FACTORS CONTRIBUTING TO LACK OF EMPLOYABLE SKILLS AMONG TECHNICAL AND VOCATIONAL EDUCATION (TVET) GRADUATES IN TANZANIA

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ABSTRACT
Currently, employers in Tanzania are seriously concerned about the lack of employable skills among technical education graduates given that they undergo Competency-Based Education and Training which exposes them to right knowledge, skills and attitude. This paper therefore explores factors contributing to lack of employable skills among Technical and Vocational Education graduates in Tanzania and recommend ways of training technical graduates who are more labour market responsive. The paper utilises Historical Dialectical Materialism approach, which suggests looking into the past and present in order to properly understand why contemporary technical education graduates lack employable skills and how to fix the problem. Drawing on secondary data and in-depth interviews with key stakeholders the findings show that lack of job competencies among graduates fundamentally emanates from poor training at primary and secondary levels resulting from incompetent teachers and inadequate facilities. The problem is further fuelled by ineffective curriculum, incompetent lecturers, less emphasis on general knowledge and skills as well as lack of career guidance at higher training levels. Furthermore, these weaknesses have been constantly fertilised by ineffective development as well as unfavourable educational policies and reforms. These factors should be holistically addressed in order to produce more labour market responsive TVET graduates. The paper makes several contributions. Policy wise, the paper contributes insights on how to promote employment through strengthening education system in Tanzania. On pedagogical strategies the paper sheds light on the ways in which instructors and institutions can be supported to equip students with more employable skills.

Key words: Technical education graduates, employable skills, Tanzania, labour market.

INTRODUCTION
Many African countries including Tanzania have made significant efforts to promote Technical and Vocational Education and Training (TVET) with an aim of enhancing graduates’ employable skills and boost economies (Lucas & Claxton, 2009). One of the salient features of TVET is its alignment towards equipping graduates with employable skills through Competency-Based Education and Training (CBET) (Dasmani, 2011). Consequently, in order to guarantee employable skills among graduates, Tanzania has made several strides in improving TVET by among other things establishing a
Department of Technical and Vocational Education and Training (DTVET) in the Ministry of Education and Vocational Training (MOEVT), to coordinate matters related to TVET at national level (URT, 2014). Subsequently, (DTVET) oversees two TVET Quality Regulatory bodies notably National Council for Technical Education (NACTE) for Technical Education and Training (TET) and Vocational Education and Training Authority (VETA) for Vocational Education and Training (VET) (NACTE, 2012; URT, 2014).

Tanzania has made other generic educational related reforms that have directly and indirectly impacted on employability skills among the higher learning and the TVET graduates in particular. These reforms are detailed in the Tanzania’s Development Vision 2025, the Education and Training Policy (ETP 1995), the Technical Education and Training Policy (1996), National Higher Education Policy (1997), Education Sector Development Programme (ESDP 2008 - 2017), National Strategy for Growth and Reduction of Poverty (NSGRP/MKUKUTA, 2005) as well as Education for All (EFA), and Millennium Development Goals (MDGs) (URT, 2010). Another effort is reflected in the Big Results Now (BRN) in the education sector, which mainly intended to bolster primary and secondary education in 2013/15 (URT, 2014). It is important to underscore here that the above mentioned reforms have impacted the education sector both positively and negatively. In the findings section the paper focuses mainly on the dark side of the reforms notably, how they failed or not well implemented hence directly or indirectly undermining the acquisition of employable skills by the TVET graduates as per the paper objectives.

Accordingly, the above noted and other efforts made by Tanzania in improving technical education were expected to prepare more labour market responsive Technical graduates given that they undergo competency based training which puts emphasis on knowledge, understanding, skills, and attitude and wider attribute (Lucas & Claxton, 2009). Contrary to the above expectation, currently, employers in Tanzania are still concerned about the alarming lack of relevant job competencies among the technical education graduates (British Council, 2014; World Bank, 2014). Indeed, technical knowledge is not keeping pace with economic growth (PWC, 2015).

Around 90 percent of CEOs in Africa, Tanzania inclusive argue that availability of key competencies among graduates including those from technical education backgrounds is extremely low (PWC, 2015), warning that this situation denies economies the skills they need to drive growth. This situation, consequently, renders Higher Learning Institutions less relevant in the context of labour market (ILO, 2013; Makumba, 2010; PWC, 2015).

In Tanzania research shows huge divergence between the kind of graduates employers expect and those produced by Colleges and Universities as attested by public and private sectors (Makumba, 2010). In 2015, former president of Tanzania Dr. Jakaya Mrisho Kikwete hinted that “(...) many of the Tanzanian graduates are unemployable because they do not get the required skills needed by the markets inside and outside the country” (Business Times, Friday, September, 18-24, 2015). Indeed,
data from the East African Community portrays Tanzanian and Ugandan graduates as among those hugely lacking job competencies required by the labour market as further portrayed in the subsequent table (Nganga, 2015).

