

Competency Based Education and Training in Technical Vocational Education: Implication for Sustainable National Security and Development

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Abstract

Despite the contemporary importance attached to technical and vocational education (TVE) as a panacea for tackling growing unemployment in developing countries, the development and application of TVE in many countries is still largely bedeviled by numerous problems. One of the major challenges of TVE in Nigeria is the lack of employable skills among graduates of TVE institutions. Though several approaches have been adopted as solution to this problem, there seems to be no head off. This calls for new strategies hence the need for the integration of Competency Based Education and Training (CBET) in Technical and Vocational Education (TVE) in the nations TVE. This paper focused on CBET in TVE and its implication for sustainable national security and development in Nigeria. The paper discussed the characteristics, elements and objectives of CBET. It highlighted the benefits of CBET as a training approach that is learner focused, thus allowing participants to acquire competencies required in the performance of their jobs. The authors argued that the introduction of CBET in TVE programmes will help to tackle the problem of lack of employable skills among TVE graduates from Nigeria institutions thereby reduce youth unemployment and by extension it will help to address various security and development challenges confronting Nigeria. The paper concluded with some recommendations that include the immediate introduction of CBET in TVE and increase funding of the sector, amongst others.

Keywords: Competence Based Education, Training, Technical Education, Vocational Education, Development, National Security

Introduction

A skilled workforce is one of the basic requirements for achieving sustainable national security and development in any nation, and Technical and Vocational Education (TVE) is perceived as the key to building this type of skilled technical and entrepreneurial workforce for sustainable national security and development in Nigeria. According to Okwelle (2008) TVE in addition to providing technical skills and job oriented behaviours for individual's sustainable life; it increases a nation's productivity by making economic, efficient and effective use of resources thus, helping in raising the standard of living of the citizenry.

Despite the contemporary importance attached to technical and vocational education (TVE) as a panacea for tackling growing unemployment in developing countries, the development and application of TVE in many countries and Nigeria in particular, is still largely bedeviled by numerous problems. National Board for Technical Education (as cited by Ayonmike, 2013), stated that the underlining challenges of TVET sector include; low societal recognition, which translate to low enrolment and inadequate skilled workforce, obsolete instructional facility, inadequate funding, poor staffing, poor linkages with industry and general deficiency in quality.

Similarly, several studies (Nwogu and Nwanoruo ,2011; Udoka, 2010; Yusuf and Soyemi, 2012) reported that the challenges of TVET are numerous, which include among others, inadequate human and material resources in terms of quality and quantity; poor funding of TVET, inadequacies in infrastructural facilities; poor quality preparation of lesson by TVET teachers; and social vices. Notably, a very serious challenge of TVE in Nigeria is the lack of employable skills among TVE graduates from Nigeria institutions. Though several approaches have been adopted to improve on quality of skills of TVE graduates, the problem seems to remain unabated. There is therefore the need to seek more pragmatic approach to tackle this problem of unskilled TVE products. Competency Based Education and Training (CBET) is one training approach which is not yet fully explored in TVE delivery in Nigeria.

CBET is an approach to teaching and learning more often used in learning concrete skills than abstract learning. It differs from other non-related approaches in that the unit of learning is extremely fine grained (Foyster, cited in Sullivan, 1995). Rather than a course or a module, every individual skill/learning outcome known as a competency, is one single unit. Learners work on one competency at a time, which is likely a small component of a larger learning goal. The student is evaluated on the individual competency, and only once they have mastered it do they move on to others. After that, higher or more complex competencies are learned to a degree of mastery and isolated from other topics. Another common component of Competency-based learning is the ability to skip learning modules entirely if the learner can demonstrate they already have mastery. That can be done either through prior learning assessment or formative testing.

