

**TECHNICAL VOCATIONAL EDUCATION AND TRAINING (TVET) AND
INDUSTRY PARTNERSHIP FOR EQUIPPING YOUTHS FOR THE OCCUPATIONS
IN NIGERIA**

BY

Emmanuel U. Tibi, (Ph.D)

Department of Agricultural Education, School of Vocational and Technical Education,
College of Education, Agbor Delta State.
E-mail. tibimanuel@yahoo.com

Abstract

Nigerian education system is guilty of inability to equip learners with skills they need to function productively in industries. Technical and vocational education and training (TVET) is education designed to equip learners with functional skills to enable them fit effectively into the workplace. Gap exists between TVET products and their effectiveness in the industries for which they received TVET due to limited partnership between TVET and industries during learners' preparation. Abdullah (2015) stated that partnerships between vocational education and training (VET) providers and industry can be a mutually useful strategy in providing workforce training and in maintaining knowledgeable employees. Partnership consists of collaboration between the TVET institution and industry, involving exposing trainees to industry operations during schooling. Issues, causes and consequences of the gap between TVET and the industries are discussed and models of partnership between industry and TVET are identified like the market, the school and dual-system models. Vocational education programmes (VEPS) that provide opportunities for learners to gain industry experience like work-study, on-the-job training and cooperative training programmes are discussed. Recommendations on appropriate partnerships between TVET and industries followed.

Key words: TVET-industry partnership, gap, industry-based work experiences, vocational education models and vocational education programmes (VEPs)

Introduction

The bane of education in Nigeria presently is its inability to equip learners with functional skills which they need in order to be effectively and productively engaged in the occupations or industries for which they received education and training. The baneful effects of educational system being divorced from life and productive work has been felt in other developing countries also (Rashtriya, 2008). Mahatma Gandhi in the

1930s visualized that the process of education should begin by teaching a useful handicraft, thereby enabling the learner to produce from the very beginning of his schooling. Industry-based training of TVET learners enhances trainees' knowledge, motivations and skills for the job. The Kothari Commission (1966) advocated that the introduction of industry-based work experience into vocational education and training provides the basis

for the development of knowledge, skills and attitudes for later stages of preparation for work. Diversified learning imposes on education systems worldwide, the responsibility of being aware of the needs of industries, persons and institutions, preparing broad, flexible programmes which are responsive to the demands of an ever-changing world, through life-long learning experiences (Zhang, 2001 and Mkpa, 2009). Since technical and vocational education refers to instruction needed to equip persons for industrial or commercial occupations, there is the need for TVET and such industries to develop partnerships that should enable trainees gain hands-on experiences in the industries, to prepare them for future effective work in such industries. TVET emphasizes acquisition of skills by learners which are relevant to the operational processes that lead to productivity in industries. While knowledge of production or service process is important in TVET, motivation to work and proficiency in the work are very critical. In preparing people to fit into the work place, ability to perform effectively is key to the realization of the goal of the industry. For TVET to achieve the objective of its learning, it should be linked with industry in such a way that industry-based work experience becomes a major component in the education and training process.

Partnership comprises of building synergy between the TVET institution and the industry, involving arrangement for support of institutional training by the industry, as well as exposing TVET trainees to industry

operations for acquisition of hands-on work of experience, while schooling. Abdullah (2015) stated that partnerships between vocational education and training (VET) providers and industry can be a mutually useful strategy in providing workforce training and in maintaining knowledgeable employees. Ayomike, Igberadja, Igberaharha and Okeke (2014), using the Expectancy Theory of Motivation by Oliver, explained how partnership between TVET institutions and industries can be promoted and sustained because of what TVET institutions and industries stand to gain in the partnership. This theory proposes that a person will decide to behave or act in a certain way because they are motivated to select a specific behaviour over other benefits due to what they expect to get. The benefits for undertaking school-industries partnership include: societal benefits, dynamic curriculum design and development, promoting entrepreneurial competencies among students, creating leadership and teamwork, promoting resource sharing between the school and the industry and encouraging researches with commercial values (Mcloughlin and Luca, 2002; Narayan, 2009). Rashtriya (2008) also advocated the introduction of “polytechnic” education which seeks to integrate theory (academic studies) and practice (vocational training), stressing the educational dimensions of study and work, especially in the scientific and technical subjects.

