

## **ENHANCING SUSTAINABLE LIFELONG LEARNING THROUGH COMPETENCY BASED EDUCATION AND TRAINING IN ZIMBABWE POLYTECHNICS**

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### **–Abstract–**

This paper looks at Competency Based Education and Training (CBET) as a mechanism of imparting skills to learners. The paper further justifies CBET as an alternative route for Technical Vocational Education and Training (TVET) in public institutions in Zimbabwe. Over the years and recently CBET has proved to be the conduit of skills development and training that produces competent graduates capable of creating employment and promoting sustainable economic growth. TVET is capable of producing specialist practitioners for the various levels of the productive and service sectors in all the sectors of the economy. The paper advanced how competency-based education can be used as a conduit to enhance sustainable life-long learning capable of creating employment through entrepreneurship and meeting industry demands. CBET is viewed as a reform mechanism of skills development for life-long learning. For this study documentary analysis of literature was used to determine the relevant source of material for review. The selected literature, which included policy documents, journal articles and search engines were critically analysed. Document analysis of reviewed literature became the main source of information and data about TVET in public institutions. CBET is a wholesome mode of delivery which links all the three domains of learning namely psychomotor, affective and cognitive and enables graduates from this system to effectively operate in both formal and informal sectors of the economy for their livelihoods and the development of the nation at large. The training system is guided by international trends of industrialisation and modernisation; hence the paper proposes a TVET system driven by CBET that focuses on skills development anchored on continuous assessment, on the job training and innovation. In conclusion, the study established CBET as an effective mode of equipping trainees with sustainable lifelong competencies for self-reliance and economic growth. For this reason, CBET can be adopted as a useful means of growing the economy through formal and informal entrepreneurial income generating projects.

**Key Words:** competency; entrepreneurship; life-long learning; sustainable; skills development

**JEL Classification:** 121

## 1. Introduction

Education in general gives individuals knowledge which empowers them with means to navigate the various, facets of life. In this context education equips individuals with knowledge, skills and attitudes that enable them to come up with better decisions about life, hence it is acknowledged as a means for transforming and empowering communities (Okwelle & Ayonmike, 2014:185). This makes education a self-empowerment tool. Turkkahraman, (2012:1) assert that education is a means to sustain individual and societal improvement. It is with this in mind that education and training has to raise sufficient number of efficient people for prosperous individuals and societies. Institutions have been given the role of educating and training that has benefits for individuals in their lives. It is against this background that this paper attempts to come up with ways of how Competency-Based Education and Training (CBET) can enhance lifelong learning that provides skills to graduates that can sustain their lives beyond any means of learning. The absence of a sustainable life after formal employment or learning has resulted in people failing to live descent lives through engaging in income generating projects anchored on the skills acquired during training. It is envisaged that a practical oriented skills based education system will equip graduates with necessary capabilities to sustain their livelihoods that enhance the standard and quality of life. Such an education and training system is important and of benefit to those who undertake it as way of combating poverty alleviation and unemployment (Obwoye, 2016:539). The concept of competency-based education and training (CBET) may be viewed as a way of perpetuating lifelong learning as learners continuously upgrade their skills at every available opportunity (World Bank 2002). The education system of any country basically aims to equip the populace with requisite skills and knowledge that respond to demands from industry leading to the development of the economy of the country at large. For this reason, competency based education and training is considered the appropriate training process comprised of skills development and training that relate to a wide spectrum of occupational fields (Report on TVET Policy Review Framework, 2005:18). The system has proved to be the basis of skills development and training that produces competent graduates capable of creating employment and promoting sustainable economic growth. TVET as a learning process is capable of producing the sector specific practitioners for the various levels of the productive and service sectors in the formal and non-formal sectors of the economy. The characteristics of TVET and CBET blend supposedly well to promote skills development and lifelong learning. This paper was guided by the following main research question: *How can CBET be used as a conduit to enhance sustainable life-long learning capable of creating employment and self-sustenance through entrepreneurship?*

## 2. Research Methodology

The paper employed a qualitative approach and used purposive sampling to select literature on CBET. A critical document analysis of relevant literature sources that included published peer reviewed journal articles and policy documents was carried out.

