# SKILL ACQUISITION THROUGH TECHNICAL VOCATIONAL EDUCATION AND TRAINING (TVET): MEANS FOR YOUTH EMPOWERMENT

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Abstract: One of the goals of TVET is to give training and impart the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who will be enterprising and self-reliant. But, the rate of unemployment is an indicator that more is needed to turn this ugly situation around. This paper therefore looks at TVET programmes and skill acquisition process, examines the best three ways of imparting appropriate skills to the youth, and proffer solution to the shortcoming of TVET for a better tomorrow.

#### INTRODUCTION

Education is the foundation of nation-building and social development. This is especially true of technical vocational education and training (TVET). TVET is the "factory" for production of the needed technologist, technicians and craftsmen as well as skilled artisans who are required to turn the nation's economy around. The implication of this is that TVET precede development. However, developed nations, such as Japan, United States of America, China, Britain and other Asian countries reached the stages of their development by encouraging, maintaining and sustaining TVET in their country. According to Olaitan (1996) TVET is a form of education which promoted the dignity of labour by entrenching work as the goal of education. According to Varis, (2008) United Nation Educational Scientific and Cultural Organization (UNESCO), and International Labour Organization (ILO) revised recommendation concerning technical and vocational education uses "technical and vocational education" as a comprehensive term referring to those aspects of the 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 occupation in various sectors of economic and social life.

UNESCO (2008) saw TVET as having a special rote in providing knowledge and skills, raising their productivity and increasing their personal incomes, thereby leading to overall raised living standards, self-reliance and stronger, more competitive economics.

The youths of a nation are said to determine the future greatness of the nation. Ukit (2005) stressed that the Nigerian Government has to empower her youths by providing them with education and training that will formulate good economic policies, develop programmes and provide them with functional education. An implementation strata should be adopted which is capable of improving the education system and stimulate growth in the economy for increased employment opportunities for the youths.

As more children, youth and adults achieve basic education, it is important for them to achieve functional literacy and skills development for employability that will enable them to secure decent work, supporting themselves and their families as well as being respected and effective members of their communities. The high level of youth unemployment in many parts of the world, Nigeria inclusive, is partly related to inadequate education and training for the workforce, and demonstrates the importance of skills development for employability. The Federal Government of Nigeria (FGN) (2004) defines TVET as those aspects of educational technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.

Furthermore, the same document understood the Vocational Technical Education (VTE) as an integral part of general education:

- A means of preparing for occupational fields and for effective participation in the world of work.
- As aspect of lifelong learning and a preparation for responsible citizenship;
- An instrument for promoting environmentally sound sustainable development.
- A method of alleviating poverty.

FGN (1981 revised) identified five types of instrument for this type of programme;

1. The pre-vocational schools at post primary levels;

- 2. The vocational schools at post-primary levels;
- 3. The technical college at post-primary and post secondary levels
- 4. The polytechnics at post-secondary levels
- 5. The colleges of education (Technical) at post-secondary levels

Furthermore, the same policy document FGN (2004) outlined the following goals for TVET.

- a) To provide trained manpower in the applied sciences, technology and business particularly at craft, advanced craft and technical levels.
- b) To provide the technical knowledge and vocational skills necessary for agriculture, commercial and economic development.
- c) To give training and impart the necessary skills to individuals who shall be self-result economically. For the above stated goals to be achieved TVET should undergo total restructuring. This is because a lot of innovations are going on in the programme.

## Concept of Skill Acquisition

Skill is the ability to do something expertly and well. It is a level of proficiency in any given task or limited group of tasks (Nneji. 1997 as cited in Nwanoruo, 2007). According to Soanes (2001), skill is the ability to do something expertly as a result of long dependence which involves physical and manipulative processes. The psychologists see skill as to over mental as well as manual operations. Nneji as cited in Nwanoruo (2007) agreed with the psychologists that all skilled performance is mental in the sense that knowledge and judgment are required, and all skills involve some kind of coordinate overt activity by hand, organs of speech etc. Skill acquisition according to Mill as cited in Nwanornuo (2007) involves respective performances of operations through manual dexterity. Skill acquisition promotes national stability, security of life and property and balanced economic development in areas such as production, manufacturing, construction, machine operation and service jobs. It is a well know fact that effective training in skill acquisition has immensely contributed to the technological excellence and economic self-reliance of the industrialized nations. Skill programmes may cover varied areas starting from shoe making, carpentry, metalwork, trade, painting, electrical and electronics works just to mention a few. While stressing the importance of skill acquisition in a nation's growth, Ezeji and Okerie (1988) emphatically contented that

