WORKSHOP EQUIPMENT AND FACILITIES AS CRITICAL FACTORS FOR SUSTAINABLE SKILL ACQUISITION THROUGH TVET IN NIGERIA

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Abstract
Nigeria’s economic transformation can be attained if a functional Technical, Vocational Education and Training (TVET) system is put in place. TVET has gained global acceptance as economic tool for any nation that adopts its implementation to the letters. However, infrastructural inadequacy has continued to plague the full potential of TVET in Nigeria. The paper examines the current status of equipment and facilities in Nigeria TVET institutions, and recommends the establishment of Technology education, equipment development centre to cushion the effects of inadequate facilities among other recommendations.

Keywords: Equipment, development, world of work, technical skills

Introduction
Technical and Vocational Education and Training (TVET) is interfaced with skill acquisition and hence sustainable employability. Exposition to skill training raises hope for useful livelihood. TVET and skill development for employability and sustainable livelihood have been identified by UNESCO member states as a major and growing priority UNESCO’s range of programme of activities (Maclean, 2011).

Nations of the world are currently keying into the full program of TVET based on its expected role in promoting economic growth and the socio-economic development of countries, with benefit for individuals, their families, local communities and society in general. The potential of TVET for eradicating poverty and flushing out unemployment saga is well understood issue. TVET is seen by Federal Republic of Nigeria (FRN) (2004) as a comprehensive term referring to those aspects of educational process involving, in addition to general education, the study of technologies and related science and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sector of economic and social life. In Nigeria, education is regarded as instrument par excellence for achieving national development. TVET as an integral functional part of her education process is further seen as an integral part of economic blue print for national development; a means of preparing for occupational fields and for effective participation in the world of work; an aspect of lifelong learning and preparation for responsible citizenship; an instrument for promoting environmentally sound sustainable development and a method of alleviating poverty (FRN, 2004).

Technical, Vocational Education and Training is perceived strictly as that aspect of education, whose function is concerned with the preparation of skilled manpower, it is a form of education, training or retraining which is directed towards developing the learner to become productive in a paid employment or self employment (Kpanep, 2011).

The main thrust of TVET is to develop skills in the learners. Skills that are practical in nature. The acquisition of relevant skills of constructing, designing and repair can only be acquired in a well functional workshop-stocked with relevant equipment and facilities. This ensures quality, dependable and sustainable employable skills to the learners.
It is generally known that a well flavored cooking gives out a palatable aroma. In his words, Kpanep (2011) has it that “quality vocational and technical education facilities assures students-learners’ competency in practical knowledge, skill and mastery of their chosen career which finally will translate into technological development”.

However, with goals and prospects inherent in a well articulated TVET programme, the question pertinent at this level is whether or not the TVET in Nigeria is measuring to standard. The answer to the above depends on one’s critical view and analysis of the issues on the ground. There exists the problem of equipment and facilities lacking in our various training outlet. Confirming the foregoing therefore Olumese (2004) stated that National Board for Technical Education (NBTE) reported that in the recent visitation to ninety-one (91) technical colleges across the country, only 8(1.5) percent could be taught with adequate tools and equipment, classroom accommodation, text books. Therefore this paper tend to look at the issue of opening more TVET institutions and equipping the existing ones which is of more relevance to sustainable skill acquisition through TVET programmes.

Current status of equipment in TVET institutions in Nigeria

There is the general saying in Nigeria that “whatsoever you garbage in is what you garbage out”. From the fundamental principle of TVET programme, it is stated that if you know that you cannot organize the programme to the taste of establishing it, you better don’t establish it. Industries in Nigeria especially the large scale ones employ foreign technicians in preference to the locally trained technician. According to Okoli, (2005) the reason for this development stem from the quality of skills being acquired in our training layout.

Apagu (2012) posited that our youths are educated under very harsh conditions and environments, often basic infrastructures are lacking to support the emphasis placed on TVET and more students than institution can adequately carter for are admitted. He also observed that to bring more problems are the issue of obsolete machines and equipment in some institutions- resulting institutions not procuring new and modern equipment due to meager resources.

Musa (1993) in his contribution on technology and science education in Nigeria described the level of inadequacy in infrastructural provision in our TVET institution, saying there have been cases where technical colleges graduate students without functional workshops, libraries, overcrowded classrooms, epileptic power supply etc. Equipment and facilities are serious factors that cannot be toyed with especially in our TVET programme. In Nigeria there appear to be lack of equipment and facilities to further compound our underdevelopment. Ezeabikwa, (2003) has it that we still train our potential teachers of technology and practitioners of technology without the necessary tools and equipment. Availability of facilities is known to be one of the most important factors that govern learning. Akamobi (2007) quoted Olaitan, Igbo, Ekong, Nwachukwu and Onyemachi (1999) as saying that when the facilities are not adequately provided learning becomes ineffective. He noted that in most TVET institutions workshops, labs, libraries are ill equipped. If the report of the visitation panel of National Board for Technical Education (2004) is to be taken serious i.e. ninety-one (91) technical colleges visited only 8 or (1.5) percent of them are adequately equipped. It means among other things that Nigeria TVET programme has not taken off. Another critical issue is the qualified personnel to handle the equipment and the learners. Some unclassified reports have it that some institutions with equipment do not have qualified teachers to handle the equipment. Though, it is outside the scope of the present write up but worthy for mentioning also the issue of funding.