## 3. Results and discussion

The rate of unemployment in Zimbabwe has risen to alarming and unfrequented levels in the range of over 90% (Mpofu & Chinhenga, 2016:8). This inspired the basis of this undertaking with a view of proffering solutions through a responsive education and training system. This education system has proven records locally, regionally and internationally. According to Ayonmike et al, (2014:290) TVET in their study of CBET in TVET: Implications for Sustainable

National Security and Development, noted that an education system anchored on CBET is the panacea for growing unemployment numbers especially in developing countries. The authors further reiterated that the absence of employable skills in TVET exacerbates the unemployment levels. The unemployment levels have increased poverty among the populace especially the youth. This status quo has led youths to engage in elicited behaviour especially to do with toxic substance abuse (Zinhumwe, 2012). However, a well-managed TVET system blended by CBET equips graduates or school leavers with skills for survival as adults. Okwelle and Ayonmike, (2014:186) in their study on the Role of TVET for Sustainable Development concluded that, since education is considered the key to effective development strategies, technical and vocational education and training (TVET) is the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all and help achieve sustainable development. It is believed that such an education and training system plays a complimentary role with learning acquired non-formally and formally. OECD, (2018) note that education has an important part to play in developing the knowledge, skills, attitudes and values that enable individuals to contribute and benefit from a wide array of societal issues. Such type of education prepares young people for the world of work (formal and non-formal) through equipping them with the skills they need to become active, responsible and engaged citizens.

The Government of Zimbabwe (GoZ) like other African countries has also embarked on radical reforms through its Ministry of Higher and Tertiary, Science and Technology Development. The government and its cooperating partners continue to fine tune its TVET based on CBET concept which is credit based on practical skills (Woyo, 2013:182). As part of its training strategies trainees undergo on the job attachment stints as part of ensuring and deepening trainees' skills acquisition. To achieve this special departments have been deliberately created under Quality Assurance and Standards viz; Curriculum Research and Development (CRD) and National Examinations (NE) as a way ensuring quality is upheld. CRD is seized with developing occupational standards and skills proficiency schedules using industry experts as a way of narrowing the gap between institutional education and industry (Woyo, 2013:185). This move has been spurred by a continuous assessment model meant ensure mastery of knowledge, skills and attitudes necessary to perform various set tasks. This connects very closely with the idea of lifelong learning.

Lifelong learning is a phenomenon that can sustain skills development in individuals in their entire lives. This acts as a basis for ingenuity based on the acquired skills, promoting an enabling platform for trainees to showcase individual potential (Tuxworth, 1994:109). The emphasis is the ability to keep on learning for an individual's lifetime. The afore said issues can be augmented by a solid base anchored on CBET and training that help support skills learnt formally in college or non-formally through socialisation and work places. It is envisaged that CBET forms the bedrock of lifelong learning that can sustain lives. The European Commission in (2000:19) established that learning through life experiences or lifelong learning has individual benefits which include self-affirmation, inclusivity, responsibility and self-reliance. In line with this assertion, a combination of CBET and TVET play a pivotal role in improving and providing solutions to societal pressing needs especially those that have to do with skills development through formal and non-formal lifelong learning (Norton, 1987). This can be achieved through a clear vision for the people's development through learning that sustains lives beyond active or formal employment. The Regional Forum of Southern Africa on Technical and Vocational Education and Training (TVET) (2016) noted that CBET is synonymous with TVET as it aims to equip the young with the necessary skills that promote employment creation opportunities. The

UNESCO TVET Strategy for the period 2016-21 aims to make the 2030 Sustainable Development Agenda a reality through its alignment to the Sustainable Development Goals (SDGs). SDG 4 advocates for the international community to guarantee an all-encompassing, non-discriminatory and impartial quality education that promotes skills development for all. Three targets under SDG 4 clearly spell out the importance of TVET which in essence is a byproduct of the competency-based education and training (CBET), as an implementation strategy. Preston (2017:10) concurs and notes that CBET is now being packaged as an essential method of lifelong learning where change in behavior through learning is assessed through set standards.

Obwoye (2016:540) emphasise that the most important characteristic of CBET is that it measures learning as opposed to the traditional system which is time based. Preparations begin with identifying competencies (knowledge, skills and attitudes) and the learning process is step by step which provides the necessary guidance and support for mastery. Zimbabwe in 1990 developed the Rationalisation of Vocational and Technical Education policy which set the TVET policy in the country (World TVET Database Zimbabwe, 2012:5). This marked the beginning of a shift towards the adoption of CBET. As a follow up in 2005 the Ministry of Higher and Tertiary Education published a review of the TVET system (World Database Zimbabwe, 2012:5). Both documents came up with a wide array of recommendations that guided the development of TVET in Zimbabwe. It was at this juncture that polytechnic education began offering CBET education and training that emphasised acquiring competencies. This saw the establishment of higher education and examinations council (HEXCO) which presided over examinations in polytechnics and department of Industrial Training and Trade Testing which recognise prior learning (World TVET Database, 2012:6). This arrangement took care of individuals who had acquired some experience through on the job training without any secondary formal qualification (Report on the TVET Policy Review Framework, 2005:16; World TVET Database Zimbabwe, 2012:6).