**Table 1: Extent of lack of job competencies among graduates in East Africa**

<table>
<thead>
<tr>
<th></th>
<th>Uganda</th>
<th>Tanzania</th>
<th>Burundi</th>
<th>Rwanda</th>
<th>Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>63%</td>
<td>61%</td>
<td>55%</td>
<td>52%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Source (Nganga, 2015).

Employers complain that neither do graduates have adequate knowledge on their areas of study, nor conversant with current affairs in their fields and the country at large as further shown in Table 3 (ESRF, 2014). They further lack innovativeness, communication skills notably inability to express themselves clearly orally and in writing as well as poor command in English language (Makumba, 2010; Mjema, 2015). These factors further lead to lack of confidence at work leading to delivery of poor service by graduates as elaborated in the subsequent table (Makumba, 2010).

**Table 2: Summary of the basic competencies often required by employers but not possessed by graduates**

<table>
<thead>
<tr>
<th></th>
<th>Subject knowledge and competence</th>
<th>Knowledge about one’s specialisation and profession.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Effective communication</td>
<td>Ability to express ideas clearly, confidently in writing &amp; speech</td>
</tr>
<tr>
<td>3</td>
<td>Team work</td>
<td>work confidently with a group</td>
</tr>
<tr>
<td>4</td>
<td>General knowledge &amp; skills</td>
<td>Understand the commercial realities affecting the organisation; Computer literacy etc.</td>
</tr>
<tr>
<td></td>
<td>Commercial awareness</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Investigative &amp; analytical skills</td>
<td>Gather information systematically to establish facts &amp; principles.</td>
</tr>
<tr>
<td>6</td>
<td>Initiative/self-motivation</td>
<td>Able to act on initiative, identify opportunities &amp; proactive in putting forward ideas &amp; solutions</td>
</tr>
<tr>
<td>7</td>
<td>Drive</td>
<td>Determination to get things done. Make things happen &amp; constantly looking for better ways of doing things.</td>
</tr>
<tr>
<td>8</td>
<td>Planning and organising</td>
<td>Able to plan activities &amp; carry them out effectively</td>
</tr>
<tr>
<td>9</td>
<td>Flexibility</td>
<td>Adapt successfully to changing situations &amp; environments</td>
</tr>
<tr>
<td>10</td>
<td>Time management</td>
<td>Manage time effectively, prioritising tasks and able to meet deadlines</td>
</tr>
</tbody>
</table>

Source: (Compiled from literature by author)

Based on the foregoing background it can be problematized that on the one hand technical education is supposed to equip graduates with practical employable skills given that the TVET graduates undergo Competency-Based Education and Training (CBET) which exposes them to right knowledge, skills and attitude. Moreover, several efforts have been done by public and private sectors in ensuring that technical graduates are employable upon graduation. However, contrary to these expectations...
employers still complain about the lack of employable skills by the TVET graduates. The graduates among other things lack adequate knowledge on their areas of study, hands on skills, current affairs, computer and communication skills as well as other kinds of soft skills that are necessary for employment.

Consequently, the objective of this paper is to investigate factors contributing to lack of employable skills among Technical and Vocational Education graduates in Tanzania and recommends strategies for training TVET graduates who are more labour markets responsive. Specifically, the paper attempts to answer the questions (1) Why some TVET graduates tend to develop less labour market oriented graduates and (2) what strategies can be applied to train more labour market oriented TVET graduates?

The paper focuses mainly on Technical Education and Training (TET) under National Council for Technical Education (NACTE) which is organised into National Technical Awards (NTA) level 4 to 10 (NACTE, 2014)\(^1\). Institutional setup and Regulatory framework for Technical Education in Tanzania can be visualised in the subsequent table.

