Government of Ghana has shown little or no interest in this sector for one reason or the other. Ghana's TVET budget allocation went down from 2.4% in 2007 to 1.9% in 2008 (UNESCO, 2010). It clearly demonstrates that this percentage of allocation is insufficient to make a significant change in this sector of education, this led to the youth (amid the ages of 15-24) unemployment rate in Ghana being 25.6%, twice that of the age 25-44 age group also three times of the 45-64 age group, (Mantar, 2013).

Little studies have been done on this issue probably because the general perception is that TVET is the education system that provides its graduates with automatic jobs. Most studies focused on the necessity for all inclusive career guidance of students; commitment of industries towards undergraduate training; good connection between schools and the workplaces; adequate duration for industrial training (Offiong, Akpan & Usoro, Ideh 2013).

Moreover, the poor transition from the Universities to work by the youth has a huge group of Technical university graduates, who are mostly teenagers from very poor backgrounds. This is established by Palmer (2005) in his work 'Decent Livelihood in Ghanaian Rural Informal Economy'. This tendency of affairs may propose that there is a gap in the school to work transition of these graduates from the technical universities. Thus this study would, therefore, attempt to identify the challenges TVET graduates experience and the strategies that will help for a smooth school to work transition.

The study upon the identification of the challenges affecting TVET graduates in Ghana would go ahead to suggest some measures that can help to mitigate the effects and solutions of these challenges whiles the ultimate goal of the study which is extremely significant is to create the awareness on how TVET can be used as a poverty reduction tool to reduce unemployment in Ghana.

In the following, exiting relevant literature was reviewed. And then the methodology used, followed by the findings and discussion, drawing conclusion and putting forth recommendations.

2. Literature review

2.1 Technical University and TVET development in Ghana

Technical Vocational Education and Training (TVET) gained prominence in the years immediately before and after independence in 1957 as an alternative education that would enable young people with the requisite skills that would make it stress-free for them to be gainfully employed. Before 1956, four Government Technical Institutes namely Kumasi Technical Institute, Accra Technical Institute, Takoradi Technical Institute and Tarkwa Technical Institute (now University of Mines and Technology) had been established. In September 1960, the Technical Teachers Training College (now University of Education, Winneba – Kumasi Campus) was established to ensure a stable supply of trained technical teachers for the Technical Vocational Education and Training system.

The pioneers of the education reform programme which started in 1987 realized that if Ghana was to develop technologically and economically, the education should have the function of teaching the population the skills that are required to produce the goods and services needed by the economy and not merely one for white collar jobs. According to the Technical and Vocational Education division of the Ghana Education Service Report (1999), the attempts to "vocationalise" education was led to the include the curriculum of Basic and Second Cycle schools subjects such as Woodwork, Block Laying, Technical Drawing, Cookery and many others.

Unfortunately, instead of viewing the introduction of these technical and vocational subjects into the school curriculum as being 'an exposure' at the Junior Secondary School (JSS) level and "an introductory" at the Senior High School (SHS) level, the innovation was misconceived as being able to make Junior High School and SHS students acquire technical and vocational knowledge and skills which will enable them to become self-employed. However, the technical institutes and their programmes were left out to the extent that the Technical and Vocational Education Division was considered irrelevant and dissolved in 1992, and reduced to a unit under the Director-General's Office. After the dissolution of the Division, financial support for TVET under the GES declined drastically, causing the prevailing poor conditions in the technical institutes to worsen further in terms of equipment, infrastructure and others. This contributed to the loss of interest in technical and vocational education. The Division of TVET was however restored to full Directorate in 1994.

At the post-secondary level, accessibility is important in terms of education in Ghana, which formed the grounds why polytechnics located wisely across the nation by siting an institution in each of the ten regions. These institutions were titled with their regional capitals, with names like the Accra Polytechnic in Accra, the regional capital of Greater Accra Region, and Ho Polytechnic in Ho, the capital of Volta Region. These institutions went through a great amendment in 2013, when the state thought it wise to switch polytechnics into universities and created a law to support the poly-university transition.