### **3.1. Learning for life**

Viewed from a simple point of view, lifelong learning is all that learning that is pursued throughout individuals' lives. This is learning that is malleable, varied and available at different times and places (Kennedy et al, 2018:30). Literature has it that lifelong learning cut across all sectors of the economy while promoting learning that goes beyond old-fashioned or traditional schooling throughout one's adult life (Elfert, 2015:89). Watson (2003:5) concurs and aptly says lifelong learning is a process that encourages individuals to acquire knowledge, values and skills through real life experiences during their lifetimes. The World Bank (2002:15) sums up lifelong learning as a system that includes all the learning that individuals go through from early childhood to retirement. Furthermore, it is learning done through formal learning channels in schools, training institutions and universities while non-formal learning is on the job and household training.

This type of learning from a household perspective is attained through socialisation or learning through imitation as learners copy from family members or people in the community. In this regard, lifelong learning can be summed up as learning that has an inclusive approach which includes formal and non-formal settings. A combination of CBET and lifelong learning would spur individuals to perfect skills development that can give rise to projects that stimulate individual and community development (World Bank, 2003:16).

### **3.2. Training for skills development**

Human capital development anchors the development process of any developing and progressive economy, thus CBET provides the platform to produce artisans in various sectors of the economy. This can be achieved through the integration of CBET and TVET as key ingredients to of developing a skilled technical and entrepreneurial workforce for sustainable national development (Ayonmike et al, 2014:291). It is, therefore incumbent that, training for skills development anchored on vocational education requires a model that is relevant to the needs of the industry and individuals who seek to survive on acquired skills. Emphasis should be in learning that is practical and competency based. Examples, that promote this type of learning is apprenticeship training that has the bigger part of the training programme focused on solving real life concrete situations rather than abstract learning (Report on the TVET Policy Review Framework 2005:17). Woyo (2013:186) agree that, CBET is a method to training in which skills are acquired based on a proficiency schedule, knowledge acquired through defined standards and attitudes measured through the aesthetic values one attaches on a completed task. The emphasis to this approach to learning and teaching is more focused on learning concrete skills than abstract learning (Ayonmike, Okwelle & Okeke 2014:123). The trio further point that learning in this approach puts emphasis on learners mastering one competency at a time and proceeding to the more complex skills step by step.

The approach allows learners to progress to next levels when they feel ready for assessment on a particular competency. From the foregoing, CBET can be considered as a suitable approach for training in Technical and Vocational Education (TVET) because the approach is oriented towards the real world of work that emphasise the acquisition of lifelong skills. CBET delivery systems are therefore well placed to train the skilled and entrepreneurial workforce that is needed to create wealth and reduce poverty. It is in this view that CBET as a way of approaching vocational training places emphasis on what a person can actually do in practice as opposed to theory (Sullivan & McIntosh, 1996:95). It is concerned with training to industry specific standards rather than with an individual's achievement relative to others in a group (Kaaya, 2012:84).

CBET can be used as a vehicle to produce practically oriented graduates; this therefore implies that TVET using the CBET approach can respond, to the needs of different industries requirements and those of the training needs of learners, preparing them for gainful employment and sustainable livelihoods (Woyo, 2013:185). It is against this backdrop that there is need to align the curriculum to the current dispensation of bridging the gap between what is taught at college and the real world of work. This is presumed to be a vehicle that produces practically oriented graduates who are functional throughout their lives. Ideally CBET requires that intended outcomes be derived from industry from a spectrum of economic sectors, stressing on the specification, measurement and mastery of competencies. CBET approach also entails that learning be student centred and flexible, allowing learners to progress at a steady pace around real-life situations through problem solving techniques (Brown, 1994:2).