From the foregoing, CBET is considered very suitable for training in Technical and Vocational Education (TVE). This is because TVE is oriented towards the world of work and the emphasis of the curriculum on the acquisition of employable and lifelong skills. TVE delivery systems are therefore well placed to train the skilled and entrepreneurial workforce that Africa needs to create wealth, emerge out of poverty and insecurity as well as development deficiencies. Another important characteristic of TVE is that it can be delivered at different levels of sophistication. This implies that TVE using the CBET approach can respond, not only to the needs of different types of industries, but also to the different training needs of learners from different socio-economic and academic backgrounds, and prepare them for gainful employment and sustainable livelihoods (Adebambo, 2007). The little contribution of this paper therefore, is to examine Competency Based Education and Training (CBET) mode and hence attempt the justification of its integration into Technical and Vocational Education (TVE) and implication on sustainable national security and development in Nigeria.

Meaning of Competency Based Education and Training (CBET)

Kaaya (2012) defined CBET as a program of study with clearly defined, concrete and measurable objectives of which every student participating in the program must have demonstrated mastery upon program completion. Often these programs also involve students working at their own rate and structuring their own methods of learning so as to meet these objectives. According to Deißinger and Hellwig (2011) CBET is the specification of knowledge and skill and the application of that knowledge and skill to the standard of performance expected in the workplace. Similarly Anane (2013) described CBET as an industry and demand driven (outcomes-based) education and training programme based on well defined industry generated standards (occupational standards). Anane further stated that these industry standards are the basis upon which the program (curriculum), assessment and learning materials are designed and developed. CBET programmes focus on what the participant is expected to be able to do in the workplace as opposed to just having theoretical knowledge. It is therefore a training programme which ensures that learners gain the necessary knowledge, skills and attitudes or values to be successful in the working environment.

Based on the foregoing, CBET can be viewed as a way of approaching (vocational) training that puts much emphasis on what a person can do as a result of the training (the outcome), and as such represents a shift away from an emphasis on the process involved in the training (the inputs). Furthermore, CBET itself may be described as training which is performance- and standards-based and related to realistic workplace practices. It is learner -focused and works naturally with independent study and with the instructor in the role of facilitator. Learners often find different individual skills more difficult than others. This CBET learning method allows a student to learn those individual skills they find challenging at their own pace, practicing and refining as much as they like. Then, they can move rapidly through other skills to which they are more adept. Consequently, this type of learning requires mastery of every individual learning outcome making it very well suited to learning credentials in which skills acquisition is very essential (Foyster, cited in Sullivan, 1995).

Writing on the importance of CBET, Biemans , Nieuwenhuisa , Poella , Muldera , and Wesselinka (2004) cited in Kufaine and Chitera (2013) posited that CBET is a human resource development approach which has given expectation to stakeholders that the gap between labour market and education will be reduced. This means CBET approach help the students acquire skills that are necessary for the industry; hence the approach demand participation of industry during training so that the competence experiences enable the students to demonstrate skills that are relevant for the industry (Kufaine & Chitera, 2013). As Harris et al (cited in Kaaya, 2012) noted, competency-based education is perceived by some as the answer to the improvement of education and training for the complex current world. CBET is concerned with training to industry specific standards rather than an individual's achievement relative to others in the group (Kaaya, 2012). Remarkably, Smith and Keating cited in Kaaya (2012) provided further insight into the importance of CBET by summarizing CBET that bases on competency standards, focused on outcomes not inputs, involving industry, taking account of recognition of prior learning (RPL), modularized, self paced, assessment based on demonstration of skills rather than knowledge, assessment criterion referenced and ungraded, flexible delivery, makes the technical institutions autonomous and competencies are widely recognized.

Competency Based Education and Training (CBET) can be traced back to the education of primary and vocational teachers in the USA in the 1970s. Poor learning in vocational education programs was the reason for applying new principles to teacher education (Deißinger & Hellwig, 2011). Deißinger and Hellwig reported that, the National Center for Research in Vocational Education at Ohio State University started research on “performance-based vocational teacher education” in 1969. Over a period of ten years 100 performance-based modules for vocational education were developed, which were supplemented by modules for adult and special education. In 1977, some 23 states had implemented performance-based vocational teacher education and in the late 1980s the concept shaped many programs of vocational education and training (VET). It must be stated here that today, there are different CBET models with countries such as Netherlands, Canada, UK, Republic of South Africa, Japan, all using CBET mode of training. The differences are mainly in terminologies, processes for the development of programmes and in assessment methods. However, the characteristics, structure and objectives of CBET are the same for all models (Anane, 2013).