Table 2: Level Framework of Technical and Vocational Education and Training (TVET) qualifications

<table>
<thead>
<tr>
<th>S/N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification level</td>
<td>NVTA Level 1</td>
<td>NVTA Level 2</td>
<td>NVTA Level 3</td>
<td>NTA Level 4</td>
<td>NTA Level 5</td>
</tr>
<tr>
<td>S/N</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Qualification level</td>
<td>NTA Level 6</td>
<td>NTA Level 7</td>
<td>NTA Level 8</td>
<td>NTA Level 9</td>
<td>NTA Level 10</td>
</tr>
<tr>
<td>Qualification award</td>
<td>Ordinary Diploma</td>
<td>Higher Diploma</td>
<td>Bachelor’s Degree</td>
<td>Master’s Degree</td>
<td>Doctor of Philosophy</td>
</tr>
</tbody>
</table>

(NACTE, 2014)

The paper pays particular attention to the institutions offering business and social science related programmes. It leaves aside technical institutions offering natural science programmes in order to maintain focus and because, such institutions seem to have received relatively significant research attention. Consequently, the study is fundamentally expected to determine more effective ways of equipping technical education graduates with more practical skills relevant to the labour market. It will further enable the graduates compete for and benefit from labour market opportunities brought about by regional integrations like the East African Community common market. Increasingly, graduates in

Tanzania view such integrations as threats rather than opportunities, mainly because they lack relevant employable skills (Makumba, 2010; Nyirenda, 2012). Furthermore, the paper contributes to offering insights on how to advance employable skills among technical education graduates and subsequently, strengthen education system in Tanzania.

**Literature review:** A number of studies related to employability among graduates and TVET graduates in particular have been conducted. Basically one strand of research has concentrated on factors influencing employability of higher learning graduates (Nikusekela & Pallangyo; Nikusekela & Pallangyo; Fulgence, 2015) while the other has concentrated on the initiatives for enhancing graduate employability and building successful future careers for graduates (Garwe, 2014; Mbise, 2014; Ndyali & Wuhan, 2016).

Accordingly, some studies in Zimbabwe, Malawi and Tanzania have associated lack of employable skills among graduates to the weaknesses such as lack of training material, large class sizes, inadequate learning facilities, absence of industrial synergies and ineffective curricula in technical education institutions as only factors leading to lack of job competencies among graduates(Anangisye, 2008; Woyo, 2013). This reality is further captured in Bangladesh and Ghana where employable skills among technical graduates are mainly attributed to the absence of linkages between training and the world of work (Dasmani, 2011; Islam & Mia, 2007). Consequently, in some countries like Ghana delivery of TVET programmes is viewed as not relevant to the local socio-economic environment given that it does not effectively respond to the needs of the informal sector as well as labour market, thus exasperating the problem of unemployment among graduates (Nyankov, 1996, p. 15). As a result, some countries in Africa fear to invest in technical education anticipating that general education would be more flexible, suitable and capable of responding to economic and labour force changes in society (Lauglo & Lillis, 1988).

Unfortunately, these studies, have simply noted that graduates fail to compete in the labour market simply because they lack skills forgetting to specifically explain why the graduates lack the skills, the type of skills they lack and the possible ways of empowering the graduates to more effectively develop the required labour market skills. Incidentally, a number of these studies tend to be qualitative in nature or limited to a relatively small sample. Moreover, the studies seem to have concentrated mainly on weaknesses and roles of technical institutions in producing labour market oriented graduates, forgetting other factors such as training problems inherent in primary and secondary school levels as well as educational policies and reforms (Calhoun & Robinson, Betty, W., 1995; Lauglo & Lillis, 1988; Sherry & Yesuenyeagbe, 2013).

**METHODOLOGY**
This study is guided by the Historical Dialectical Materialism (HDM) approach. It is a methodological approach to the study of human societies and development, first articulated by Karl Marx (1818–1883)
(Stalin, 1938). Historical Dialectical Materialism looks for the causes of changes [developments or underdevelopment] in human society and the means by which humans collectively produce the necessities of life. Since Marx's time, this theory has undergone considerable changes (Graseck, 2008; Stalin, 1938). One of the improved versions of the theory which is also applied in the context of this paper purports that in order to understand the present situation it is imperative to look into the past and in order to predict the future it is mandatory to take into account both the past and present (Graseck, 2008; Stalin, 1938).

Application of this approach in the context of the current study suggests that, in order to understand factors responsible for lack of employable skills among the technical education graduates in Tanzania, it is imperative to examine the training history of the technical candidates notably at lower levels (primary and secondary schools), past reforms and policies, coupled with current practices at the technical education institutions. Subsequently, in order to recommend effective ways of equipping the graduates with better, effective and relevant job skills it’s unescapable to reflect on both the current and past factors including the learning environment of the technical graduates.

This approach is therefore useful in the context of this paper because it provides a holistic lens towards examining technical graduates training process notably by looking into the past training practices right from primary schools to tertiary technical institutions. It takes into account the fact that education is something that should be approached holistically given that it is a multifaceted and gradual process of imparting set of skills, knowledge and attitude to graduates.