#### **3.2.1. Lifelong learning for sustainable life style**

Traditionally, emphasis has been on the benefits of formal education ignoring the fact that learning is entirely a natural process (Brine, 2006:649). This point to the fact that in everything that one engages in, there is some learning that goes on as individuals interact and skills acquisition becomes natural. Piaget a popular psychologist says learning is inherent and begins

even before birth. The argument is that learning in such circumstances depends on curiosity, desire to explore and manipulate things around coupled with the ability to grasp new ideas and skills. Clark, (2005:47) says this is learning through socialisation where knowledge and skills are passed from generation to generation. This notion makes non-formal education lifelong which needs to be harnessed and integrated into the mainstream formal education and training system to produce self-reliant and innovative individuals.

People learn with the help of educators, schools, and educational bureaucracies. This makes learning primarily a social activity. First major learning achievements after birth like walking and talking are impossible without the stimulation and encouragement of parents, siblings or other adults. All subsequent learning depends on interaction with others, either directly or indirectly (e.g. through books or other media). Most of this is done through formal education. This kind of learning system achieves its greatest success at very early stages in life that is, learning to read and write. This remarkable accomplishment almost always requires the intervention of a professional educator using a formal system of instruction and forms the basis for a good deal of our subsequent learning (STEP Report Series 1: Southern Africa Regional Forum on Technical and Vocational Education and Training).

### **3.2.2. The limitations of formal education**

All nations around the world have committed substantial investments in education, for social and economic reasons. For most developed countries, formal schooling for young people begins at tender ages and continues until adulthood. From as early as six(6) to twenty four years learning at this age group primarily takes place in educational institutions, from primary and secondary to tertiary levels. Family life, social organizations, religious institutions and mass media have a role in learning during this time (Laal, 2011:475). However formal learning at this stage has its own share of problems.

Formalised learning presents problems, like that of sustainability, as this type of learning aims to sharpen the cognitive domain rendering other domains useless as there is lack of knowledge transfer that link skills learned in school to real life situations in the outside world (Deißinger & Hellwig, 2005:8). While it is easy to see how such basic skills as reading and writing can be applied in a wide range of contexts, as education becomes more specialised it transfers less readily to new situations. Modern-day higher education has become highly specialised and only a small number of graduates has access to careers which require specialised knowledge and skills. This situation is further complicated by the ever changing nature of professional knowledge and practice, which makes a good deal of what is learned in formal education rapidly redundant or obsolete. Thus, in a swiftly changing world, the ideal situation is one which promotes skills development. This seems a reliable remedy for the promotion of flexible learning needed to tackle a wide range of existing, new, unforeseen and complex problems (Sullivan & McIntosh 1996:97; Sampson & Fytros, 2008:155)

### **3.2.3. Importance of lifelong learning**

The essential principle of lifelong learning is that it is a process of a life time or throughout life. In this rationality, lifelong learning is sustainable in that it operates as a self-directed individual initiative. On the other hand formalised learning is central to a dominant figure, a fountain of knowledge handing down facts exuding authority or superiority (Harris, Hobart & Lundberg, 2006). The term lifelong learning was formalised by Edgar Faure through the piece, *learning to be* and was adopted worldwide including UNESCO which was later used as a blueprint for

universal education. The concept ‘lifelong learning’ was adopted to represent the need for equal opportunities for all as a way of ensuring individual self-fulfillment. The idea was proffered to ensure learning is not confined to formal educational institutions only but should also take place in a wide variety of settings that include workplaces and social settings (Ayonmike, Okwelle & Okeke 2014:290). The most important aspect of lifelong learning is that, it enhances social inclusion, active citizenship and individual development and also increases competitiveness and employability as learners continue to seek knowledge and skills (Ates & Alsai, 2012:4092).

#### **3.2.4. Characteristics of lifelong learning**

Lifelong learning has characteristics that make it more responsive to real life situations that make it relevant for personal well-being and growth (Laal, 2011:472). This learning process allows learners to plan, monitor and participate in self-evaluation. The learning process is active and assessment is based on feedback for improvement. Furthermore, learning occurs in both formal and informal settings, allowing learners to learn from peers. This makes lifelong learners tackle real life problems and possess skills for life (Laal, 2011:472). It is on this basis that marrying lifelong learning and competency based education and training is logical in building up a complete individual able to come up with income generating projects. Through this learning process learners are exposed to different learning situations that promote integration of ideas from different fields. The learning strategies are also varied and appropriate as needed. This empowers learners to evaluate information from different sources based on the obtaining situations. This learning model stresses acquisition of competencies accompanied by standards informed by relevant knowledge (Ates & Alsai, 2012:4095).