Characteristics of Competency Based Education and Training (CBET) Programmes

Delker, Foyster, and Norton cited in Sullivan (1995) affirmed that, there are a number of characteristics of CBET programs. Key characteristics of CBET Programmes are summarized as follows:

- ❖ Competencies are carefully selected,
- ❖ Supporting theory is integrated with skill practice. Essential knowledge is learned to support the performance of skills,
- ❖ Detailed training materials are keyed to the competencies to be achieved and are designed to support the acquisition of knowledge and skills,
- ❖ Methods of instruction involve mastery learning, the premise that all participants can master the required knowledge or skill, provided sufficient time and appropriate training methods are used,
- ❖ Participants' knowledge and skills are assessed as they enter the program and those with satisfactory knowledge and skills may bypass education and training or competencies already attained,
- ❖ Learning should be self-paced,

- ❖ Flexible training approaches including large group methods, small group activities and individual study are essential components,
- ❖ A variety of support materials including print, audiovisual and simulations (models) keyed to the skills being mastered is used, and
- ❖ Satisfactory completion of education and training is based on achievement of all specified competencies.

Structure of Competency Based Education and Training (CBET)

Norton cited in Sullivan (1995) describes five essential elements of a CBET system:

- ❖ Competencies to be achieved are carefully identified, verified and made public in advance,
- ❖ Criteria to be used in assessing achievement and the conditions under which achievement will be assessed are explicitly stated and made public in advance,
- ❖ The instructional program provides for the individual development and evaluation of each of the competencies specified,
- ❖ Assessment of competency takes the participant’s knowledge and attitudes into account but requires actual performance of the competency as the primary source of evidence and
- ❖ Participants progress through the instructional program at their own rate by demonstrating the attainment of the specified competencies.

More so, Harris et al. cited in Deifinger and Hellwig (2011) defined six criteria that describe the typical structure of CBET programs. These criteria specify both the micro structure of CBET, i.e. its learning and assessment dimension, and the macro-structure, i.e. its institutional framework. The criteria were defined for the Australian system but can be summarised in a generalised form in the following tables:

Table 1: Micro structure of CBET

Outcome criterion
The course is recognized to meet national competence standards that have been endorsed by a national authority. In the absence of national standards, course outcomes should be based on the authority’s definition of competence and endorsed by industry training boards or by relevant industry parties where industry training board coverage is not appropriate.
Curricular criterion
The curriculum gives learners a clear indication of what is expected of them in terms of performance, conditions and standard. Also, if appropriate, workplace and off-the-job training and assessment responsibilities should be identified.
Delivery criterion
Delivery is flexible and learners can exercise initiative in the learning process. Learning materials used by providers indicate the degree to which program delivery is learner-centred.
Assessment criterion
Assessment should: <ul style="list-style-type: none"> ❖ Measure performance demonstrated against a specified competence standard; ❖ Be available for competences gained outside the course; ❖ Include workplace or off-the-job components if appropriate.
Reporting / recording criterion
Reports of competences gained should be provided to learners. Reporting may be in terms of completed modules provided that the relationship between competences and modules is understood.
Certification criterion
Persons demonstrating all prescribed competences in an accredited course or training program should obtain a credential or statement of attainment which is recognised within the national framework.

Source: Victorian State Training Board (1992) in Deifinger and Hellwig (2011)

The criteria specifying the micro structure of CBET in table 1 primarily refer to the design and realization of the learning process. Besides, four criteria that shape the political and regulative framework of CBET can be identified (See table 2 below):

Table 2: Macro structure of CBET

System criterion
The system, in which CBET is implemented, is marketoriented and a major influence of the industry is prevalent. The educational system is dominated by the general education sector and VET.
Policy criterion
The philosophy of workplace-based training and the concept of competence define the VET system. Although the government passes policies industry plays a major role.
Authority criterion
Industry is in charge of training, lead bodies define standards and awarding bodies are authorised to carry out workplace and off-the-job assessment.
Regulative criterion
Legal regulations are limited due to demanded flexibility by industry.