Technical Committee on the transformation of polytechnics to assume university stature declared its choice to change all polytechnics into technical universities starting 2016. According to the Committee, the reason for the change is to intensify the bridged gap between academia and industry. It is also directed towards equipping students in Ghana with employable skills for economic transformation.

Adei (2016), argued that the decision is wrong and that the reason why the polytechnics want to be elevated into Technical Universities is that their salaries do not match up to that of the universities So that when they are changed to Universities then their salaries must be increased. In the same vein, Ebo (2016) mentioned that the decision of government to upgrade the 10 polytechnics into technical universities would increase the unemployment rate if the focus is on humanities and social sciences because they now do more of the options in the social sciences and humanities which constitute 65% in their course schedule whilst overlooking the core directive of its being thus Technical, Vocational and training. This, he said constitutes only 35% of its course schedule. Both Concurring to the idea that Polytechnics even when converted into Technical Universities may fail if government fails to provide the needed resources to run the schools which seem to be neglected for a long time.

Additionally, Geh (2017) found that the conversion of polytechnics to technical universities; the subject of equality between polytechnics and traditional public universities has ever been present. While lecturers were questioning conditions of service, the worry of students was job placement after graduation. From the experience of some people, it appeared as though students graduate from the

traditional universities were seen as "more suited" with their qualifications for jobs and as such were paid much more than their colleagues from the polytechnics.

Indeed the migration attracted several reactions across the country, those who were 'against' the move were of the view that the initiative was ill-timed, inadequate resources and not well thought out whiles others applaud for such initiative. Currently, the government has elevated eight of the ten polytechnics to degree awarding universities in Ghana which commenced during the 2016/17 academic session. The two institutions left will be assessed again sometime in the future and upgraded to university status subsequently when they meet the standards and requirements (Geh, 2017).

The eight institutions that have already been elevated to the status of technical university are Accra Technical University, Kumasi Technical University, Takoradi Technical University, Ho Technical University, Cape Coast Technical University, Tamale Technical University, Sunyani Technical, and Koforidua Technical University. The institutions thus far to be upgraded to technical university are Wa Polytechnic and Bolgatanga Polytechnic.

2.2 The role of the Government in Financing Ghana's TVET-Technical University

Ghana on the order hand has not been very successful in effectively administering its TVET Technical Universities. Cost constraints have hindered the progress of TVET in Ghana (Aryeetey, Doh & Andoh, 2011). Ghana's TVET budget allocation rests at around 1% of the education budget, it grew to 2.4% in 2007 and was 1.9% in 2008 (Aryeetey, Doh & Andoh, 2011). Sustainable finance is needed to develop TVET infrastructure and services in other for it to translate into economic growth.

In the book "financing vocational education and Training in sub-Saharan Africa" the author Ziderman (2003) in sub-Saharan Africa, the state is a major supporter of reemployment training; public training institutions provide courses free or at purely minimal fees. He goes on to give seven arguments that may justify government's role in financing TVET. The seven arguments are:

- Externalities
- Property rights in human capital within the enterprise
- Market imperfections
- Inadequate enterprise training
- Weak private training institutional capacity
- Parity of treatment between trainees and students
- Neglect of disadvantaged groups.

Contrarily Bennell's and Segerstrom's "Vocational Education and Training in Developing Countries: Has the World Bank Got It Right?" argues that funding and provision of VET is best left to individuals, enterprises, and private sector training institutions with government intervention kept to a minimum. This is reasonable on the grounds that demand-driven training systems with private sector provision have out-performed supply driven systems that rely mostly on public sector training institutions. The poor enactment of a sizeable section of Bank-funded TVET projects (particularly in sub-Saharan Africa) during the 1970s and 1980s was also a key feature in shifting opinion in the Bank against public sector TVET provision (Bennell & Segerstrom, 1998). Private firms are mostly driven by profit. Therefore, their suggestion will not make much sense, especially in the Ghanaian context because not every youth will afford to pay a higher fee that comes with private TVET. Moreover, the number of private TVET institutions in Ghana reduced from 111 in 2011/12 to 74 in 2012/13 according to the GES final report 2013 probably due to high costs of maintenance.