As earlier acknowledged lifelong learning is self-directed as learners are given the latitude to study on their own pace and evaluate own performances. Both teachers and learners play an important role, with educators playing a more facilitating role in the learning process, while learners focus on the execution of skills. The pre-eminent task for educators is to equip learners with the ability to guide their own learning throughout their lives and in a wide variety of situations encountered after leaving formal education. This is the underlying principle of CBET which allows learners to learn at their own pace.

#### **3. Methods that encourage lifelong sustainable learning**

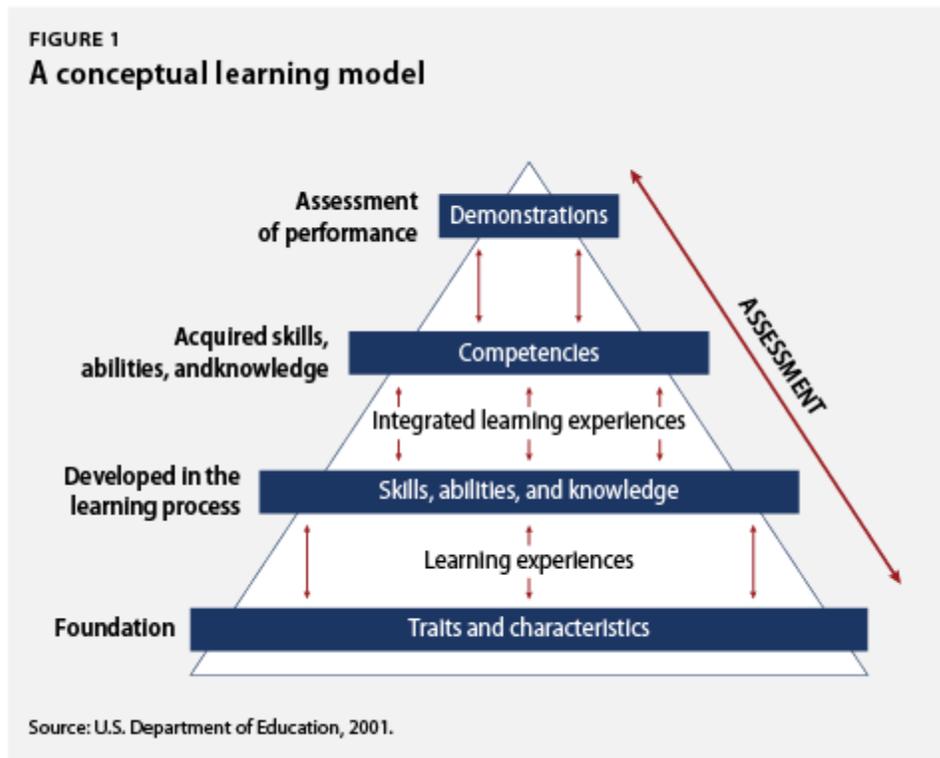
In order to ensure lifelong learning is effective, teaching methods employed should be learner centred which promotes learner activity and task performance rather than just mere acquisition of facts (Deißinger & Hellwig, 2005:10). This should subsequently present meaningful personal interaction between students and teachers. Teachers or educators’ roles become that of guiding, validating, and inspirational role in motivating learners. Furthermore teachers model good learning that help learners develop essential real life skills empowering them to make key life choices. Methods employed should also be interactive as this presents learners with opportunities for collaborative team learning which helps learners to integrate with others as learning in real life always involves working with other people, either directly or indirectly. Again lifelong learning methods should provide more authentic involving tasks performed in natural situations that can lead to change and improvement. Constructive feedback should also be given that include elements of peer and self-assessment, which enable learners to reflect on their performance and make appropriate changes based on those reflections (Deißinger & Hellwig, 2005:54).

Methods employed should encourage integration of information and skills from different fields as most problems in the real world are multi-faceted. These should also take into consideration individual differences among learners as rate of assimilation and mastery of skills differs according to individual ingenuity. Overall, the teaching and learning process should present challenging tasks that are achievable. These present learners with the motivation to want to learn more. This also means the tasks should not be highly pitched as this demotivates learners. It is on this basis that learning outcomes should be agreed between learners and teachers or educators. This includes decisions about the content to be learnt, methods employed and approaches to assessment.