Source: Dei ßinger and Hellwig (2011)

Objectives of a Competency Based Education and Training (CBET) Qualification

According to Anane (2013), the objectives of CBET are as follows:

- ❖ Set clear standards which can be measured,
 - ❖ Develop competent individuals with transferable skills,
 - ❖ Link education and training to skills needed by employers,
 - ❖ Provide an objective quality assured system which will have the confidence of all users, i.e. learners, educational establishments and employers,
 - ❖ Develop individual’s potential fully, and
 - ❖ Promote the concept of lifelong learning.
- Similarly, Dei ßinger and Hellwig (2011) stated that the objectives of CBET include:
- ❖ CBET aims at preparing learners more effectively for real workplaces, which means that the acquisition of competences takes into account the requirements of companies and industry.
 - ❖ CBET should enable employees not only to increase their knowledge and skills at the workplace but also to gain nationally accredited certificates for workplace-based learning.
 - ❖ The self-paced and flexible structure of CBET programs should encourage learners to become responsible for their individual learning process.
 - ❖ The modular structure allows for individual combinations of competences limited only by certain “packaging rules” which refer to accredited national vocational qualifications.
 - ❖ The objectives of nationally endorsed competence standards as the core of CBET are on the one hand to transform the requirements of industry and enterprises into the world of learning. On the other hand, standards shall provide transparency of competences underlying vocational qualifications.

Programme Delivery using the Competence Based Education and Training (CBET) Approach

As earlier on indicated, CBET is a programme whose curriculum development is based on occupational standards. This is to ensure that the problem of skills mismatch, which has been identified by industry as a major cause of unemployment, is addressed. Therefore, after institutions have consulted with industry and businesses to generate valid and quality occupational standards, what is known as Learning Unit Specification is developed for all the courses of the respective programmes. According to Delker cited in Sullivan (1995), this Learning Unit Specification lays down the Level, Quality and Scope of the performance that must be achieved by the learner. The standards set out in the Learning Unit Specification must also reflect national standards of achievement which must be appropriate to the target audience.

The Learning Unit Specification according to Anane (2013) has four key elements which set out the standards on which certification is based:

- ❖ Learning Outcomes: What is expected of the learner to know and be able to do at the end of the facilitation of the unit,

- ❖ Performance Criteria: What the learner should know and do in order to achieve the specific learning outcome,
- ❖ Range Statement: Parameters of learning the learner should cover in order to be able to perform,
- ❖ Evidence Requirement: This is the assessment criteria. In CBET assessment is the process of collecting evidence of learners' performance in order to judge whether or not, or the extent to which the learner has met the performance requirements.

The assessment process includes a variety of approaches:

- i) Observation: observing the learner while he/she is carrying out the activity,
- ii) Product: looking at something a learner has made or done,
- iii) Questioning: asking the learner questions which can be answered either verbally or in writing.

Learner-centred Learning Materials are then developed for the learners from the unit specification. These detailed training materials are keyed to the competencies to be achieved and are designed to support the acquisition of knowledge and skills. They are developed in a way that they encourage the learner to work as independently as possible both out of class and while in class. The content of these learning materials which includes self assessment instruments and peer assessment/appraisal instrument for learners encourages active participation in learning through group, pair and whole class interaction (Anane, 2013).

Facilitation Methods Used for Competence Based Education and Training (CBET) Programmes

Anane (2013) posited that CBET demands a different approach to teaching and even assessment and certification. This is because conceptually, CBET is different from the traditional system. It is based on defined competency standards which are industry oriented; it is unit based or modular and it can be applied to both formal and informal education and training. For these reasons training or teaching approach requires flexibility. The education and training is more learner-centred (more emphasis is placed on the learner's role in the learning process) than teacher-centred (teacher has control over what is taught and how the learners are given the information they have to learn). Though CBET uses both the teacher-centred and the learner-centred approaches, the emphasis is more on the learner-centred approaches.