2.3 Transition of graduates students to world of work

A population of over 26 million and a GDP of 1,550USD per capita, Ghana have a 56.6% unemployment degree among the youth. This state of affairs is partly because of a troublesome transition for graduates from the university to the task market.

Adding that, the Country needs to form a local skilled workforce urgently, to be able to respond to the rising demand for new infrastructures (Caggiano, 2017). This is clear evidence and the very reason why the transition stage should not be overlooked.

The key parts of the sleek transition of faculty schoolroom theories to figure observe in associate occupation of labor to be per Scott (2014) are:

i. Collaborative partnership

ii. Integrated curriculum
iii. Technological advances
iv. Adaptable friendly workers (industry based supervisor)
v. Comprehensive career guidance
vi. Work-based learning; and
vii. A step-by-step approach.

These practices and key features of school-to-work transition use collaborative resources, relationships, and activities to build alternatives to classroom theoretical instruction that would develop a student towards manpower needs of the 21st century workplaces. These best practices amongst others may include: reformation in vocationalization, school and workplace collaboration can contribute to supporting newly developed educational innovation (Ikeoji & Agwubike, 2006) over time as well as create avenues for financing TVET on specific research into job task as required by aiding industries to meet a given need or upgrading of the workplace.

In so doing, industries can develop school workplace collaboration relationship of the industry that would enhance a sustainable workforce that would meet the industries manpower needs. To this finish, Offiong, Akpan & Usoro (2013) suggested funding of TVET- Technical Universities through endowment, partnering with companies and non-governmental organizations, establishing of internally generated revenue projects, parent Teacher Associations, and Alumni Associations.

School to Workplace collaboration can result in significant changes to traditional curriculum and instructional practices. Employers of labour play a key role in making certain this transformation of scholars from school-to-workplace upon graduation (Obioma, 2015; Scott, 2014). In the Contextualization of Vocationalization, Scott (2014) disclosed that workplace learning, competency-based curriculum, occupation to job-task analysis orientation education is some forms of transformation that can be adapted into TVET curriculum in Ghana.

Although workplace and school collaboration has been a survival to aid a smooth TVET school-workplace transition, it has failed to link the cognitive, affective and the psychomotor changing aspects of TVET curricula to meet the recent trends of the industry and as such, TVET students find it tough to have an even transition from the school to world of work. In spite of the experience of TVET students to SIWES (Student Industrial Work Report Scheme), there exist skill gaps between the request for employment (manpower needs) and the level of educational preparation of graduates which may be linked to some inadequacies of workplace-school industry collaboration which continue to widen the gap between practice and theory.

Some of the issues in TVET school-work transition according to Ideh (2013) are duration of industrial attachment being insufficient for the hands-on and relevant experience and added that students were occasionally placed on jobs other than the ones in which they were enrolled in school, conflict often arise between what was taught in school and what is actually done on the job students oftentimes did not receive training throughout the period of industrial training. Thus, there is a need for collaboration for students to know what they hope to acquire and enough time for practise at the industry.

The need for workplace to school collaboration is more even by the very fact that accessible literature evidences show that TVET establishment and their programmes are ineffective and of a low standard. Okeshola (2012) asserted that there are several issues facing TVET in developing countries, the greatest of which is inadequate funding by the State, Federal and Local governments, poor school to work transition curriculum, inadequate facilities in our training institutions (Obioma, 2015). Lack of comprehensive career guidance of students, lack of commitment of industries towards undergraduate training, poor working relationship between schools and the workplaces (Offiong, Akpan & Usoro, 2013), lack of awareness of new technological innovations in the industries, overemphasis on theory (certifications) at the expense of work experience training (practice)' poor planning and inaccurate research data, teacher incompetence (poor material and resources), inconsistent monitoring and evaluation; and the inability of TVET institutions to develop other forms of workplace collaboration that will integrate theory and practice (Olorufemi & Ashaolu, 2008). Yusuf & Soyemi (2012) opines that most formal TVET institutions in developing countries are currently operating in an environment that is characterized by low-quality training and mismatch between training and labour market skill demand. Most studies focused on the necessity for all inclusive career guidance of students to facilitate their

decision making; commitment of industries towards undergraduate training; good connection between schools and the workplaces; adequate duration for industrial training (Offiong, Akpan & Usoro, Ideh 2013).

