

Competency-based Education and Training (CBET) in Kenya: Policies, Opportunities and Challenges

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Abstract

Educational reforms are requirements in every education system. UNESCO recommends that educational reforms are undertaken every five years or as the need arises. Embedded within the educational reforms are curriculum reviews which focus on teaching and learning while taking into consideration the market demands as well as global trends. Educational reforms in the Kenyan context to a large extent, have been informed by political proclamations as opposed to laid down educational guidelines. These political proclamations have impacted the process and ownership by various stakeholders. This article presents a conceptual and practical perspectives of key actors in educational reforms in Kenya, focusing on Competency-based Education and Training (CBET) in the technical vocational education and training (TVET) sector and the implications of the same on curriculum policy and implementation. The article delves into the theoretical underpinnings that inform educational reforms that led to a CBET Curriculum, varied perspectives of key stakeholders and what they portend for curriculum policy. The article concludes by recommending clear policy guidelines that are devoid of partisan interests and cognizant of contextual relevance.

Keywords: Educational Reforms, Competency-based education and Training, CBET implementation

Introduction

Education reform are any planned changes in the way an education institution functions from teaching methodologies to administrative processes

(Zajda 2016). He further argues that globalization as a phenomenon is a multi-faceted cultural construct that signifies the interdependence and connectedness of all fundamental aspects of culture such as: the economy; politics; ideology; language; education; communication; technology; consumption of goods; travel and global citizenry. In Kenya, Education reforms have occurred as a result of political machinations as opposed to laid down educational guidelines. This has impacted the process and ownership by various stakeholders as well as the relevance and effectiveness of the particular reforms. The government of Kenya has always set up commissions to look into, and advise it (the government) on the envisaged reforms. The outcome of these commissions has been the following reports – The Ominde report (1964); The Gachathi Report (1976); the Mackay Report (1981); and the Koech Report (2002). While the recommendations of some of these commissions have been factored into education reforms many have not been acted on. This has resulted in reforms that are haphazard, poorly implemented and in some instances costly and irrelevant.

UNESCO advocates for Education reforms every five (5) years or as the need arises. This paper explores educational reforms that have taken place in the technical vocational education and training (TVET) sector in Kenya. It focuses on Competency-based Education and Training (CBET). Policies opportunities and challenges. The TVET sector in Kenya has been in existence as far back as during colonialism. However, for purposes of this paper, I will provide a background of the TVET sector from 1963 after independence to the present.

This paper is divided into four parts. The first part focuses on providing a background to CBET in Kenya. This is followed by a presentation of literature on CBET trends Globally and regionally. The third section explores the theoretical underpinnings that guide CBET Curriculum. The penultimate section examines key players in education reforms and the role of politics proclamations. Finally, conclusions and recommendations are made, and the contribution of the paper to knowledge is defined.

Background of CBET in Kenya

The first education commission –the Ominde commission was set up in 1964 to look into education reforms in Kenya after Independence. The governments priority was manpower development and Education was seen as an

instrument for change and self-reliance (Miseda & Kitainge 2021). This commission recommended a curriculum review to make it relevant for Kenyans. Emphasis was on practical subjects that would provide manpower to address the labour needs. This commission was followed by the Gachathi commission of 1976 which build on the first commission. This commission laid emphasis, among other things, on the teaching of vocational subjects in the technical, agricultural and business disciplines. The recommendations of this commission were not effected as there was a change in the political leadership of the country in 1978 when a new government came into power. Another commission was set up the Mackay commission of 1981. The period also saw a shift from multi-party politics to a single party state. This stifled voices of change. A notable change during this period was the conversion of technical secondary schools to technical training institutes. This distorted the progression of students to Technical institutions as the technical schools served as the pathways through which students were admitted to TVET institutions. Another commission- The Koech commission - was set up in 1998 to look into education reforms and its recommendations included reducing examinable subjects in schools. The findings of this commission were never implemented.

It should be noted that between 1963 to 2002 several commissions had been set up but most of the recommendations they made were not implemented or implemented half-heartedly. During this period the TVET sector was ignored, under resourced and left for those who were deemed to have failed. In the meantime, school dropouts increased and many youth were unemployed. Many went into apprenticeships which is a common phenomenon in Kenya known as the *Jua Kali* sector. This sector comprises of small and medium enterprises, is informal and is characterized by low wages.