Nigeria's Social and economic problem will be drastically reduced if people are given adequate vocational training in skills, raw materials, machines and equipment. The level of technological nations, such as Japan, Great Britain, China and some Asian countries depended on a well articulated and organized skill acquisition programmes.

#### TVET and Skill Acquisition

Basic education such as literacy and numeracy is central and vital to TVET. The health and safety of workers often depend upon their ability to read instructions (e.g. on equipment macula label) and to make accurate calculations (e.g. of mixing and application levels). The wider skills of scientific and social literacy are also important, for example, equipment maintenance and repair and understanding technological change (scientific literacy) and for group work, dialogue and negotiation with colleagues and supervisions, gender and ethic tolerance and other skills needed for harmonious relations in the workplace (social literacy).

According to UNESCO-UNEVOC (An International centre for Technical and Vocational Education and Training) (2006), the applications of such literacy to the world of work and active citizenship need to become core dimensions of TVET if it is to respond to the imperative of social sustainability. This implies that, while developing skills of the occupation to trade in the individual accompanying knowledge and abilities required for success in the occupation may also be taught.

## Effective Methods for Skill Acquisition

There are three effective avenues or methods by which practical skills can effectively be acquired by students (youth) at all levels of TVET. These are:

- Student Industrial Work Experience Scheme (SIWES).
- Demonstration and project method and
- Task-instructional level approach.

## Student Industrial Work Experience Scheme

The establishment of the Industrial Training Fund (ITF) by Decree No.47 of 8<sup>th</sup> October, 1971 ushered in the Students Industrial Work Experience Scheme (SIWESO) in 1973 (Olaitan, Onyemachi, Nwachukwu, Igbo & Ekong, 1999) SIWES is an on-the-job practical experience for students undergoing all courses that demand exposure in industrial activities during their institution

programme. One of the objectives of the scheme is to expose students to work methods and machinery that may not be available in the institution training workshops or laboratories. Through such a programme a meaningful work experience is combined with formal education, thus enabling students to acquire knowledge, skills and appropriate attitude for work. This eventually helps to bridge the yearning gap between theory and practice. However, SIWES programme prepares students to fit in readily to employment in industries and commerce since they have been exposed to real life situations. In addition, it helps to strengthen partisanship between industries and institutions of higher learning, and gives the student the opportunity to change environment, and interact with worker of various cadre in the industries of their placement.

## Demonstration and Project Approach

This approach applies to both tertiary and post – primary (senior secondary schools and technical colleges) institutions. This is practicable under these conditions; (i) there should be a standard workshop, (ii) functional tools and equipment must be available, (iii) the trainer or instructor most be occupationally skilled and dedicated. This approach can take place in an established institution or outside an institution.

## The following steps are taken in the approach;

- 1. The teacher or instructor discuses on the tasks involved objectives, materials to be used, and their function;
- 2. Try out with materials steps of skill learning by instructor before the learners to carry out the task individually or as small groups before the instructor.
- 3. Providing the same materials to learners to carry out the task individually or as small groups before the instructor.
- 4. Supervise and inspect what the lecturers are doing and how they are carrying out the task;
- 5. Assess the job done by the learners to ascertain if they have acquired the necessary skills; and
- 6. A report of the procedural steps taken to achieve the task(s) to provided by the learner.

The demonstration and project methods provide the learner with the opportunity to observe, listen to the teacher, and ask question where

necessary. The learner is allowed to practice the tasks involved in the project. The instructor supervises the learner and makes corrections when needed and assesses and feedback the learner on the spot.