This is the approach used in competency education and training, where learners are informed of the learning outcomes through the availability of skills proficiency schedules and occupational standards (Deißinger & Hellwig, 2005:13). In this case skills proficiency schedules roll out the expected competencies for a specific course. The provision of these two documents coupled with the content outline assist learners work towards the attainment of the set goals. Assessment is continuous with emphasis on skills mastery. This empowers learners to take the responsibility for their own learning. Learners are given countless chances to master given competencies practiced at their own pace.

Figure 1 below summarises an illustration of the competency-based approach.

**Figure 1: Competency based education and training approach**



Source: Obwoye, 2016:541

## **5. Characteristics of Competency Based Education and Training (CBET)**

There are a number of characteristics of competency-based programs. Important characteristics of this learning model include the following outlined points. To begin with occupational standards are developed which bench mark the occupation using knowledge obtained from practicing experts from industry. This is followed by the crafting of competencies of the occupation which are carefully selected and put on proficiency schedules. The proficiency schedules outline the practical components of the occupation which must be mastered by learners. This helps learners to know the competencies to grasp. Learners are assessed based on the competencies and the information given during occupational standards development. The last phase is when educators, teachers or lecturers help out in the formulation of the content to be taught based on the level set using the level descriptors. This is where relevant theory is integrated with the practical component on the skills proficiency. In other words vital knowledge is used to support the performance of skills. The occupational standards usually state the required training material, equipment and accompanying facilities (Deißinger & Hellwig, 2005:20).

All the three operating documents provide the time required to master the content and the skills. Furthermore mastery of skills is measured through recognition of prior learning which may lead in some instances to exemptions of some subjects. This allows transfer of credits and individual learners mobility from one area to another. Learning under this model is self –paced and can be done in groups of manageable sizes. Completion of a set of competencies is pegged at specific levels which must reveal mastery of both theory and practical components producing an all-rounder who can function under any conditions (Foyster, 1990:3).

## **6. Benefits of competency-based education and training (CBET)**

There is sufficient evidence that the adoption of a Competency Based Training system improves quality and relevance of TVET. Benefits of CBET are numerous but the most important are that; learners achieve competencies required in the jobs through mastery of skills; the mastery of competencies further acts as a way of building confidence in the trainees; training time is utilised efficiently and effectively as the trainees spend more time practicing acquisition of competencies, while the trainer is a facilitator of the learning process as opposed to a provider of information; the training process accounts for every individual ensuring that each learner receives adequate attention through evaluating each participant's ability to perform essential job skills (Woyo, 2013:185).

Competency Based Education Training is a model that tackles unemployment as graduates from this system are able to start self-employment projects because they have acquired the competencies to set up their own businesses or be absorbed by the industries. Therefore, unemployment which other programmes grapple with is not an issue for CBET graduates (Anane, 2012:117). There is no doubt that having gone through CBET, graduates do not simply provide service in the working environment; they accomplish results and this is what the world of work expects from its work force and which the CBET graduates have exhibited. Most graduates from this training background have either gotten formal employment or are self-employed because they have acquired the competencies needed to operate efficiently in their respective professions. These graduates have become the pillar of economic development in both first and third world countries. For example apprentices who underwent similar training are still on demand in African and European countries. These are usually recruited with incentives of

attaining citizenship and lucrative on the job packages. This goes to batterers the point that Competency Based Training is indeed quality delivery for TVET Institutions.

## **7. Zimbabwe's drive to sustain lifelong learning through CBET in polytechnics**

Zimbabwe at independence took a deliberate move meant to sustain lifelong learning through crafting a policy on education with production which was basically meant to produce graduates who could live on the skills gained after training (Maravanyika, 1990:87). This philosophy was meant to bring together theory and practice making school experiences meaningful in terms of real life activities outside the school. It was the government's view was that all learning should encompass practical application used to solve real life problems faced by the people in trying to improve their environment, standard and quality of life (Maravanyika, 1990:89). The main focus of this thrust was aimed at reducing shortages of skilled workers and as a possible solution to the increasing youth unemployment (Mupunga, Burnett & Redmann, 2005:75).

Zimbabwe's polytechnic education offered through its eight (8) polytechnics and two (2) industrial training centres has also transformed its training model, from being course based to become competency based (Woyo, 2013:188). This transformation was in line with the need to bridge the gap between institutions of learning and industry. This was to earn polytechnic training and education a relevance tag from industry as graduates from these institutions performed better than before on being employed by industry (Namaco Joint Meeting Report, 2012). To this end polytechnic education adopted Competency Based Education and Training philosophy. The policy came into being in 1990 (World TVET Database Zimbabwe, 2012:8).