In 2010 the Kenyan Constitution was revised and with it was a need to realign education to the tenets of the constitution. Another commission was formed – the Odhiambo commission of 2012 – to look into education reforms with a view to enhance access, equity, quality and relevance. This commission aligned its work to the Kenya Vision 2030 whose three pillars – economic, social and political – are anchored on macro-economic stability, infrastructural development, Science, Technology and Innovation (STI); land reforms; human resource development; security and public sector reforms (Republic of Kenya 2018). This led to the promulgation of the TVET Act 2013.

A UNESCO survey realized that tertiary enrollment in Kenya remained below 2 percent (UNESCO 2017). As a result, many youth exit school early (before 15 years of age) and end up in the labor market. Additionally, there was evidence of a disconnect between formal education and labor market relevance, because the focus was on cognitive skills and theoretical education, at the expense of non-cognitive and practical skills (OECD 2016). The promulgation of the TVET Act 2013 led to the creation of three institutions - TVET Authority (TVETA); TVET Curriculum development; and THE Certification Council (TVET – CDACC) and the Kenya National Qualification Framework Authority (KNQA) to oversee the development and implementation of CBET.

The TVET sector in Kenya has seen a marked growth since 2012 when the Government of the day shifted its focus from University education to Technical and Vocational training. This is as a result on a world bank report that indicated that the bulk of Kenyan Youth were not making it to Universities (World Bank 2018). Additionally, the existing TVET facilities were under resourced and poorly managed. The cost of training was also a hindrance to many youth who came from poor backgrounds and could not afford the cost of tuition and upkeep. The government of Kenya, then set out together with the devolved county governments to set up a vocational training Centre in each of the 47 Counties in Kenya. They also upgraded existing National Polytechnics (NPs) and Technical Training Institutions (TTIs) by supporting Infrastructural development, employing more trainers and subsidizing the tuition fee for trainee entering TVET Institutions.

In a quest to improve the competencies of graduates, the government, through TVET CDACC, embarked on developing demand-driven CBET curricula. This process included the involvement of industry players to alleviate the issue of skill mismatch between what is provided by the training institutions and industry needs. Sector Skills Advisory Committees (SSACs) were formed to identify sector needs and evaluate and advise on the requirements of their respective sectors. Competency-based assessment (CBA) is a crucial component of CBET, and TVET CDACC has trained 13,758 trainers to spearhead the assessment and certification process. The government has invested substantive resources in equipping public institutions with state-of-the-art training equipment and hiring additional trainers to smoothen the CBET implementation process. Developments in the last three decades have made the role of TVET more decisive; the

globalization process, technological change, and increased competition due to trade liberalization necessitate requirements of higher skills and productivity among workers in both modern sector firms and Micro and Small Enterprises (MSE) (Muia 2011).

What is CBET?

General Competence is defined as ‘the ability to perform tasks or do work according to set standards. It is the ability to transfer skills, knowledge, and attitudes to various situations within a given occupation’ (Republic of Kenya 2018). Competency-based Education and Training (CBET) is a practical approach to education where emphasis is placed on the acquisition of skills (Miseda, & Kitainge 2021). It is designed to meet the demands of industry and business. This approach allows trainees to progress from one level to the next based on demonstrated mastery of predetermined competences. CBET involves training individuals to perform to the standards required in employment, in an agreed range of contexts, repeatedly over time. Successful Implementation of CBET has the potential to improve productivity, increase access to employment opportunities and raise the standard of living. Countries globally, have endeavored to reform their training approaches from ones that over emphasize content recall and examinations to ones that emphasizes the trainees’ ability to perform tasks according to set standards. The CBET curriculum was introduced in the TVET sub-sector in Kenya to address concerns of industry players who stated that graduates from Tertiary Institutions possessed skills that were not relevant to the job market. Secondly, it was noted that a large number of youth were dropping out of school and ending up in the informal sector where they worked as Apprentice for very low wages. In a quest to realize the objectives of vision 2030, there was need to carry out reforms in TVET training. The country also realized that majority of school graduates were not making it to the tertiary institutions hence the need to make the sector attractive, relevant, affordable to as many Youth as possible. Additionally, the sub-sector previously suffered from lack of attention from policymakers, which led to the production of graduates who did not meet industry expectations in terms of skills they acquired during training. This was evidenced by a study by the Kenya Association of Manufacturers (2017), which established that the training content in the TVET institutions did not match industry needs. The

survey report recommended that TVET trainers undergo industrial attachment at least every three years to upgrade their knowledge and skills. The proposed reforms included switching from knowledge-based instruction to the Competence-based Education and Training (CBET) approach.