This in my view shows little or no studies done on this issue probably because the general perception is that this type of education system provides its graduates with automatic jobs (entrepreneurship) after graduation. Also, students' challenge during their transition to work in the Ghanaian context and how a support system can help them to establish themselves to avoid joining the likes of the unemployed youth is missing in the literature.

2.4 Transitional strategies for Technical University Graduates

Oser & Volery (2012) stated that (starting) which in this case refers to graduates of Technical Universities especially need a sense of success but also a sense of being unsuccessful. Students and professionals need to better perceive the method of entrepreneurship and also the implications it will bring. This is remindful for the fact that Technical university graduates must endeavour to understand what comes with the transitional stage towards starting their own businesses and the possible challenges they are likely to encounter. This would help to better prepare themselves for the market by critically assessing the requirements of the market and creating merchandises and services that would be able to address these needs adequately. Most importantly, the graduates should also work towards creating goods and services of unique nature and quality. It is believed that TVET could be an effective tool to reduce unemployment in semi-urban areas, which ultimately cut down people relocating to metropolitan cities (UNESCO, 2010). With the firm growing of youth population, the TVET sector capacity for delivering demand to driven training services for increasing workforce with technical and professional skills remain insufficient to meet the current labour market challenges (Shah, 2004; Janjua & Irfan, 2008). Bearing in mind that some of the possible challenges associated with TVET are it supposed lack of adequate training, TVET graduates can complement their training from acquiring knowledge in other fields of study too. In this highly sophisticated economy, Technical University graduates cannot only depend on the skills and training they acquired from their various institutions. Upgrading their skills in other areas will make them more suitable for jobs that are not strictly TVET oriented.

2.5 Technical/vocational graduates and wage employment

TVET enhance human capabilities and diversifies peoples' choices in order to promote self-employment and entrepreneurship development. It is perceived that TVET plays an important role for social development and sustainable citizenship (Jallah, 2004). Also, Jallah (2004) referred that TVET is a "master key" for sustainable development, which is of great fear for the people in 21st century and also plays key importance in Education for Sustainable Development (ESD). Thus, the development of TVET has become one of the key strategies for education development in both developed and under-developed countries (Grierson & Young, 2002). However, UNESCO current report repeated that; how can TVET solve the problems of many marginalized societies worldwide, who have not equal access to resources due to socio-economic differences?

According to Hilal (2012) TVET can help students to develop capabilities, to achieve their own choices. With TVET their chances on a better life increase, as is their expected income, social responsibility, personal wellbeing and economic inclusion. Raemdonck, Tillema, de Grip, Valcke & Segers (2012) declared that individuals who have high self-directedness are additionally able to sustain their job and notice quality and promotion. Companies should facilitate self-directedness, so people can take accountability for their own development and learning. Pema & Mehay (2012) stated that TVET education can improve job matching and that it can increase long-term job stability, especially if the learned skills are occupation specific. These long term employment relations will increase lifetime earnings and makes companies more willing to invest in firm-specific training. Training can increase earnings. Tsamadias & Chanis (2012) for example looked at earning advantages of TVET degree holders in the public and private sector. Both benefit from their degree but the advantage is even 5.76% upper in the private sector.

Oxenheam (1981) also observed that in a country where the average salary or wage is three or four times higher than income generated from self-employment, specific preference is given to wage-

employment and very little attention is devoted to self-employment. If this assertion contributes to why the unemployment rate of TVET graduate students seems to increase, whereas Ghana's public sector structure does not cater for graduates from TVET, then this has to be tackled ideologically.