The problem therefore is the gap between TVET institutions and industries in the preparation of learners to fit into

manipulative roles in the industries. Ayomike et al (2014) found that no partnership existed between TVET institutions and industries in Delta State. TVET that should have revolutionized the thinking, motivation and actions of school leavers and youths towards the occupations is being taught and learned like liberal arts and sciences geared towards certification, rather than as skill-building experiences for the occupations (Tibi, 2012).

This paper seeks to address the issue of lack of effective partnerships between TVET institutions and industries, the causes of the gap and the consequences of these on youth employability and on the nation's economy. Moreover the paper aims to identify techniques for enhancing partnership between TVET institutions and industries for skill-building in students to prepare them to fit into, and grow in the industries, or emerge as entrepreneurs to reduce unemployment and grow the economy.

Lack of Effective Partnership between TVET Institutions and Industry

Technical and vocational education and training (TVET) is supposed to prepare learners for the world of work at the skilled and semi-skilled levels of productivity, service and entrepreneurship. While TVET comprises of educational and training schedules in school and non-school facilities that prepare learners to fit into the workplace, the industry is the place where the skills which are acquired through TVET, are applied to serve the purpose of the skills acquisition. Thus, TVET and industry are inseparable, with one complementing the other. If industry

benefits directly from the human products of TVET for its operations and sustainability then industry should be part of the preparation of human products of TVET efforts, by offering to TVET the training ground for the skills that operate such an industry. The skilled, experienced personnel, the facilities, the equipment, the inputs and outputs of the industry, the processes of the industry as well as the hierarchy of personnel of the industry are found in the industry. There is no better place for the TVET learner to experience the mechanisms of the industry than by being exposed to the workings of the industry, while undergoing TVET preparation.

While there are relevant laws and regulations concerning this relationship between TVET and industry for the effective equipment of the learner to fit effectively into the workplace in Nigeria, the implementation and enforcement of such regulations have not been taken seriously, in the current educational system. There is a yawning gap between TVET providers and industry, while mutual suspicion pervades the TVET-industry complex. Public sector TVET is riddled with obsolete facilities and rusty instructors that are not current with innovations in the industry. On the other hand, the private sector is reluctant to expose unskilled learners from public TVET institutions to the "sensitive" and modern facilities in their industries, for fear of damage being done to their facilities, or their secrets being stolen by people who are not their employees. According to Tibi (2012), the mandatory

students' industrial works Experience Scheme (SIWES)'s objective of TVET and industry partnership has been undermined by the industries, the schools, the learners and society. Abelega (2009) observed that poor entrepreneurship education in the curriculum of the existing vocational courses has made students graduating from courses in agriculture, business, home economics and technical education without the slightest knowledge of how they could be gainfully employed.

Thus, the problem stems from the inability of TVET institutions to effectively partner with industry for the crucial aspect of learners having the opportunity to acquire industry-based work experience during training, to make them all-round skilled workers, ready to fit effectively into the occupations, after graduation from school. It is necessary to identify the causes of this gap between TVET programmes and industry experience inclusion in learners' preparation to fit into the workplace as skilled personnel, after their education and training.

Factors Responsible for the Gap between TVET Institutions and Industry

Four major factors are held responsible for the lack of effective partnership between TVET and industry; in the preparation of learners to appropriately fit into the industry are the school system, the learners, the industry and the society. These factors have aided in creating challenges to effective partnerships between TVET institutions and industries in equipping students and even staff of the two organizations for performance. In a recent study, Ayomike,

Igberadga, Igberabarha and Okeke (2014) found that no partnership existed between TVET institutions and industries in Delta State, Nigeria. They further identified challenges to partnership to include: lack of fund, the time that it consumed, lack of interest by TVET institutions and industries to partner, poor government policies of participation in TVET, poor public relations practice by TVET institutions and industries, and risk sharing pattern between TVET institutions and industries.

The TVET institutions operate poorly developed curricula, have inadequate or out-dated infrastructure and facilities, and are staffed by poorly trained, ill-motivated or incompetent teachers. UNESCO (2000) stated regretfully that less than 1% of secondary education in Nigeria is oriented towards technical and vocational schools. If the schools are few and ill-equipped, the basis for TVET and industry partnerships will not be there. According to Okoye and Chijioke (2013) this ugly situation could be attributed to the neglect of TVET education by the government at all levels in Nigeria. Okuwa (2005) had observed that the Nigerian educational system has been characterized by declining resources inputs, particularly from government.