The TVET Act No. 29 of 2013, saw the formation of three councils TVET Authority (TVETA) which is a regulatory body responsible for registration and accreditation of programmes. Technical Vocational Education and training – Curriculum Development, Assessment and Certification Council (TVET - CDACC) is mandated to undertake design and development of Curricula for the training institutions' examination, assessment and competence certification. It is also mandated to make rules with respect to such examinations and competency-based assessment. It is this organisation that was also tasked with capacity building trainers in CBET and Kenya National Qualification Framework (KNQA) responsible for Alignment and Validation of Qualifications into the KNQF awarded by Foreign Universities and Qualifications awarding bodies in accordance with Section 10 (1) of KNQF Regulations 2018. It also helps coordinate and harmonize education, training, assessment and quality assurance. These three institutions work with TVET training institutions such as national polytechnics, Technical training Institutes and Vocational training colleges to ensure the effective implementation of CBET.

CBET is practical oriented and relates training to industry. Its focus is on the transfer of knowledge, skills and attitudes (work behavior) to a task. Embedded in the work behavior are issues of values and other 21st Century skills such as creativity, innovation, digital literacy, communication among others (Voila 2016).

CBET is also a demand driven curriculum. The curriculum development process entails working with experts from the industry to ensure graduates trained meet the industry needs. Sector Skills Advisory Committees (SSACs) were formed to identify sector needs and evaluate and advise on the requirements of their respective sectors. Competency-based assessment (CBA) is a crucial component of CBET, and TVET CDACC has trained 13,758 trainers to spearhead the assessment and certification process.

The government has invested substantive resources in equipping public institutions with state-of-the-art training equipment and hiring additional trainers to smoothen the CBET implementation process. They also provide capitation to cater for the trainee's tuition costs. The TVET sector in

Kenya absorbs over 80% of youth who do not get a chance to enter Universities (UNESCO 2017).

CBET Trends Globally and Regionally

According to Makunja (2016) and Ford (2014), implementation of competence-based education is not a new concept in education systems of the world. The United States of America (USA) in 1957 was among the pioneers of competence-based education. This was in reaction to the space race that saw the Soviet Union launch the first satellite (Hodge 2007). By the late 1980s the concept shaped many programs of vocational education and training in the USA. CBE has recently gained traction again in the USA. The approach entails breaking down program requirements into specific sets of competencies that trainees are expected to master to be declared competent. A number of CBET programs are presently operating successfully. Germany introduced CBET at vocational level training in the 1970s (Mulder 2012) with a view of addressing the issue of high rates of unemployment especially among the youths, while the United Kingdom (UK) adopted it a decade later (Harris *et al* 1995).

In Canada, Johnstone & Soares (2014) posit that CBE is preferred over traditional models as it enhances access to post-secondary degrees and diploma acquisition to employees, addressing labour market demands and reducing the cost of post-secondary education. It also increases employability and graduates are better prepared for the world of work (Abner, Bartosh, Ungerleider & Tiffin 2014). CBE accreditation is popular in Canada and a number of professional bodies such as the Police sector council, Canadian Association of Schools of Nursing and Chartered Professional Accountants have adopted the competency approach. Other countries that have adopted CBE are South Korea and Finland. CBE is intended to enhance accountability whilst providing flexibility and reduced cost, some characteristics that make it differ from the traditional model include:

- It begins with a set of competencies relevant to the content and context of the job market the trainee is being trained for.
- The Curriculum is centred around robust competencies.

- Assessment is reliable, secure and aligned to competencies.
- Mastery is the main focus.

(Mulder 2012.)

Implementation of CBET approach in Africa started in South Africa in 1998 to address the acute shortage of professionals such as engineers, technicians and artisans. Other African countries such as Malawi, Ghana, Ethiopia, Tanzania and Rwanda followed suit. In Ethiopia, competence-based TVET was implemented under severe challenges which included lack of adequately prepared trainers and resources, frequent curricula changes, lack of employers' cooperation, discontent of trainers and administrators (Solomon 2016). In Tanzania, the CBET approach started in technical colleges in the year 2002 and was marred with various challenges including low understanding of CBET concept, lack of support facilities and resources, large number of trainees in classrooms, lack of motivation to some trainers due to unfavorable working conditions and low trainees' cooperation attitude (Tambwe 2019). In the quest to build a knowledge-based economy with a particular emphasis on science and technology as an engine for development, competence-based curriculum was introduced in Rwanda in the year 2015. Urunana (2018) however cites various challenges such as insufficient teaching and learning materials, large classes, lack of parental support and inadequate qualified teachers in the Rwandan case. These challenges are similar among many sub-saharan African countries and point to poor implementation or lack of adequate government support to effectively undertake CBET in the said countries. This is similar to the case in Kenya where policy guidelines are ignored for political expediency.