In the study, 'considering why people prefer to go into wage employment', Grierson (1993) argues that economic barriers prevent people to go into self-employment. He explained that the prospective self-employed worker can secure capital during period of wage-employment. Such employment may be in the formal sector and further suggesting that after a period of years, the individual will have accumulated adequate capital, contracts and experience to enter into self-employment. Mead & Kunjuku (1993) also supported the findings of Grierson (1993) by noting that the most successful self-employment artisans are those with significant wage employment experience. Form these perspectives; it is difficult to raise sufficient capital for self-employment by TVET fresh graduate students from the Technical Universities without being supported or in a gainful employment as the writers stressed.

3. Theoretical perspective

The literature on TVET and unemployment suggest that, for the later to have a positive effect on unemployment, and hence economic growth, the government as well as industries in the country need to put their efforts together. Knowledge of the labour marketplace by the key stakeholders in the development of TVET-Technical University is pertinent because if we do not know the needs of the market and how changes occur in it, we cannot effectively train or educate TVET students to respond to the market needs.

Jallah (2004) mentioned that TVET is a "master key" for sustainable development, which is of great concern for the people in 21st century and also plays key importance in Education for Sustainable Development (ESD). Furthermore the development of TVET has become one of the key strategies for education development in both developed and under-developed countries (Tabbron, & Yang, 1997; Grierson & Young, 2002).

The idea of investing in human capital concept has been developed for a long time by many economic thoughts. Schultz (1961) & Becker (1964) found that human capital investment in terms of education have been found to be essential for productivity. Furthermore, the education gives benefit to the labour market outcome. In view of this, education generates knowledge and skill for the individuals which determine the performance of their occupation. Therefore, investment in education has a long term benefit as it raises the income in the future.

This theory is of immense relevance to the study because it encompasses the core objective and the research questions the study aims at achieving which are fundamentally in relation to the systems of TVET-Technical University, its relative challenges and the opportunities that TVET offers in the form of employment prospects for graduating students. An analysis of the theory and concept above clearly points to a very important factor as far as human development and financial stability is concerned and explains the need for governments especially to pay more consideration to this area of the educational sector. It also points out unambiguously that costs is an important factor to be considered because it can potentially reduce the effectiveness and render "useless" the ideas behind Technical University's graduates being unemployed in under developed countries particularly.

4. Methodology

To portray the transitional challenges and strategies for a smooth transition, the researcher used both questionnaire and interviews for collecting a comprehensive primary and secondary data from Ho Technical University and Accra Technical University. Questionnaires and semi-structured interviews were employed as the main data collection instruments. The quantitative data (collected through the administering of questionnaires) was analysed with the help of a Statistical Package for Social Sciences (SPSS) and the interviews were taken from industry personnel who have been working for years with students and graduates from Technical Universities. Opinions from the government policy makers and concerned authorities were cross checked to verify authenticity and realism of the collected secondary data.

Briefly, One hundred and fifty (150) respondents were selected for the study with one hundred and forty one (140) Questionnaires and nine (10) interviews. The reliability of the interview guides was also guaranteed by carrying out one-on-one interviews and administering standardized questionnaires, the researcher guaranteed validity by avoiding all personal biases and expectations as well as ensuring that the respondents selected for the study were truly experts who were well-informed on the subject under study. Besides these, the researcher took steps to test initial results with the respondents to see if it is true as suggested before.

Ethical issues were handled with high level of professionalism–informed consent was sought from respondents and the purpose of the study was clearly clarified.

5. Findings

Table 1.

Transitional Challenges of TVET Graduates that Hinder Employment.