Secondly, the learners who attend TVET institutions, do that, not out of genuine desire to acquire skills for the occupations, but as a last resort, when all efforts to get liberal education fail. Ukpore (2006) argued that most often, the curriculum of vocational education emphasizes objectives in the cognitive domain, to the detriment of

the psychomotor domain. While graduates of the American school system easily fit into the world of work because of the work skills they acquire while in grade school system (basic school) and high school (senior secondary school) their Nigerian counterparts study agriculture only so they can pass written examinations in agriculture (Tibi, 2012). Such school system cannot fit into the industries, and so they need institution-industry partnership for effective skill acquisition. Learners are also reluctant to pursue TVET programmes, because of low parental support for them, dearth of employment opportunities and fear of limited progress in such occupations. Partnership with industries during training should reduce such problems by providing initial contact and industry exposure while in TVET schools.

Thirdly, the industries are secretive in their operations, are reluctant to support TVET institutions with funds, infrastructure and facilities; they prefer to engage already trained skilled personnel (especially expatriates), rather than supporting the training of indigenous skilled workers in our local TVET institutions. To address the problems that have bedeviled TVET, has therefore necessitated the present day search for yet better measures, among which is the private-public partnership (PPP) strategy (Aworanti, 2015). Public-private partnership has important implications for the role of the state vis-avis the private sector as providers of services including education, health services, sanitation etc (Education International, 2009). If the industries collaborate with

TVET institutions in the training of learners in skills of the industries, it will improve the over-all attainment of the goals of TVET in building capacity for the workplace.

Fourthly, the Nigerian society compounds the problem by having only disdain for TVET skills; rather channeling their youths towards liberal education to the detriment of work-based education that boosts self-reliance, employment generation and vibrant economy. There is need for vocational re-orientation for every Nigerian; the young basic school child, the teenage high school student, the college-bound youth, parents/guardians, the community leaders and the elites (Tibi, 2012). Until every member of the society readjusts their perception of TVET, the benefits of TVET institution and industry partnership will not be meaningfully appreciated and adopted for economic growth. Other elements that widen the gap between TVET institutions and industries are subsumed under these factors above.

Consequences of the Lack of Partnership

1. The learners fail to acquire relevant learning experiences that they need to become skilled workers.
2. The products of TVET institutions hold certificates but not the relevant competencies for work leading to armies of unemployable persons.
3. Resources used in training them become wasted.
4. Self-reliance and entrepreneurship suffer because of lack of productive skill and capacity.
5. Industries suffer from low installed capacity due to absence of skilled

personnel and attrition due to aging of skilled workforce.

6. There is flight of foreign exchange due to repatriation of fiscal resources by expatriates to their home countries.
7. Collapse of the national economy result and the TVET institutions loose relevance.
8. Peace takes flight while insecurity reigns supreme in the society due to the evil activities of idle youths in a prostrate economy.

Educational and Training Models for Skills through Partnership

Existing models of vocational education are ways in which vocational trainings are conducted such that full-time TVET is replaced in part, with industry-linked practices. Rashtriya (2008) observed that the hitherto favoured full-time form of vocational education are being judged critically because of the great expense they cause, their remoteness from practice and the tendencies to bureaucratization that they involve. In order to bridge the varieties of gaps involving practical skills acquisition and classroom learning experiences with industrial skills, the Industrial Training Fund (ITF) was mandated with students industrial works experience scheme (SIWES) to enhance practical skills acquisition of TVET students and others in allied areas of study (Ekpenyong, 2011). Egbri and Chukwuedo (2013) in their study stated that it is necessary to develop TVE-industry partnership since the existing SIWES programme has relatively failed in achieving its objectives. This SIWES has failed to produce skilled graduates from the

TVET institutions due to poor linkage with industries.