This was meant to promote technical vocational education and training which in principle equips learners with skills and entrepreneurial prowess to come up with self-employment projects. The policy meant that all polytechnics in Zimbabwe run TVET programmes anchored on CBET. The vision was to bridge what was learnt in institutions and the real world of work. This involved the creation of horizontal and vertical linkages with exit points at virtually every level. The TVET curriculum was designed with compulsory courses such as, National Strategic Studies, HIV-Aids Education and Entrepreneurial Skills Development. On the job education and training is also a compulsory course basically meant to ensure learners get the necessary hands on exposure. The process involves on-and off-the job grooming of the trainee by both the institution and the productive and service sectors. Its graduates include skilled operatives, skilled workers, technicians and technologists. TVET graduates are the practical problem-solvers, innovators, leaders and employment creators in any society. The expansion of TVET institutions and programmes has been to address more the predicament of school leavers and dropouts who need to be prepared for productive life after training (21<sup>st</sup> Century Paper; Hexco General Regulations, 2012).

### **7.1. CBET in Zimbabwean polytechnic institutions**

Zimbabwe has since adopted CBET learning system in its TVET institutions (Woyo, 2013:185). Industry has become an important player through the National Manpower Advisory Council (NAMACO) which council is made up representatives of the twenty sectors of the economy which prevail in Zimbabwe (Report on TVET Policy Review Framework, 2005:18). The key role of the council is to advise government on human capital needs of industry and critical skills gap. Hence, experts from industry help in crafting occupation qualification standards and skills proficiencies for different occupations. The idea was intended to bridge the gap between what is learnt in institutions and the real world of work. Assessment is continuous during the learning

process and external assessors are drawn from industry and involved in the assessment process to ensure the assessment is valid and reliable. Students are also given an opportunity prior, to assessment to know exactly what to expect from the assessment process. This has made the assessment purposeful in that all three main domains of learning namely, cognitive, affective and psychomotor are taken care of; this has led to coining this approach “*cbetisation*” or “*cbetised*” curriculum. The assessment includes portfolios, simulations, interviews and model projects that solve real life problems.

According to HEXCO General Regulations 2012, the practical skills component, which is the continuous assessment, is composed of written tests, field-based projects and a proficiency mark. The final mark is then derived from merging the practical components and final the written examination. The practical component has sixty percent weighting while the written exam has forty percent. This assessment criterion emphasises skills development. The outcome of this has improved on the performance of students in their execution of competencies. As a result, formal and non-formal employment has benefitted from this initiative which is slowly creeping into institutions of higher learning. Engagement by graduates in self-initiated projects has also manifested in Small to medium enterprises (SMEs) in tourism, metal fabrication, hospitality, accounting among others dominate these initiatives (Zimbabwe TVET Policy 1990; HEXCO Report 2017). There has been deliberate promotion of this phenomenon by government through such student programmes as GEEP (Graduate Entrepreneurial Economic Programmes) designed to enhance income generating projects.

## **8. Conclusion**

From the experiences of other countries and policy formulations there is general consensus that Competency Based Training is the ideal education and training model for TVET programmes, as the learning process takes on board skills, knowledge and attitudes necessary to produce an all-rounder after training. The approach has relevance in developing economies which still need to be grown and have to deal with huge numbers of unemployment. However, implementation of this training model requires funding to ensure that relevant training equipment and facilities are in place. Furthermore the training system should be flexible enough to allow students ready for assessment to be assessed as required. However, testimonies from industry about the performance of CBET products is evidence enough that if a nation emphasizes on skills development through competency-based training, there will be sustainable development for industries and the nation as a whole. Therefore, every effort must be made by stakeholders to overcome challenges to do with training facilities and assessment through the adoption of systematic and pragmatic strategies to ensure that the CBET system is sustained. Competency Based Education and Training (CBET) takes all two modes of learning i.e. informal education through recognition of prior learning, on the job education and training and through designed programmes that lead to a qualification which translate to lifelong learning as learners continue to grow in search of knowledge, skills upgrades and qualifications. The inclusion of job profiles, occupational standard development and skills proficiency schedules complete the process taking care of the three domains of learning i.e. cognitive, psychomotor and affective. The emphasis on practical skills makes CBET a tool for life wide and lifelong learning.

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