## The Task – Instructional Approach

This approach is designed to equip learners with skill in TVET institutions using problems-solving approach. According to Olaintan et, al., (1999) this approach has three levels (i) Work activity level; (ii) The community training level; and (ii) The job placement level.

At the work activity level, the teacher or instructor defines the job, identifies different steps involved in carrying-out the task(s) and demonstrates, while the trainee or student will be given the same tools and materials to practice same. The teacher supervises the trainee and eventually assesses him or her. At the community job training level, trainees are attached to an industrial or business centre within the community. In the end of the job training period, learners found to be competent are assisted to secure job placement.

#### Problems of TVET in Skill Acquisition Process

The problems facing TVET in achieving effective skill acquisition for the youths are as follows;

- 1. Inadequate Supply of Technical Equipment: Vocational Technical Education is a skill-oriented programme, which requires the use of tools and equipment. But when it is not available or adequate it tends to frustrate the programme's effectiveness. In some cases, the available ones are obsolete. There is therefore need for current and sophisticated equipment to be provided.
- 2. Lack of Standard Technical Workshop: A standard workshop is an essential infrastructure for such programmes to be effective. Most of the vocational institutions such as the Technical Colleges and Polytechnics cannot boast of a standard workshop. There are institutions that have some tools and equipment, but because of non-availability of a workshop these expensive materials are dumped outside, which may be regarded as economic waste.
- 3. Inadequate Provision of Consumables: Consumables are materials needed to carry out work in a workshop. These materials are important in the sense that they facilitate the development of manipulative skills and competencies required in project or maintenance works.

- 4. Poor Remuneration of Teachers/Motivation: Vocational Technical Education teachers prepare students both in acquisition of knowledge and skills. This involves lots of hard work and risk-taking, which are not rewarded adequately. As a result, these teachers appear not to put in spirited efforts to ensure effectiveness and improve productivity.
- 5. Inadequate Funding of Vocational-Technical Education Programme: The development of effective programme of vocational and technical education in the schools requires a great deal of attention to the facilities needed for good instruction. But when funding is inadequate, it affects every other thing that goes on in a technical institution no practical training will take place. Meanwhile, according to Olaitan (1996) The Federal Government is single-handedly funding programmes of Vocational-Technical Education. This situation calls for institutions to mobilize all resources to generate fund internally so as to compliment that of the Government NGO's and other relevant organizations that can be of help.
- 6. Lack of Appropriate Skills and Occupational Experience of the Teachers: Most Vocational–Technical Education teachers do not have adequate or appropriate skills and experience to teach skills. The national policy on education considered occupational experience as an important factor to be considered when recruiting teachers. This is always overlooked by the recruitment authorities. This class of teacher should be granted in–service training through which they can acquire skills needed in their areas of specialization.

#### The Way Forward

For TVET programmes to be able to effectively, empower the youths, the following issues should be redressed:

- The Federal Government should re-introduce and sustain the domesticated Technical Teachers Training Programme (TTTP) in order to produce enough technical teachers for the Nations institutions;
- The Federal Government and states should allocate enough funds specifically for TVET programmes. In addition, institutions should as well embark on aggressive internal revenue generation to compliment that of the Government:
- The issue of teacher's welfare should be vigorously pursued to reduce the exodus of competent, and dedicated TVET teachers;

- TVET teachers should be granted in-service training, sponsored for workshops/services on entrepreneurial skills development;
- The SIWES programme should vigorously be supervised by the industry based/institution based supervisors;
- Funding institutions responsible for granting loans to entrepreneurs whether old or new should be closely monitored to avoid misappropriation of funds meant for establishing new businesses or sustaining old and existing ones.
- The Federal and State Governments should be able to procure sophisticated tools/equipments for the TVET institutions to be able equip the youths with contemporary skills and knowledge in technology.

#### CONCLUSION

To have a sustainable youth empowerment in the country, the role of TVET must be given topmost priority in our educational system. The important roles of the institutions concerned in TVET programmes both in the present and future of our youths and adults cannot be over-emphasized. Our youths' are our fundamental resource. We must empower our youths by revitalizing TVET programs, since the future greatness of a nation in determined by the quality of her youths.

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