Consequently, this paper employed a qualitative approach utilizing both quantitative and qualitative data. Accordingly, the paper essentially drew on the secondary data review as well as interviews with some key education stakeholders. As per qualitative approach data were coded and clustered thematically. Quantitative data adopted from secondary sources were modified based on the context of the study; while those from primary sources were subjected to MS excel to determine frequencies and percentages.

In order to maintain reliability and validity of data, triangulation, analysis of negative cases, member checking and audit, peer review, and prolonged engagement were taken into account (Bowen, 2005). These aspects would lead to credibility, transferability, dependability and conformability which are essential aspects of ensuring reliability and validity in qualitative approach (Bowen, 2005; Strauss & Corbin, 1990).

**FINDINGS AND DISCUSSION**

I: Factors contributing to lack of employable skills among technical graduates in Tanzania

Findings show that technical education graduates in Tanzania fail to develop employable skills required by employers fundamentally due to poor training at primary and secondary school levels.

This situation results from (1) incompetent teachers, (2) inadequate number of qualified teachers, (3) poor remuneration and motivation of teachers (4) lack of teaching and learning resources notably small number of classrooms, laboratories and teaching aids as reported in 2015 (UNICEF, 2015), and further demonstrated below.

**Incompetent teachers:** Data show that, primary and secondary schools teachers are among the poor and weak students in their form four and form six exams. This is mainly casued by poor training and preparation of teachers (ESRF, 2014). Data show that academically weak students have continued to join teacher education and training in Tanzanian. For example, in principle, the minimum entry qualification for the teachers’ diploma programme is at least two principal passes and a subsidiary in Form Six National Examinations (ACSE). Conversely, students with one principal and one subsidiary passes have also been enrolled in the programmes (ESRF, 2014).

For example It has been found that at Butimba public teachers’ College in Mwanza Tanzania, more than two-thirds of the student pursuing Diploma course in teaching enrolled between 2010/2011 and 2011/2012 academic years had qualifications below the official requirement of two principal passes and a subsidiary (Luwavi, 2012) in ( Kitta, S. & Fussy, D., 2013: p. 33). Consequently, school teachers are hardly capable of implementing the practical part of curricular due to lack of competency coupled with inadequate facilities, low motivation and the time factor owing to the challenging environment they find themselves in (Sumra & Rajani, 2010; UNESCO, 2011).

**Inadequate number of well trained teachers:** According to the Ministry of Education (MoEVT) in 2014, Tanzania had a shortage of 26,000 teachers and was required to recruit at least 406,600 teachers by 2030 (The citizen Tuesday, October 14, 2014). A research report by (Nyandwi, 2014) concerning education situation in Sumbawanga District, Tanzania showed acute lack of teachers as evidence 75% of teachers and 76.7% of students who ascertained that there were no enough qualified teachers in their schools. The report added that there was a 40% shortage of qualified teachers in secondary schools in the district (Nyandwi, 2014). Lack of qualified primary and secondary school teachers is further caused by the fact that teacher candidates in Tanzania are among those with the lowest grades/scores at their secondary level results; notably divisions three and/or four at “O” level and “A” levels (Komba et al., 2013). Students at this level lack subject knowledge and mastery as well as language skills for learning to become effective teachers (Rugemalira 2005).

**Poor remuneration and motivation of teachers:** Primary and secondary teachers’ inability to deliver is further associated with poor remuneration and motivation (ESRF, 2014). Public schools’ teachers are among the most poorly remunerated workers in Tanzania and who work in an extremely difficult environment. Teachers have for long time been asking for teaching and housing allowances in vain (ESRF, 2014). Consequently, teachers in remote and rural areas do not have houses and other social amenities. They therefore use some of their working time, to engage in other money earning activities giving less time to teaching (Sumra & Rajani, 2010). Moreover, public primary and secondary schools
teachers’ promotion takes too long and not given due priority by responsible authorities (Komba et al., 2013).

**Lack of teaching and learning resources:** Indeed, significant investments in primary and secondary schools have focused mainly on expanding access to education services paying little or not at all attention to quality learning outcomes (Sumra & Rajani, 2010; UNESCO, 2013). For example, the ward schools established all-over Tanzania in 2006 operated almost for 6 years without adequate number of teachers, classes, laboratories and libraries. Such deficiencies at primary and secondary level inevitably prevented students from internalising skills and building foundation necessary to master technical education and develop job competencies at tertiary levels (Komba, Hizza, & Jonathan, 2013; Nyirenda, 2012; Woyo, 2013). Lack of teaching and learning resources in primary and secondary schools is complicated by inadequate financing of infrastructure and capacity building of teachers as shown in Table 5:

**Table 5: Financing of infrastructure and capacity building of primary school teachers in Tanzania in 2015**

<table>
<thead>
<tr>
<th>Programme intervention</th>
<th>Funds required</th>
<th>Funding gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Learning Opportunities</td>
<td>1,440,000</td>
<td>800,000</td>
</tr>
<tr>
<td>Teacher Education</td>
<td>3,720,000</td>
<td>2,200,000</td>
</tr>
<tr>
<td>Integrated Early Childhood Development</td>
<td>2,880,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Primary education planning, quality assurance and support to priority schools</td>
<td>10,040,000</td>
<td>5,680,000</td>
</tr>
<tr>
<td>Education Quality and Equity</td>
<td>18,080,000</td>
<td>10,180,000</td>
</tr>
</tbody>
</table>

*Source: (UNICEF, 2015)*

At the technical institution level it is noted that academic incompetency and poor background in competency based training of Technical education students is a critical factor impeding technical graduates from realising employable skills at technical institutions (Nganga, 2015). Compared to Universities, Technical education institutions in Tanzania mostly admit candidates with low scores at primary and secondary school level (UNICEF, 2015) For example, in order to be accepted for certificate programme by the Technical education institutions in Tanzania one has to possess at least three passes or “4 Ds” at “O” Level, while Diploma candidates require only one pass at “A” Level or a relevant ordinary certificate from technical institutions (NACTE 2007). Indeed, the majority of candidates join technical education institutions as a last option after failing to make it to Universities but not necessarily because they are interested in technical education.

Moreover candidates in technical education institutions have been brought up in knowledge based system and ideally trained to pass exams rather than building competencies (Nganga, 2015). Most primary and secondary schools in Tanzania follow knowledge based system as opposed to competency based system. Consequently, it becomes a challenge in raising the academic incompetence of
candidates as well as changing their attitudes from knowledge based to competency based orientation once at the technical education institutions\textsuperscript{2}.

Some technical institutions have been permitted to conduct bridging courses for less qualified students for direct entry. However, an inquiry from several institutions proved that, the pre-courses are not effectively organised and presented based on the required quality standards. Indeed around 50 technical students and 10 technical teachers in two visited technical institutions suggested that courses were being rushed adding that they needed to be conducted in a more organised and effective manner. Specifically, respondents noted that at times courses are extremely shortened and inappropriately delivered to students with content being compromised. Students’ assessment and results handling are not done based on the set academic quality standards. This further suggests that, courses are not adequately relevant in providing the less qualified students with knowledge and skills necessary for acquiring, developing and mastering desired job skills.

Another factor leading to lack of employable skills among the technical graduates is less emphasis on general subjects which include but not limited to Communication skills, Information and Communication Technology and English language (Onyango, 2015; Fulgence, 2016). However, the inquiry showed that students at technical institutions shy away from general modules and have negative attitudes towards such subjects. Indeed, a discussion with instructors and students coupled with observations in technical institutions proved that students study general subjects in order to pass and not necessarily to practice them. Moreover, students memorize the content in order to get the minimal pass mark so as they can continue to next levels. In this subject not because they pass the modules relatively well:

> Communication skills do not add to anything on my profession. I don’t see what to read there. I mean the content is too general and I don’t see how it’s directly related to my specialization. I only need to get a C [grade] in order to pass. I am studying to become an accountant, so I only need to know how to handle accounts. Its better therefore I concentrate in other subjects which can be useful in profession.  
> *(Male Bachelor Degree Student (19), Dar es Salaam)*

Specifically, candidates lack English language proficiency which is a medium of instruction between students and instructors. As a major medium of instruction at secondary and university learning levels, English language proficiency guarantees, effective communication, comprehension and internalization of employable skills (Mjema, 2015). However, it was noted that lack of English language proficiency significantly, limited graduates from mastering their subject areas (attaining adequate subject knowledge) as well as the ability to communicate which are critical employable competencies required by employers (Nkwame, 2015). In Tanzania English language is formally used for job interview and

\textsuperscript{2}Technical education Instructors, administrators, and candidates tend to think, behave, plan and even compare themselves with the non-technical/competency based institutions
day to day business communication at workplace. Even though, English language is a medium of instruction at secondary schools in Tanzania, students start studying English without proper preparation and taught by teachers with poor English language background (Mjema, 2015; Nkwame, 2015).

Inadequate supply of teaching and learning resources in technical institutions is yet another impediment to internalizing job skills by technical education candidates in Tanzania. All of the visited institutions lacked adequate number of learning and teaching resources such as classrooms, well equipped libraries, computer labs as well as facilities such as, internet services, power point projectors to mention just a few. Specifically, Government based technical institutions fail to cater for these facilities due to decrease of funding by government sources. It was noted that government financial contributions to TVT institutions have been decreasing in the past years and are limited to catering the expenses for staff and personnel. Specifically, 3 ten out six visited Government Institutions attested that they had not received any Other Charges (OC) from the Government.

