

Enhancing Technical and Vocational Education and Training (TVET) in Nigeria for Sustainable Development: Competency-Based Training (CBT) Approach

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Abstract

This paper attempts to examine the concept of Competency-Based Training (CBT) as a veritable mode of delivery of Technical and Vocational Education and Training (TVET) and at the same time highlights some of the strengths and weaknesses of implementing competency-base training. The characteristics, principles and benefits of CBT were also x-rayed. It was concluded that CBT mode of delivery is providing the kind of workers industry demands and also is preparing individuals for self-employment.

INTRODUCTION

Technical and vocational Education and Training (TVET) is an indispensable aspect of the educational system of Nigeria. This is based on the fact that unlike other forms of Education, TVET is aimed at the acquisition of practical and applied skills as well as basic scientific knowledge for the development of the country.

The major aim of TVET is to become an instrument of self employment to the individual who has been empowered not only by subject matter inhibition but who through experimental learning perceived it as real life solution to problems and can make use of his initiative in labour market (Klein-Collin, 2012). The major thrust of TVET thus can be described not just as knowledge or facts, but includes also the practice and comprehensive command of one “peculiar ability after training in solving human problems”.

However, Technical and Vocational Education and Training (TVET) was introduced in Nigeria with the aim of providing the technical knowledge and skills necessary for agricultural, industrial, commercial and economic development of the nation. Really, this form of education has not live up to its expectation in terms of achieving its goals. This development could be as a result of not implementing a workable mode of delivery for TVET programmes. Numerous countries of the world among which are Australia, Indonesia, New Zealand, United Kingdom and Ghana have made some reforms in the mode of delivery of TVET by introducing the Competency Based Training (CBT) concept and it has proven to be productive in all its ramifications.

The Competency Based Training (CBT) programme is an exciting new outcome based qualification which has been developed in partnership with leading employers (Ganzglass, Bird & Prince, 2011). This mode of delivery is providing the kind of workers industry demands and also is preparing individuals for self employment. The introduction of the CBT in the TVET reform will therefore engage most youth of the nation in well structured skills development and workplace experience to ensure employment opportunities and industry led skills development (Killer, 2000).

Therefore, it is the focus of this paper to bring to limelight the concept of competency based training as a workable mode of delivery of Technical and Vocational Education and Training (TVET) in Nigeria. This is essential as embracing competency based training will mean employment creation and poverty reduction.

CONCEPT OF COMPETENCY BASED TRAINING

Competency Based Training (CBT) is a structured approach to training and assessment that is directed toward achieving specific outcomes. It is about assisting individuals to acquire skills and knowledge with a view to performing a task to a specified standard under certain conditions (Harris, & Hodge, 2012). In CBT, the outcomes to be achieved are clearly stated so that learners know exactly what they have to be able to do, trainers know what training or learning is to be provided and organizations know the skill levels required of their people.

The emphasis is competency based training is on “performing” rather than just “knowing”. Competency according to Dubois and Rothwell (2004), is defined in terms of what a person is required to do (performance), under what conditions it is to be done (conditions) and how well it is to be done (standards). Competency based training promotes education and training in TVET institutions for the world of work (Klein-Collins, 2013).

Competency based training was introduced in the 1980s in Australia as part of broader industry restructuring to increase Australia’s competitiveness in an increasingly globalised economy (Goozee, 2001; 62). CBT was introduced in Vocational Education and Technical (VET) in Australia by a Labour government as part of broader reforms to all sectors of education through seeking to subordinate education to economic needs and to align “skill” development with the “needs” of the economy.

However, CBT is a way of approaching (vocational) training that places primary emphasis on what a person can do as a result of training (the product), and as such represents a shift away from the emphasis on the

process involved in training (the inputs). It is concerned with training to industry specific standards rather than on individual's achievement relative to others in the group (Kuh et al, 2014), that is CBT = DIY = Do it Yourself = Knowledge + Skills + Attitudes + personality traits.

Really, CBT is now used as an important strategy in most TVET programmes. According to LeBlanc, (2013). CBT does not only promote the quality of the programmes but ensures their sustainability and working environment. Consistent with the rationale behind TVET, CBT's prime focus is on lifelong learning, holistic and integrated pedagogy, whole- person development, much – skilling, flexibility and world class workforce (Porter, 2014).

With properly constructed bench marks', CBT has the potential to produce intellectual capital that is competent in terms of what the industry or employer needs. Some of these competencies include efficiency, effectiveness and quality performance. Some countries such as Australia, New Zealand and the United Kingdom have introduced competency approaches in their education and training programmes. Owing to the success of the competency based regime, many countries including Zimbabwe have begun to adopt CBT in their Education and Training Programme (Banta and Blanich, 2010).