Theoretical Underpinnings

Theory has multiple perspectives and definitions rooted in Philosophy that promotes concepts and variables in meaning making (On'gondo & Jwan, 2020). The varied meanings are dependent on the context in which theory is applied. This implies that these concepts, definitions and propositions facilitate in making assertions about specific types of actions, aiding in analysing their causes, outcomes, and procedures, with the ultimate intention/purpose of developing a logical construction of knowledge of the lived world.

The CBET curriculum emphasises action learning. Focus is on what the trainee can do as opposed to what the trainee knows and this is achieved by the trainer providing opportunities for the trainees to engage in practical actions that demonstrate what they can do. Action learning propagated by Leont'ev (1981) identifies operations, objects and goals as methods that constitute individual actions, that can be used in the pursuit of one's goals. Leont'evs' theory is known as object-oriented collective activity. In this theory Bunner (2007) posits that an activity as human life expression can only be understood adequately if it is explained by its biological, natural-historical and social origin (Bunner 2007:90). These relate training contents (objects, phenomena, processes or similar) and its reflection within the human conscience (perceptions, feelings, ideas). Thus, an individual's activity comprises outer objects and inner insights together with action structures, and abilities.

Figure 1 depicts Leont'ev's object-oriented activity theory. It is ideal when discussing CBET curriculum because the practical nature of CBET requires individuals that engage in action learning to achieve their goals which in this case would be the specific competence that the trainee achieves. As action is perceived as individual, and activity as collective, motivation is understood as an individual or group-based process while motive is positioned as being socially and culturally located (Bunner 2007; Leontiev 1981; Kisaka 2018). To Leont'ev the activity is a system with its own structure and is an integral part of the subject. It aims at orientating the subject to the world of objects (Leont'ev 1981: 83). The needs of the subject stimulate activities. Activities differ – based on their objects, if it is the object (the content of the activity) stimulating the activity that can be considered the motive of the activity. In CBET the motive of the action is to acquire a competence, thus the activity could be said to be stimulated by the object.

Methodology

Data for this article was drawn from e-cases developed as a teaching resource for MEd students by a colleague and myself. I have included a screenshot of the cover page and the acknowledgement page. I have also included the Link to the e-case.

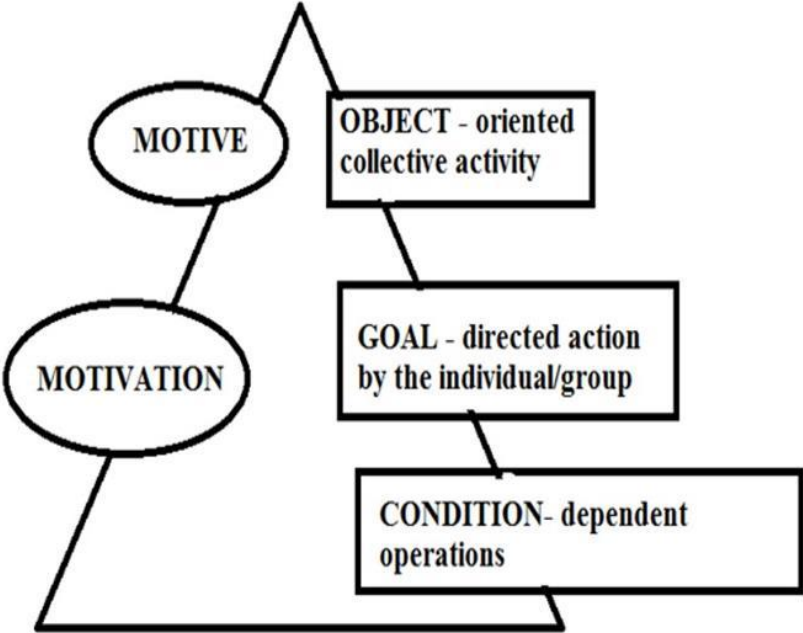


Figure 1: object-oriented collective activity
Source: Leont'ev (1981)

The Competence Based Curriculum (CBC) In Kenya

Roll-Out or Hold?