Consequently, large class sizes emanating from inadequate classrooms and other teaching resources did not allow instructors to attract and retain the attention of all students during demonstration lessons as required by the competency-based teaching approach customarily practiced at technical education institutions (Onyango, 2014). According to NACTE a standard competency based class size should be 50 students and 70 at maximum. However, in all visited technical institutions it was revealed that the number of instructors was far small as most classes had more than 100 students which is against the competency based training that suggest a class size of 50 students. Inadequate resources give room to teachers to focus more on theoretical knowledge rather than practical job skills needed by labour market (NACTE 2014, 2007).

The institutions are further confronted with the lack of competent instructors in the area of competency based training that is preferred and implemented in the technical education institutions. This is firstly caused by the tendency by most higher learning institutions to recruit the best performing students, good at theory but poor at practice (Makumba, 2010). Moreover, experience shows that most of the lecturers and technical teachers do not have teaching or pedagogical skills since they are picked from universities rather than under teaching/ educational related courses. Instructors were found to be incapable of translating curricula into class environment due to lack of knowledge and resources. Lack of competency by instructors in technical institutions is key factor contributing to lack of employable skills among graduates given that:

Teaching staff in Technical Institutions is the single most important learning resource available to most students. It’s important that to those who teach have full knowledge and understanding of the subject they are teaching, have the necessary skills and experience to communicate their knowledge and understanding effectively to students in a range of teaching context and can access feedback on their own performance. (NACTE, 2014, p.12)
Fig. 1: Instructors’ knowledge and confidence in Competence based Education and Training (CBET)

Another factor is inadequate industrial attachment for both technical education instructors and trainees that denies them hands-on-experience. It was noted that Industrial training among staff was either rarely practiced or non-extent. Field work attachment for technical students was poorly organised and implemented in all visited institutions. They were reported to be few and students encountered a series of problems in securing and undertaking them as further shown in table 2 below (Makumba, 2010). This same factor has also been documented in among some technical graduates in Ghana (Sherry & Yesuenyeagbe, 2013) as well as in Zimbambwe (Woyo, 2013).

Table 2: Constraints for field work among higher learning Institutions

<table>
<thead>
<tr>
<th>Filed work related problems</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going to field work unprepared</td>
<td>20</td>
<td>20%</td>
</tr>
<tr>
<td>Lack of commitment by employers to train</td>
<td>61</td>
<td>61%</td>
</tr>
<tr>
<td>Missed field work or reported late</td>
<td>44</td>
<td>44%</td>
</tr>
<tr>
<td>Students not motivated due to lack of financial gains</td>
<td>30</td>
<td>30%</td>
</tr>
<tr>
<td>Economic hardships e.g. transport etc.</td>
<td>55</td>
<td>55%</td>
</tr>
</tbody>
</table>

(Source: Field data, September 2015)

At the technical institutions level, it was noted that 6 out of 10 visited institutions had not reviewed their curricula for over five years and teaching staff did not have the ABCs of competency based curricula. Moreover, the existing curricula were not well implemented either due to lack of resources or lecturers inability to translate them into the classroom context. Literature in support of this point maintains that the curricular for technical institutions have failed to shape the graduates to face the requirements of employers (Nkwame, 2015).

Moreover, lack of employable skills among graduates is also impeded by poor formulation and implementation of Education policies and reforms right from primary to tertiary education levels. Past education reforms in Tanzania have focused on increasing students’ enrolment through removal of school fees and building classrooms without improving curriculum, learning facilities as well as...
building teachers capacities to deliver skills (Kiwia, 2000). For example, the policy of constructing secondary schools in each ward starting in 2006 did not consider quality aspect notably; by ensuring presence of learning and teaching resources such as laboratories, libraries, teachers and adequate classrooms (Kiwia, 2000).

Moreover, in 2008 the government canceled primary four and form two national examinations that were useful in preparing students more effectively for primary seven and form four national exams respectively. This killed the hard working spirit among students and failed to master key skills through personal studies. These led to mass failures in primary seven and form four national examinations in the subsequent years. Majority of the students who fail to make it to Universities at their secondary school examinations in Tanzania end up in technical Institutions as one of the last options. Consequently, in 2013, the government introduced the Big Results Now (BRN) reforms in the education sector where it among other things aimed at lowering the primary and secondary students pass marks and grades to increase the pass rate (Janus & Keijzer, 2015)

The big results now (BRN) program in the education sector introduced a new assessment plan for primary and secondary schools whereby 40% of continuous assessment (CA) will now complement the 60% of final exam (FE). This may further dilute academic standards because the environment for getting the 40% of continuous assessment (CA) is not well prepared and so students may end up getting these marks unjustly. Simply, schools do not have adequate number of laboratories and teaching facilities and teachers are less competent, less motivated and or too busy to creatively improvise teaching facilities.