Variables	Strongly agree		agree		neutral		disagree		Strongly disagree	
	f	%	f	%	f	%	f	%	f	%
Insufficient knowledge and skills to attract well-paying jobs	30	21.4	13	9.3	39	27.9	32	22.9	26	18.6
Training provided does not match jobs on the market	9	6.4	83	59.3	10	7.1	28	20	10	7.1
TVET graduates placed wrongly with inappropriate salary and job levels	42	30	58	41.4	14	10	14	10	12	8.6
Employers discriminating against technical and vocational graduates	56	40	36	25.7	26	18.6	18	12.9	4	2.9
Lack of government assistance for TVET graduates businesses start up	48	34.3	36	25.7	26	18.6	26	18.6	4	2.9

Source; data survey 2019.

The respondents in this case demonstrated a certain level of disagreement to show that insufficient knowledge and skills to attract well-paying jobs is not a challenge that technical university graduates face in Ghana. This disagreement was demonstrated by 22.9% and 18.6% of the respondents disagreed and strongly disagreed respectively. The respondents agreed on a common ground that training provided does not match jobs on the market. The response obtained from 6.4% and 59.3% of the respondents who strongly agreed and agreed respectively shows that technical university training does not meet the demands of the job market.

One of the challenges that hinder employment opportunities for technical university graduates is relative to the fact that technical universities graduates are wrongly placed with inappropriate salary and job levels. This challenge was discovered by 30% and 41.4% of the respondents who strongly agreed and agreed respectively. Some employers discriminating against technical and vocational graduates are one of the barriers that prevent technical university graduates from being gainfully employed. Per the responses of 65.7% of the respondents, most employees are not likely to employ technical university graduates. The lack of government assistance for starting own business is one of the challenges that made it for technical university graduates to be unemployed. A detail of response generated from 60% of the respondents is evident of the fact that government does not support technical university graduates.

5.1 Strategies to address Challenges Graduates face during school to work transition

Table 2.

Mean and standard deviation

Variables	Mean	Standard deviation	ranking
Creation of awareness of TVET to the youth	1.3214	.46870	6th
Provision of workshops and training facilities	1.7429	.87632	5th
Adequate teachers and facilitators should be employed and trained	1.6500	1.07907	4th
Graduates from TU graduates should be guaranteed some form of career progression	2.1000	1.10134	3rd
Budget allocation for TVET must be increased significantly	2.0143	1.18738	2nd
Government should create policies that would facilitate TVET	2.5786	1.31438	1st

Source; data survey 2019.

In an attempt to identify the best strategies that can be adopted to address the transitional challenges associated with graduates, the means and standard deviation were ranked to help determine which of the strategies would be the most effective. This would help to focus more attention on the most effective choice and thereby achieving a significant success rate. The most effective of all the strategies according to ranked (1st) above is the creation of policies that would facilitate TVET by the government. The creation of policies would set the tone and provide the basis upon which restructuring and reformation would be done. The least effective of the strategies is the creation of awareness of TVET to the youth as it ranked 6th. What this means is that even though all the strategies can be adopted for use, some would have a more significant impact than the others.

6. Discussions

6.1 Transitional challenges of TVET graduates that hinder employment

The study to a very large extent shows how students who graduate from TVET institutions are handicapped during transition; when it comes to gaining the requisite knowledge skills and attitudes that would ensure that they are gainfully employed. It is evident of how students who graduate from technical universities have contrary attitudes and beliefs when it comes to how much of a better position the skills they acquire place them to be gainfully employed. When graduates continue to experience such levels of disappointments in relation to inefficiencies between skills required and the opportunities available to them in the labour market, they begin to consider as irrelevant and consider that there is more of a mismatch between skills acquired from Technical Universities and employment and this to a large extent cause a difficulty in the transitional stage. And the other constant finding that has run through the entirety of the study is the fact the technical education was created with the logic of helping to reduce unemployment and creating an easier transition from to work through the ability of graduates to start their own concept with the help of outlined policy to facilitate the TVET programme, increase budget allocation and support financially for start-ups. As prudent and noble as this concept is, very little measure and systems have been instituted by both government and technical universities to enhance this transition process. It has been argued by both graduates and experts in the industry that transitioning from school to being gainfully employed has become a very difficult thing to do.