In-Depth Analysis of the Competence-Based Curriculum (CBC) Curriculum roll-out pushed to 2020 | The Government's plans for new education curriculum.

Video source: Cision

from this page

On December 10th 2018, Amb. Dr. Amina Mohammed who was the Cabinet Secretary of Education (CS) at the time announced on National TV that the Competence-Based Curriculum (CBC) roll out slated for January 2019 had been put on hold. This she stated, was due to the fact that education was a crucial aspect of a country's development and as such changes to a curriculum should not be rushed. She stated that the current intention to roll out the CBC was rushed and as such she had put it on hold. One week after this announcement, the CS was back on National TV stating that the curriculum roll out would go on as planned. One month later, she was transferred as the CS Education and Prof. George Magoha was appointed as the new CS of Education.

Imagine that you are Prof George Magoha and as the CS Education, one of your key duties is to advise government/ the President on the direction education in the country should go. You are tasked with making a decision on whether or not

MODULE 1

Stakeholders' Perspectives

MODULE 2

Challenges of CBC

MODULE 3

Way Forward

Home

Back

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Figure 2: Screenshot of e-cases (cover page) from which data for this article was derived



Figure 3: Screen shot of acknowledgement page of e-case showing the authors

Below is the link to access the full e-case.

<http://34.242.173.106/ecases/competency-based-curriculum-in-kenya/#screen/e43e4ff5-15c1-44c2-a54a-a700872d464c>

The e-case was drawn from Newspaper articles, News clips on stakeholder's perspectives on Competence-based curriculum (CBC), challenges on CBC as presented by the Permanent secretary responsible for basic and early learning education, parents whose children are undertaking CBC. Though this article is situated at the TVET level which is post school. The CBC which is currently being undertaken by primary and secondary school learners, feeds into the CBET curriculum that is offered at the post school level. This is important as the context is important in shaping the argument in the article.

Stakeholders in Education Reforms in TVET Sector and the Role of Politics Proclamations

The TVET sector has a lot of stakeholder's key among them is the Ministry of education specifically, the state department of vocational and technical training. This is the office responsible for providing policy direction and guiding the reforms in the sector and advising the president on the same.

The TVET subsector is provided across formal settings conducted in middle level Institutions and leads to level 3, 4, 5 & 6.; Non-formal settings-intentional and systematic training usually outside training institutions in which content is adapted to the unique needs of the trainees. and informal settings which is least structured and occurs in the Jua Kali sector.

The sector falls under the Cabinet Secretary in the Ministry of education, who is deputized by the permanent secretary in the State department for Vocational and Technical training (provides oversight for actors in TVET). Then the three organisations responsible for ensuring CBET implementation namely: TVETA – TVET CDACC – KNQA. These deal directly with Training providers, Training programs, facilities, trainees and trainers and the final group are Industry, labour force experienced worker's competent graduates. We also have development partners who collaborate with the various stakeholders mentioned above to facilitate curriculum development, capacity building, infrastructural support among others, we equally have the parents, guardians of the trainees and the general public (Republic of Kenya 2019).

As discussed earlier since independence the reforms that have been undertaken in the sector have been as a result of Commissions appointed by the Head of state at any given time. The selection of members to these commissions has not been transparent and in some instances the recommendations of the commissions have not been addressed. The fact that reforms have been top down has not augured well with the implementers of the reforms as they do not buy in to the said reform. As is the case with CBET curriculum. A research undertaken by a team from TVETA and TVET CDACC found that a majority of the institutions were not offering CBET courses in their institutions. Various reasons were attributed to this and they will be discussed in the next section.

Political proclamations have also played a role in impacting the adoption of CBET in TVET Institutions in Kenya. For instance, last year the permanent secretary for Vocational and Technical training ordered all institutions to offer at least one CBET course. This was done with no due diligence to capacity of some institutions to adhere to the directive. Additionally, the TVET Act of 2013 that saw the creation of the Institutions responsible for offering CBET wasn't well done and is currently under review. This act was devoid of clear guidelines that institutions could follow. This leads to varied implementation which may have a devastating effect.

Policies, Opportunities and Challenges

All the Curriculum reforms undertaken in the CBET sector have been as a result of reports of task forces/. Commissions set up to advice the government-based on the the contextual factors prevailing at the particular time. This include regime change, feedback from stakeholders, global trends among other. We also have acts of parliament that are passed-based on legislature.