Lack of carer guidance and counselling has also contributed to the lack of employable skills among technical graduates given its critical role on the same. Career guidance and counselling is a comprehensive, developmental program for assisting individuals to plan and implement informed educational and occupational choices. Its’ geared towards developing competencies if individuals regarding self-knowledge, educational, occupational exploration as well as career planning process (UNICEF, 2015) All the 10 the visited technical institutions had offices for dean of studies responsible for career guidance and counselling task. However they did not have effective and consisting place for implementing career guidance and counselling. This is very unfortunate because, having in place career guidance and counselling programmes is considered as vital for a well-functioning of TVET system (UNICEF, 2015)

Tracer study is considered as one of the most useful formal ways of obtaining feedback from graduates regarding the relevance, usefulness, strengths and weakness of its programmes run by a particular academic institution (Oseifuah, K. K., Gyekeye A. B., NovisiKwadzo, G., Quarshie, V., 2014). This kind of study is advisable to be conducted after every 5 years given its importance. Unfortutely only 1 out of 10 visited Institutions had conducted it over the past 5 years. The rest of the institutions were either in process of doing so or the plans only existed in papers. Failure to conduct tracer study is
therefore a significant barrier towards instilling right employable skills among technical graduates given that tracer study results are important for “analysis of relationship between higher education and work. Consequently NACTE should require all technical institutions to conduct a tracer study and demand the report for the same as one of the required documents during accreditation process and curriculum validation.

II: Recommendations: Ways of Training more Labour Market Responsive Technical Graduates in Tanzania

The second objective of this paper was to recommend ways of training more labour market responsive technical graduates. Accordingly, building on the above findings and discussion, the following factors should be considered in ensuring employable skills among the technical graduates in Tanzania.

- Ministry of education and other relevant stakeholders should improve primary and secondary education and training through provision of adequate teaching and learning resources include building capacities of teachers and improving their remunerations.
- Specifically, National Council for Technical Education (NACTE) as a technical education regulatory authority should collaborate with technical education institutions in Tanzania in organising and implementing bridging courses based on the required quality standards and general subjects.
- Technical institutions should at the same time ensure that English language proficiency among students and instructors is emphasized throughout training period to ensure general and language skills among graduates.
- Government through the ministry of education and the responsible technical institutions should ensure adequate supply of teaching and learning resources in technical institutions including classrooms, well equipped library, computer and ICT facilities etc.
- Ministry of Education, in collaboration with NACTE and the management of technical institutions should ensure capacity building of technical teachers to specifically equip them with competency based teaching skills to enable them to more effectively translate curricula into classroom environment.
- Institutions should invest in adequate industrial attachment for both technical education instructors and trainees to ensure hands-on-experience among them.
- Review and improvement of curricular should be affected right from primary to tertiary education level to make it more informed by the industry and corporate recruiters as well as help teachers, trainers and instructors implement it in the classroom environment.
- Bodies responsible for formulation and implementation of development and education policies such as the ministry of education, and its agencies such as COSTECH and NACTE should always consider the quality of technical education right from primary to tertiary education levels.
- Technical Colleges should devise and implement Career guidance and counselling with the purpose of ensuring a comprehensive, developmental program for assisting students to plan...
and implement informed educational and occupational choices to meet the labour market requirement.

- Technical Colleges should devise and implement Career guidance and counselling with the purpose of ensuring a comprehensive, developmental program for assisting students to plan and implement informed educational and occupational choices to meet the labour market requirement.
- Technical Colleges should conduct tracer studies regularly in order to obtain feedback from graduates regarding the relevance, usefulness, strengths and weakness of their programmes in the labour market and improve them accordingly.

CONCLUSION
This paper explored the factors contributing to lack of employable skills among Technical Education graduates in Tanzania and recommends ways of ensuring such skills among the students upon graduation.

The findings showed that lack of employable skills among technical graduates was fundamentally due to poor training at Primary and secondary school level emanating from inadequate teaching and learning resources and teachers. This point seems to be unique because it has not been underscored by the previous literature. The ability of this work to capture this point could have been due the use of the Historical Dialectical Materialism approach (Stalin, 1938), which emphasises on examining the past in order to understand the present. The theory helped examine the former learning environment of the candidates (primary and secondary school practices) and the way they would have determined the skills internalisation by the technical candidates at the tertiary level.