6.2 Strategies addressing challenges TVET graduates face during transition to work

Collaborative effort between technical universities and the industrial sector; students before they graduate can be given attachment opportunities to work with some of these industries to get some first-hand job experience and training that would help them gain more knowledge. This would be useful because it would prepare students adequately for transition from school to work.

Also the study supports that budget allocation for TVET-Technical Universities must be increased significantly. One of the eminent challenges this system faces is the small monetary allocation the sector receives. This has affected almost every aspect of the sector from the provision of infrastructure to the employment of teachers. This has reduced drastically the levels of efficiency and

performance from technical universities which in turn have made it less attractive for the youth to enroll in technical universities.

Moreover, some argued that just as graduates from the public nursing institutions are posted to government health facilities, graduates from technical universities must be offered some of government guaranteed job placement after school. Once the youth realize the potential employment opportunities that technical universities can bring, many would like to enroll and acquire knowledge at the Technical Universities.

7. Conclusion

Based on the findings of the study, the study can state firmly that TVET- Technical Universities stakeholders have not lived up to its fullest potential of opening doors of employment opportunities for graduates in Ghana. This conclusion is made possible because of the direct responses of the graduates and industrial personnel that seem to portray technical universities as being less capable of providing a higher level of chance for graduates to aid a smooth transition. Per the responses of the graduates, it is clear that it has been difficult over the years to gain any form of meaningful employment with the skills they have acquired from technical universities. Their assertion is corroborated by the industry personnel who argue that there is a mismatch between the knowledge acquired from technical universities and the industry requirements.

This obviously shows how many technical universities have not adjusted to the ever-changing industrial sector of the Ghanaian economy. The study can conclude that the major problem TVET - Technical universities faces are directly related to government's lack of commitment and support for Graduating students in Ghana. As much so much responsibility rest on the shoulders of administrators to offer the best of tuition, the biggest responsibility is on government to put in place effective systems and structure that would support technical universities in Ghana. However, the study can conclude without the shadow of any doubt that the government has failed woefully in providing the necessary assistance for technical universities to grow and develop. What then happens is that these institutions have to improvise and do the best they can with the very little support they get.

The study also recognizes that most of the youth who go into technical universities do so with very little information on what technical education is. Therefore, some of the graduates from technical universities after graduation do not have the desire to pursue careers in the fields they chose to study. Regardless of all these challenges, the researcher can conclude that technical universities and the graduates with the right support can be a major contributing factor to reducing the high rate of employment in Ghana. This is achievable especially when it is targeted at creating entrepreneurs who can create their own businesses after school than just producing graduates who would compete for the limited jobs in the labour market.

Recommendations

The following are recommended based on the findings of the study:

1. Government through the ministry of education should put in place new policies that would address solely technical universities and their school-work transition in Ghana. The policy documents must indicate all the steps that would be taken to reform the sector as well as the duties of government and the institutions involved.
2. Plans should be put in place by the state institution in charge of TVET (COTVET) to certify that every teacher who is employed to teach in any Technical University is highly qualified and abreast with the latest trends of knowledge in TVET. To the extent that technical universities lack trained/professional teachers, it can only be predicted that some of the teachers teaching in these institutions do not possess the adequate skills to impact knowledge in the most efficient and effective way. Government can set up a specific school for training teachers whose services would be needed in technical universities and also attain industrial experience whiles undertaking the training.
3. Because technical universities depend solely on government for funding, the state must allocate adequate funding to technical universities. This would ease the burden that administrators go through in managing the school under difficult circumstances. Adequate funding from government would help to cut down on the infrastructural deficit suffered by most technical universities.

4. As part of government plans to industrialize the Ghanaian economy, technical universities were created to produce graduates who can be integrated into the sector. Therefore the study recommends that government must put in place a system that can aid the graduate school-work transition. This would reduce drastically the fear students have that they cannot progress in their career if they choose to study TVET related courses in the technical universities.

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