In seeking ways of bringing TVET institutions closer to real-life work experiences in industries, some conceptual models of vocational education have been developed. Rashtriya (2008) observed that in the international discussion on vocational/educational theory, the systems in accordance with which vocational training is conducted are seen as models of vocational education. While Murugasu (1991) identified three TVET models at the post-compulsory school stage (for 16 to 19 years old) i.e. the school models, the dual model and the mixed model, it is the work of Greinet (1994) that better influences the organization and spread of vocational education around the world. Greinet (1994) using the criterion of the role of the state (government) in vocational training, identified three models of vocational education in practice as follows: the market model, the school model and the dual-system model. The degree of involvement of the industries in the planning and implementation of the collaborative training programmes with TVET institutions determines the efficacy in the learners' acquisition of industry-based work experience during training, as enunciated below:

1. **The Market Model:** In which vocational training is directly connected to production factors of labour and labour market. It consists of the industries designing and implementing vocational training to suit their industries' labour needs. Government is

only marginally involved in regulatory roles, while the vocational training takes the shape of on-the-job-training, apprenticeship, internship or pupilage; all of which are undertaken under industry-based supervision. It is industry-based and industry-controlled as found in USA, Canada, UK and Japan.

2. **The School Model:** in which government plans, implements and monitors vocational training. It is highly bureaucratic, involving formal courses, planned curriculum and methods of teaching and learning include role-playing, socio-drama, simulation etc in school laboratories, studios, workshops, farms etc without learners being exposed to direct experience with real-life industry-based situations. All the skills and experiences are second-hand and are essentially off-the-job. It is prevalent in France, Italy, Sweden and numerous third-world countries including Nigeria.
3. **The Dual-System Model:** This is a joint-venture vocational training programme between government and industries, in which the government lays down comprehensive guidelines for industries to implement. It is a state-controlled market model, in which TVET schools are established with strong links with industries. Industries interpret TVET school curricula through learners being made to acquire practical manipulative skills. Cooperative training programme, in which theories and principles are

learned in class, while skills are acquired in real industries, exemplifies this dual-system model. This model is practised in Germany, Austria, Switzerland and Latin America.

It is from these vocational education models that vocational education programmes (VEPs) are derived in the formulation of TVET and industries partnerships in different countries. Vocational education programmes consist of several complex activities in occupations that provide students with opportunities to gain work and entrepreneurship experience in industries. Such skills are specific to the occupations. Vocational education programmes (VEPS) differ from general work experience programmes (GEPS) which prepare students through liberal non-specific occupational education that makes such students “educated” but not necessarily skilled in any occupation (Tibi, 2012) For TVET students to benefit optimally from industry-based work experience, they need to engage in vocational education programmes as part of their work experience acquisition while in school, and not when they are already out of school.

Partnership between TVET institutions and industries can be developed through vocational education programmes like:

- I. **Work Study Programme:** in which the students study occupations in TVET schools and work part-time in the industries, to earn income to support their education, while at the same time acquiring functional skills in the

industries in which they are working part-time.

- II. **On-the-job Training Programme:** In which planned programmes of instruction are provided for persons in actual jobs or occupations. In these, real-time works are used to train recruits in the principles and practices of productivity, service and entrepreneurship.
- III. **Cooperative Training Programmes:** in which education and training are coordinated between the school and the workplace such that the students learn the theories in class and acquire skills in the cooperating enterprises or industries. Classroom education and job training are planned and implemented by teachers and employers of labour, to show the blending of theory and practice in the occupations.

Conclusion

For TVET institutions to produce people with the requisite skills to fit into occupations, or become successful entrepreneurs, the institutions should build strong partnerships with industries. These industries that provide the work spaces for skilled manpower should provide training grounds for their future workers to acquire work experience training. Both TVET institutions and industries benefit optimally from this partnership because if learners do not acquire industry experience, they will be ill-equipped to function in those industries, after graduation. SIWES as presently implemented in Nigeria cannot provide adequate work experience to equip learners to fit into the workplace, and the

vocational education curriculum does not have adequate provisions for skill-building activities to enhance the competencies of the students. This paper, after, discussing the causes and consequences of the lack of partnership between TVET and industries, also identified vocational education models from which various countries derive functional vocational education programmes (VEPs) that could be adopted in building enduring partnerships between TVET institutions and industries.

Recommendations

1. There is the need for the linkage between TVET institutions and industries to be strengthened, especially in the area of exposing learners to industry-based work experience.
2. To achieve this, the school curriculum needs to be renovated to incorporate some vocational education programmes that would be implementable between the schools and relevant industries or occupations.
3. Government should generate acts of parliament that could compel industries to be more accommodating of TVET students on internship or pupilage in real-time work experience.
4. Entrepreneurship education should accompany skill acquisition training in all occupations.

References

- Abdullah, H. (2015): The role of VET providers in training partnerships with industries in East Java, Indonesia. *TVET@sia: The Online Journal for TVET in Asia. Issue 5:*

Approaches and achievements in TVET personnel professional development.