PRINCIPLES OF COMPETENCY BASED TRAINING

According to Jones and Voorhees (2002), principles of CBT includes:-

Student Centred: The student as the active player generates the learning goals and is responsible for his or her own learning activities in terms of time and rate. The lecturer as a coach guides the students to develop these competencies.

Task Based:- Learning activities are directed toward performing the professional task. This ensures active learning instead of passive learning.

Competence Oriented: Learning task are formulated to develop competencies that are needed to perform the professional task of the student's future working environment.

CHARACTERISTICS OF COMPETENCY BASED TRAINING

According to Travers and McQuigge (2013), key characteristics of CBT are:-

1. Competency based training focuses on the learner as an individual. It provides opportunities for each individual to develop skills at their own pace, collaborate with others, collect evidence of learning and become successful lifelong learners CBT empowers learners to:-
 - Understand the competencies they need to master to achieve their goals.
 - Progress through learning process without time constraint.
 - Explore diverse learning opportunities.
 - Collaborate in learning activities with countries of peers and mentors.
 - Create learning artifacts that represents their competencies.
 - Reflect on their own learning or training achievement.
 - See what they have mastered, what they still need to accomplish and where to improve etc.
2. Outcomes-based. It bases each part of an educational system around goals (outcomes). By the end of the educational experience each student should have achieved the goal.

COMPARISON OF TRADITIONAL TVET TO CBT TVET

The table below highlights the major difference between the two types of TVET.

Traditional TVET	CBT TVET
* Graduates supply driven	* Customer demand driven
* Exam driven	* Learners are assessed on an ongoing basis.
* Rote learning (memorization Technique)	
* Syllabus is content based and broken down into subjects.	* Critical thinking, reasoning Reflection and action.
* Textbook/worksheet bound and educator –centred.	* An integration of knowledge, skills and attitudes/value learning is relevant and connected to real-life situation/read work situation.
* Educator/trainer uses “ deductive” approach in teaching	* learning materials/training packages, learner-centred, educator/trainer is a facilitator.
* Content organized according to rigid timeframes.	Facilitator uses inductive approach in facilitating.
* Curriculum development process is not open to public comment.	*Flexible time-frames allow learners to work at their own pace. Comment and input from the wider community and stakeholders is encouraged.

COMPETENCY BASED TRAINING ASSESSMENT

To determine whether a learner has imbibed what he/she has learnt, an assessment is organized for all learners. The assessment is based on the learning outcomes specified in the learning unit specifications developed for each course (Prineas and Cini 2011). Therefore, in CBT, assessment is the process of collecting evidence of learner's performance, upon which an assessor judges whether or not, or the extent to which a learner has met the performance requirements of the learning outcome laid in a particular unit and then making a decision, based on these judgements as to whether a learner has achieved the learning outcome as a whole or not.

In other words, it is the process of measuring learners skills, knowledge and understanding against the standard (occupational standard) laid down for a particular unit. If a learner can show by generating sufficient evidence of their competence, that they meet the standards, they qualify for that unit. According to Adelman (2010), CBT measures whether a learner is competent or not competent. Only two possible outcomes can be the result of the assessment process, that is they are competent (that is they can perform what is stated in the standard) or they are not yet competent (they cannot perform yet what is stated in the standard).

The assessment process uses the following approaches to ensure that much emphasis is placed on performance: (a) observation: observing the learner while he/she is carrying out the activity, (b) Product: looking at something a learner has made or done (c) questioning: Asking the learner questions that can be answered either verbally or in writing. (Ewell, 2013).

STRENGTHS OF COMPETENCY BASED TRAINING APPROACH

According to Adelman, (2010), the strengths of CBT include:-

- It meets the immediate needs of business and professions; students are either already working and receive advancement within the company or if unemployed, are more likely to be employed once qualified;
- It enables learners with work or family commitment to study at their own pace;
- For some students, it speeds up time to completion of qualification by enabling prior learning to be recognized; and
- Students get individual support and help from their mentors.

WEAKNESSES OF COMPETENCY BASED TRAINING APPROACH

Some of the weaknesses include:-

- It focuses on immediate employer need and is less focused on preparing learners with the flexibility needed for a more uncertain future;
- It does not suit subject areas where it is difficult to prescribe specific competencies of where new skills and new knowledge need to be rapidly accommodated;
- It takes an objectivist approach to learning;
- It ignores the importance of social learning; and
- It will not fit the preferred learning styles of many students.

CONCLUSION

It is worthy of note that what Nigerians need now is a workable mode of TVET delivery and competency based training (CBT) is the way forward to go with a view to ensuring acquisition of relevant knowledge and skills which are found in TVET. In addition, the testimonies from industries about the performance of the products of the pilot CBT programmes are enough evidence that if a nation like Nigeria emphasizes on skills development through CBT, there will be sustainable development specifically for industries and the nation at large.

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