According to Anane (2013) the following facilitation methods are employed for the CBET programmes:

- i. **Direct Instruction Method:** It is effective when you have to introduce learners to a new study area or define new concepts and show how they are interrelated or for teaching factual information. On the other hand, because the method relies mostly on one-way communication there are limited opportunities to get a feed back on the learner's understanding of what is being taught and it is not possible to teach psychomotor skills using this method.
- ii. **Discussion Method:** Allows learners to share knowledge and ideas thereby motivating them to achieve more particularly when others respect their contribution. It also helps the teacher to determine whether the learner understands the content of the lesson. On the other hand, there is the possibility of straying from the topic under discussion and dominating learners might influence the group to accept their view.
- iii. **Small Group Method:** Pairing is done in such a way that learners help each other to learn faster than the teacher would have been able to do with the whole class. There may however be difficulties with the physical arrangement of the classroom and individual assessment using group work is difficult.
- iv. **Problem Solving Method:** Very popular teaching strategy for CBET. Provides a challenge to learners; gives them a sense of satisfaction and increases their confidence when they are able to solve new problems and thus gain new knowledge. It also allows the learner to develop critical thinking skills and the ability to adapt to new learning situations. It is however time consuming and because learners sometimes work individually, they may not learn all the things that they are expected to learn.
- v. **Research Method:** It is used for workshops and laboratory tasks, field experiments, case studies. It encourages learners to investigate and find answers for themselves and to critically evaluate information. It however requires a lot of time and careful planning of research projects for the learner.

Competency Based Education and Training (CBET) Assessment

To determine whether a learner has imbibed what he or she has learnt, an assessment is organised for all learners. The assessment is based on the learning outcomes specified in the learning unit specifications developed for each course (Killen 2000). Therefore, in CBET assessment is the process of collecting evidence of a 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 (Anane, 2013). In other words, it is the process of measuring learner's skills, knowledge and understanding against the standards (occupational standards) 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. Therefore CBET assessment measures whether a learner is competent or not competent. It implies that only two possible outcomes can be the result of the assessment process, i.e. they are competent (i.e. 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 is not designed to measure a learner who is 30% or 50% or 80% etc. competent. If they do not meet the standards they develop their skills and knowledge further, after which they are assessed again. 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 (Anane, 2013).

National Security and Development Issues in Nigeria

The Nigerian society is getting more and more insecure, more people are involved in crimes and they are becoming more ruthless, desperate, and sophisticated (Otto & Ukpere, 2012). These crimes range from kidnapping, arm robbery, employment scam, advanced fee fraud (419), internet scam, misappropriation of public funds, prostitution, cultism, ritual killings, political violence, drug trafficking, human trafficking, militancy in the Niger Delta, and more recent Boko Haram uprising in the North. However, each of these dimensions, singly and conjointly, greatly affects the nation's stability and well being. Ogundiya (2011) stated that threats to human and natural security ranges from the menace of separatist demands, illegal militia armies, ethnic and religious conflicts, armed robbery, corruption, terrorism, and poverty to sabotage of public properties, and economic sabotage. The consequent decline in internal security and the reactions it has elicited from the State raises important questions about the level of poverty and youth unemployment in the country. Without doubt, Nigeria has become a state under perpetual internal security threat. At a more general level, the threat has social, economic, political and environmental dimensions, (Ogundiya, 2011).

Nigeria is presently rated as one of the poorest nations in the world with debilitating youth unemployment (Nwanegbo & Odigbo, 2013). Youth unemployment has several implications; it has adverse psychological, social, occupational and financial consequences on them (Shadare & Tunde, 2012). Unemployment has serious impacts both on the present living conditions and the attitude of the youth towards the future and on the society in which they are supposed to be part. Youth unemployment literally devastates society morally and raptures the ties and relationship they form. People who have no jobs feel irrelevant and inferior. And always having the feeling that they are rejected from the rest of the society, with these feelings the youths can resort to criminal activities and violence. In Nigeria, like many other developing countries, about 70 percent of the population lives in poverty (Otto and Ukpere, 2012).