Effects of inadequate facilities on skill related training

Dependable and sustainable TVET programme establishment demand huge and enormous resources, materials, personnel and facilities. The NPE affirms that the principle behind TVET and nurturance of children is to be experimental, exploratory and challenging to the utmost (Apagu, 2012). Researches portray direct relationship between facilities and quality of education. Evan
(2000) highlighted the importance of facilities in a review of resources allocations in Chinese education, noting that although, there was scarcity of scientists in research institution, yet the young scientists recorded excellent scientific and technological performance having been trained with best pieces of equipment available in the world. However, in Nigeria, the reverse is the case because our youths are educated under very harsh conditions and environment where basic facilities and equipment for training are lacking. Our TVET programme has remained best on pronouncements. It becomes obvious that well articulated objectives of TVET would only remain on the pages of National Policy on education (NPE) until adequate infrastructural facilities are provided (Apagu, 2012). Facilities are the important factors to be considered while making provision for TVET implementation. This is sequel to the fact that emphasis on TVET at any level is all about practical skill including manipulative skill concerned with direct experimentation or production with psychomotor skill. Though verbal skills are emphasized but not to the detriment of manuals operation. Equipment are needed for efficient achievement of those technical skills needed by the learner in TVET. Kpanep (2011) posited that quality technical vocational education facilities assures student learners’ competency in practical knowledge, skill and mastery of their chosen career which finally will translate into technological education development. Idialu (2007) opined that the shortage of equipment and facilities required for imparting skills and facilitate learning are inadequate or at times not available.

Continuing on the effects of inadequate facilities or the lacks, Olaitan (1996) remarked that the condition under which TVET is imparted is poor, noting that most secondary schools and tertiary institutions lack equipment for training, lack workshop and facilities etc. If TVET is the type of education that prepares its recipients for the world of work, therefore, the students should be exposed to environment similar to where employment should be secured. That means if equipment and facilities are lacking at the training point, the probability of producing ‘half-baked’ technicians will ensue. Therefore TVET students are supposed to be exposed to a work environment which will enable them to fit in and outside the school environment.

Lack of equipment and facilities and the way forward
Having understudied the effects of equipment and facilities inadequacy or lack impact on the skill acquisition by the learners in TVET institution, the problem will not be allowed to persist for assurance of sustainable development in Nigeria. Measures should be put in place especially those pragmatic solutions. In view of this and others, the following measures should be adopted by the concerned especially the National Association of Teachers of Technology (NATT) and various ministries of education at National, States and Local Government levels to arrest thoroughly the trend:

a. Establishment of National TVET Equipment Development Centre in Nigeria, just as National Mathematics Centre is there for mathematics, to produce or fabricate facilities necessary for the learning of Technology education in Nigeria.

b. A comprehensive review of facilities availability in all the TVET institutions in Nigeria should be conducted or coordinated by Federal Ministry of Education to ascertain the lapses in the system. All the Heads of TVET institutions should direct all the Departmental Heads under him/her to come up with list of equipment and facilities that are available and those that are lacking for onward submission to Ministry of Education which in turn will liaise with the TVET equipment centre for procurement with built in sincerity on this annual exercise, the issue of equipment and facilities lacking should be a thing of the past. Nigeria as a nation should stand to gain tremendously as TVET has been globally accepted as a very strong economic factor in the global economic competitiveness.

Recommendations
a. Teachers of technology in Nigeria should be made to embark on facility tour or retraining at the National TVET Equipment Development Centre to update their skills on equipment improvisation and usage on the periodic basis.

b. TVET should have a representative at National law making bodies to sponsor an enactment of bills for periodic review of programmes of Technical, Vocational Education and Training in Nigeria.

c. There should be an enthronement of peer reviews mechanism in TVET programmes in African countries that of the programmes and come up with adjustment where necessary.

d. Funding is necessary in TVET area.

Conclusion

Having examined place of equipment and facilities in realizing an efficient and effective TVET program, it is observed among other things TVET can function effectively if the training stations are equipped adequately with facilities that should guarantee sustainable skill and hence sustainable livelihood to the practitioners. One of the underlying principles of TVET requires that the students be trained with the machines, tools, equipment, process and in fact in the replica of the work melee of eventual employment, but we still train our potential teachers of technology and practitioners of technology without the necessary tools and equipment. All hope is not loss, with the implementations of the recommendations as above, Nigeria TVET will excel and the participants assured of sustainable livelihood and TVET education will be strengthened for further exploits.

References