The Ominde Commission (1964) recommended practical education to create a skilled work force for the labour market. Education reform here was aimed at capacity building and enhancing skills that were contextually relevant for Kenya. The implementation of these recommendations was not adequately enforced. In 1976 The Gachathi commission was formed it too recommended a practical oriented curriculum with a focus on rural areas to stem the rural urban migration. The Mackay Commission of 1981 followed. Its recommendation focused on Technology adaption in Education and it

came with the change of political leadership as a new president had been sworn in in 1978. The Kamunge Commission of 1988 came next. It stressed the need to expand and capacitate TVET training institutions to enhance training of artisans. The Koech report of 2002 came next, it recommended the strengthening of the TVET sector as it noted that the TVET sector had failed to attract trainees and thus was not meeting the demand for artisans and technicians to meet the market demands. This report was never implemented.

In 2012 the Odhiambho commission was set up. It recommended competence-based curriculum and Competency-based Education and Training, this it felt would absorb the large number of school dropouts while providing affordable training aligned to industry needs. The CBET Curriculum was a product of the Odhiambo Commission of 2012 as well as the TVET Act no 29 of 2013. There has been a mismatch between the intended Curriculum and the Implemented Curriculum (Kisaka 2018) as no clear guidelines have been given on how to implement CBET with different institutions implementing it differently. Additionally, there has not been a follow up to ensure implementation is taking place leading to fragmented implementation with for example only four out of eleven National polytechnics implementing CBET.

Several opportunities exist for trainees and trainers in that trainers now act as facilitators in the learning process enabling the trainees to take control of their learning. Graduates produced meet and serve the needs of the Industry leading to higher productivity, Job satisfaction, lack of wastage on both the part of the Industry in retraining and the trainee on Re – tooling. Youth employability is enhanced as more youth have access to TVET training through government capitation as well as expanded access. The informal sector gets a boost as TVET Institutions now offer courses from Levels 3,4 ,5 & 6 from Artisan level to Diploma and with a standardized qualification framework there is room for trainees to pursue their training up to University level. Self-employment enabled as many do not have to wait to be formally employed. Better goods and services as training is geared to societal need - Jua Kali sector thrives on a policy of supply and demand. Many Kenyans involved in this sector as merchants or buyers (World Bank 2018; Manguyu *et al.* 2018).

Challenges in the Implementation of CBET include: increased enrollment of trainees straining existing facilities; lack of adequate infra-

structure; CBET implementation is expensive and institutions do not have adequate funds to build workshops and relevant facilities as well as buy modern equipment; Technical training Institutions trainers are not adequately trained in the implementation of CBET; lack of awareness on the part of the trainees, trainers and industry on CBET so some trainees refuse to take CBET as they argue it isn't recognized in the job market (Wambua 2019). Industry lacks incentive to participate in the development of the Curriculum as they do not see the benefit to them. Lack of clear policy from government on how this may work leading to fragmented implementation across institutions (Miseda & Kitainge 2021; Kufaine & Chitera 2013).

Conclusion

This paper delved into Education reforms in Kenya with a focus on CBET Curriculum in the TVET sector. The Introduction section looked at education reforms in general and why education reforms are necessary, this was followed by a background to CBET in Kenya. This was discussed against a presentation of literature on CBET trends Globally and regionally. Action learning as the learning model was explored with Leont'ev's object oriented collective activity as an ideal theoretical stance for CBET Implementation. Various stakeholders in the TVET sector were presented and the role of political proclamations as opposed to policy guidelines examined. In conclusion the paper postulates that CBET curriculum though only four years since its inception is gaining traction among TVET institutions with most institutions implementing at least one course using this approach. CBET approach requires a lot of preparations such as; Advocacy drives to create awareness among the public; capacity building of trainers especially in regard to conceptualizing the approach to ensure buy in, Adequate supply of modern training material and relevant infrastructural development. Clear guidelines on implementation backed by relevant policy documents, training manuals.

Recommendations

A tracer study should be carried out to ascertain the actual issues on the ground and using a design-based research approach work together with practitioners in finding solutions.

Linkages with Industry and collaborations and partnerships with development partners can ameliorate the infrastructure issues as well as building capacity among trainers on implementation, curriculum, development, audit gap reviews etc. (Oviawe 2018).

Politicians leave decision making to technocrats in the education sector who understand what is best for this sector and act on guidance and recommendations from these technocrats.

The national and county governments should support TVET training institutions with acquisition of relevant equipment, improve infrastructure and capacity build trainers.

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