However, Atiku (2011) posited that, one of the tragedies of the Nigerian situation is that we tend to think of security as though it is disconnected from economic and political development, when in fact, they are interrelated. He further stated that the rising wave of insecurity in the country results largely from socio-economic challenges; high level of unemployment, high level of illiteracy and poor and unaccountable governance. From the forgoing, the Nigerian state can hardly be classified as a secure nation because of the numerous security challenges which became more pronounce since the emergence of Democratic government in the year 1999 till date.

Security is the condition or feeling of safety from harm or danger; the defense, protection and preservation of core values and the absence of threats to acquire values (David, as cited by Otive, 2011). According to Bello (n.d) the term 'national security' was traditionally viewed as referring to the protection of the territorial integrity of a state

and the protection of its citizen from external threats, with specific focus on protection against military attack. Conversely, the concept national security has taken a new direction, it does not imply only the protection of lives and properties; and the protection of territorial boundaries through military support but the inclusion of other aspect such as the provision of; good health facilities/infrastructures, required human and material resources for education, employment, better living condition, basic and modern infrastructural facilities, potable water supply, social amenities and healthy environment for its citizens. More so, Onuaha as cited in Agu (n.d), opined that national security is the capacity of a state to promote the pursuit and the realization of the fundamental needs and vital interests of man and society and to protect them from threats which may be economic, social, political and military. The consequent decline in internal security and the reactions it has elicited from the state raises important questions about the level of poverty and youth unemployment in the country. Without doubt, Nigeria has become a state under perpetual internal security threat. At a more general level, the threat has social, economic, political and environmental dimensions, (Ogundiya, 2011),

Evidently, different groups seeking redress against the system have emerged in contemporary Nigeria. Oftentimes, these groups claims to be fighting against perceived socio-political and economic deficiency that has resulted in alienation, marginalization, injustice, poverty and a general lack of access to basic socio-economic needs. Therefore, if severity derives from the commonsensical fact that a person's first interest is survival, the Nigeria environment (socially, economically, politically) in strict sense is far from been secured. More worrisome is the fact that the average Nigerian can barely live above the poverty line. Nigeria ranked among the 25 poorest countries in the world the country. Ajaegbu, (2012) argued that urban society is becoming progressively criminalized, especially with the proliferation of youth gangs. Neither homes, nor markets are safe in Nigeria because of repeated occurrence of armed robbery incidents. Unemployment problem, which now seems beyond remedy, has produced mass of idle hands and some of them have decided to punish the society that fails to provide them with means of livelihood and dignity by robbing its members of their properties at gunpoint (Ideyi, 2010).

Unemployment have also multiplied the number of aggrieved youths and resulted in the emergence of area boys' and Almajiris who target the very society that alienated them(Ibrahim, 2006). In a survey conducted on the socioeconomic characteristics of the armed militant groups in Nigeria namely Bakassi Boys, O' odua People's Congress (OPC) and Egbesu Boys were made up of youths within 16 - 17 years (40%), 18 – 19 years (10%), 20 - 21 years (20%), and 20 – 23 years (20%). Approximately 60% of them were unemployed (Awogbenle & Iwuamadi, 2010).The unemployed youths, have been used as local militants to attack, bomb, vandalize and destroy oil pipelines, lives and property in the Niger Delta region of Nigeria (Gilbert, 2010).

Therefore, to curtail these national security and development issues in Nigeria, there is need to empower unemployed Nigerian citizens with employable skills that will boost the nation's human resources for sustainable national security and development which can only be achieved through the introduction of Competency Based Education and Training (CBET) in Technical and Vocational Education (TVE) system in Nigeria.

Implications of Competency Based Education and Training (CBET) in Technical and Vocational Education (TVE) for Sustainable National Security and Development in Nigeria.