This was coupled with the incompetent background of Technical education candidates owing to their significantly low scores and knowledge based system background that trained them to pass exams rather than building competencies as noted among the Ghana technical graduates (Dasmani, 2011; Sherry & Yesuenyeagbe, 2013).

Poor organisation and implementation of bridge courses played key role as these courses were in many cases not presented based on the required quality standards. Again this is one of the points that have not been captured by the previous research. It could be something that takes place only in Tanzania.

Another set of factors leading to lack of employable skills among technical graduates include less emphasis on general subjects necessary for ensuring general skills among graduates, lack of English language proficiency among students and instructors as medium of instruction at secondary and university learning and inadequate supply of teaching and learning resources in technical institutions. This includes ill equipped classrooms and libraries, lack of ICT facilities etc. This factor seems to be
unique only to this paper, because the Historical Dialectical Materialism approach (Stalin, 1938) that inclines researchers to look at both the present and past in understand the current situation.

Lack of incompetent lecturers mainly in the area of competency based training further fueled up the problem as lecturers are incapable of translating curricular into class environment due to lack of knowledge and lack of resources. This point has been captured elsewhere in Ghana and Zimbabwe (Sherry & Yesuenyeagbe, 2013; Woyo, 2013).

The situation is compounded by the inadequate industrial attachment for both technical education instructors and trainees that denies them hands-on-experience as well as less effective curriculum from primary to tertiary education level as documented among the Ghanian technical graduates (Sherry & Yesuenyeagbe, 2013) as well as in Zimbambwe (Woyo, 2013).

Indeed primary and secondary school education curricula were hardly informed by the industry and corporate recruiters while teachers incapable of implementing the practical part of curricular due to lack of competency, facilities, motivation and the time factor as witnessed in other several African countries (Sherry & Yesuenyeagbe, 2013; Woyo, 2013).

At the technical institutions level, it was noted that some institutions were missing competency based curriculum and others had not reviewed their curricula for over five years and that the existing curricula not well implemented either due to lack of resources or lecturers inability to translate them into the classroom context. Last but not least poor formulation and implementation of education policies and reforms right from primary to tertiary education levels extremely contributed the situation. Issue of polices in relation to lack of employability skills among technical students has hardly been touched upon by the previous research. This paper has managed to bring up this point owing to the strength of the Historical Dialectical Materialism approach (Stalin, 1938).

Moreover lack of career guidance and counselling coupled with lack of tracer studies which is formal way of obtaining feedback from past graduates and the industry also contributed to lack of employable skills among graduates. This has been captured in the Philippines (Oseifuah, K. K., Gyekye A. B., Novisi Kwadzo, G., Quarshie, V., 2014) suggesting that it should also be considered by the technical institutions in Tanzania.

In a nut shell lack of employable skills among technical graduates has been fundamentally caused by poor learning background at primary and secondary school levels, candidates’ academic incompetency and strong background in knowledge based training, less focus on general subjects and English language, poor curriculum, lack of industrial linkages as well as enactment and implementation of poor policies. Whereas the rest of factors are significantly in line with the exiting literature, factors related to poor learning background at lower levels, poor organisation and implementation of bridge courses, less emphasis on general subjects and the poor enactment and implementation of policies
seem to be more unique to this study mainly owing to the application of the Historical Dialectical materialism approach (Stalin, 1938) in this paper.

Accordingly, a number factors including but not limited to the following should be considered in ensuring employable skills among the technical graduates in Tanzania. Ministry of education and other relevant stakeholders should improve education right from primary to tertiary levels. Formulation of policies and reforms should underscore education quality and relevance right from the primary to tertiary levels through improvement of learning and teaching infrastructure and resources. Specifically, regulatory authorities should collaborate with technical education institutions in Tanzania to organise and implement bridging courses based on the required quality standards and general subjects. English language as training age should be given priority. Institutions should be supplied with adequate teaching and learning resources. Moreover, capacities of teaching staff should be build, curriculum improvement be undertaken regularly and industrial attachment be reinforced. Above all, technical Colleges should devise and implement Career guidance and counselling as well as conduct research for aimed at improving and devising relevant skills and knowledge for technical students.

REFERENCES


Lucas, B., & Claxton, G. (2009). *Wider skills for learning: what are they, how can they be cultivated, how could they be measured and why are they important for innovation? NESTA, University of Winchester.*


Tomlinson, M. (2007). Graduate Employability and Student Attitudes and Orientations to the Labour Market retrieved from
UNESCO (2011). *Tanzania Education Sector Analysis beyond Primary Education, the Quest for Balanced and Efficient Policy*: Choices for Human Development and Economic Growth, Dar es Salaam