- Abelega, M (2009): Technical and vocational education in crisis; which way out? In P. Mbah (ed); *Re-engineering Technical and vocational education (TVE) for Entrepreneurship: Issues and Challenges for the Realization of Millennium Development Goals (MDGs)*. Lagos. Dan Publishers, Pp 1-13.
- Aworanti, O.A (2015): Partnership in technical and vocational education and training (TVET) for national development. A lead paper presented at the 23rd Annual International Conference of Nigeria Vocational Association, at Yaba College of Technology, Lagos, 5th -8th August, 2015.
- Ayomike, C.S, Igberadja, S., Igberaharha O.C and Okeke, B.C (2014): Status of partnership Between TVET institutions and industries in Delta State of Niger Delta Region in Nigeria. Presented at the International Vocational Education and Training Association (IVETA) Annual Conference on Promoting and Sustaining Effective TVET Partnerships. Nov 19-19, 2014 at Nashville, TN, U.S.A.
- Education International (2009): Public Partnerships in Education http://download.eiie.org/Docs/webDpot/200909_Publication_Public-Private-Partnership-in-Education_en.pdf. retrieved on 10/07/2015.
- Egbri, J.N and Chukwuedo, S.O (2013): Re-engineering technical vocational education and training (TVET) in Nigeria through school-industry collaboration for capacity building. *Nigeria Vocational Association Journal (NVAJ)*, 18 (1) Pp 74-82.
- Ekpenyong, L.E, (2011): *Foundation of Technical Vocational Education: Evolution and Practice for Nigerian Students in TVE and Adult Education, Policy Makers and Practitioners*. Benin City. Ambik Press.
- Greinet, E.D (1994): Basic Types of Vocational Qualification: The Market Model, the School Model and the Dual System Model. Translated by C. Boone in *Education*, 49-50. Tubingen. F.R.G. Institute for Scientific Co-operation. Pp. 61-91.
- Mcloughlin, C. and Luca, J. (2002): Keeping an anchor Watch: industry partnerships, a basis for learning. Available at <http://www.ascilite.org/conference/auckland02/proceedings/paprs/005.pdf>.
- Mkpa, M.A. (2009). Curriculum Diversification: Meaning and Application in Nigeria and Elsewhere, in K.Nwuyet al (eds): Curriculum Diversification in Nigeria. CON Publishers, Pp. 17-32.
- Murugasu, V. (1991): Technical and Vocational Education and Training: An Overview; in *Technical and Vocational Education and Training*. Proceedings of the Regional Seminar on Technical and Vocational Education and Training. January 22-27, 1990; Manila, Asian Development Bank.
- Narayan, RT. (2009): Academia-industry partnership: an impetus for strengthening teaching and research

- in higher education institutions. Available at <http://www.americanprogress.org/issues/2010>.
- Okoye, E.R.E. and Ehijioke, O.P. (2013): Public-Private partnership and Technical Vocational Education and Training (TVET) in a Developing economy. *Arabian Journal of Business and Management Review*(OMAN Chapter) 2 (10).
- Okuwa, O.B (2005): Public-Private Partnership of Higher Education financing in Nigeria: the Case of User Fees, Revitalisation of African Higher Education (Pp 126 – 148). <http://www.herp-net.org/THEMATICLISTOFPRESENTERS2007.pdf>. retrieved on 10/07/2015.
- Tibi, E.U (2012): *Vocational Agriculture in Schools for Productivity and Entrepreneurship: Are We Teachers Succeeding?* Second Distinguished (Inaugural) Lecture Series of College of Education, Agbor. Delivered on October 17th, 2012.
- Ukpore, B.A. (2006): *Fundamentals of Consumer Education*. Ibadan. Spectrum Books Limited.
- UNESCO (2000): Revitalizing TVET in Nigeria. <http://portal.UNESCO.org/education/en/ev.phpurl-id=34506andvol>. retrieved on 10th October, 2011.
- Reshtriya, I. (2008): *Vocational Education*. New Delhi, APH Publishing Corporation.
- Wikipedia (2012) Expectancy Theory of Motivation. Available at http://www.en.wikipedia.org/wiki/Expectancy_theory.
- Zhang, S. (2001): Human Capacity Building for the New Economy in *Development Outreach* Fall, 2001, Pp. 9 – 12.