It is clear that the rate of unemployment and development is further accentuated by the neglect of Technical and Vocational Education (TVE) in Nigeria. With a plethora of problem relating to youth unemployment, there is ample evidence that the adoption of a Competency Based Education and Training (CBET) system would improve quality and relevance of Technical and Vocational Education because of the numerous benefits. Furthermore, CBET enable employees not only to increase their knowledge and skills at the workplace but also to gain nationally accredited certificates for workplace-based learning (Deiflinger and Hellwig, 2011). Benefits of CBET identified by Norton cited in Sullivan (1995) include:

- ❖ Participants will achieve competencies required in the performance of their jobs,
- ❖ Participants build confidence as they succeed in mastering specific competencies,
- ❖ Participants receive a transcript or list of the competencies they have achieved,
- ❖ Training time is used more efficiently and effectively as the trainer is a facilitator of learning as opposed to a provider of information,
- ❖ More training time is devoted to working with participants individually or in small groups as opposed to presenting lectures, and
- ❖ More training time is devoted to evaluating each participant's ability to perform essential job skills.

Competence Based Education Training (CBET) is an industry and demand driven education and training programme, its products have a high demand on the job market (Anane, 2013). Therefore, unemployment which other programmes are grappling with is not an issue for CBET graduates. Having gone through CBET, they either go into self employment because they have acquired the competences to set up their own businesses or are absorbed by the industries whose skills requirement they have met by nature of their training. 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. We are in an era where emerging industries are in dire need of expertise to run their industries. Anane (2013) reported that, in Ghana, the oil and gas industries, for example, are in need of graduates with the technical skills to run these companies but which are not readily available so they are depending on foreign expertise, the case of Nigerian TVET graduate are not exceptional. More so, the Nigerian local content act (FRN, 2010) prescribed that a certain percentage of the work force to be local content. But how can this be a reality if our technical institutions, apart from those which piloted the CBET model, are using the old paradigm of TVET? From what CBET offers, and the success stories of countries such as Japan, the UK and South Africa, who because of this form of training have a highly skilled workforce, there is no doubt that to get competent graduates with employable skills to run our emerging industries, the CBET approach should be introduced in TVE system.

Conclusion

Competence Based Education Training (CBET) aims at preparing learners more effectively for real workplaces, which means that the acquisition of competences takes into account the requirements of companies and industry. Several countries are currently adopting the concept of CBET by re-inventing or reforming their VET systems. There is no doubt that CBET is the way to go for TVE programmes in Nigeria. Countries such as The Republic of South Africa, The Netherlands, China, Malaysia, South Korea and Japan, have all succeeded in making their education and training competency-based. The testimonies and success stories of the countries listed above in the area of wealth creation, employment generation and industrialization are enough evidence that if a nation like Nigeria emphasizes on skills development through competency-based training, there will be sustainable national security and development for industries and the nation as a whole.

Recommendations

The following recommendations are made in order to ensure that sustainable national security and development is attained through the introduction of Competence Based Education Training (CBET) in technical and vocational education in Nigeria.

- i. CBET should be introduced in TVE delivery system in Nigeria without delay.
- ii. The task of ensuring competence based training through the TVE cannot be tackled by government alone. The involvement of major Nigerian stakeholders, complemented by partnerships with international agencies, NGOs, Foundations, etc., will be essential if the goals and potentials of Nigerians are to be realized using TVE for job and employment creation, so as to tackle security and developmental problems in Nigeria.
- iii. There should be linkage between TVE institutions and industries. However, in planning and developing TVE curriculum, TVE institutions and industries should be part of the planning and development committee. This will enable the industries to inform the TVE institutions, the skills they required from graduates from TVE institutions, to enable the TVE institutions produce graduates with employable skills.

- iv. Funding of TVE programmes should be improved. This can be done collectively by both TVE institutions and industries through Public Private Partnership, grants and donations from industries and other stakeholders.
- v. Introduction of internship programme for TVE graduates in industries to help consolidate their skill competency in the area of specialization.

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