# Inhibitors to Quality Assurance in Tertiary Institutions: A Synthesis of Literature

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#### Abstract

Quality Assurance (QA) and Technical and Vocational Education and Training (TVET) are two widely discussed concepts in specialized skill-focused education. Ineffective or absence of QA has been identified as an inhibition to the realization of goals of TVET. The purpose of this paper therefore is to examine the problems inhibiting QA in TVET in Nigeria especially in the tertiary institutions. This study also provides suggestions to improve TVET in Nigeria. The position of the paper is that the impact of TVET has not been impressive because of ineffective QA at all levels. The practical implication of the paper is that for TVET to be impactful on technical progress, employability and national development, there is need for the policymakers to focus on critical areas such as finance, access/participation, quality assurance and relevance of the program to the needs of the country.

**Keywords**: Nigeria, Technical and Vocational Education and Training, Quality Assurance

## Introduction

A vocation could be regarded as any paid or unpaid job, career, profession, occupation or work for which an individual assumes duty because he/she is trained and has some abilities, capability or potentials. Okoro (1999) defined vocation as work, which is any mental or physical activity directed towards achieving goals. Vocation may be a career, that is, a life time profession or trade which one begins to develop from young age, and grow in it as one grows. Vocational skills are achieved through vocational technical education as training or retraining programs in a career one engages in or has chosen to do. Its main features are development of practical skills, knowledge and attitude needed to enter, grow, develop and progress in a career or employment which suit one's needs, interests and abilities.

Osuala (1987) defined Vocational Technical Education as vocation or technical training or re-training given in schools or classes under public supervision. He further stated that it refers to systematic learning experiences designed to fit individuals for gainful employment in recognized occupations as semi-skilled (sub-professional) workers or technicians.

Denga (1993) defined Vocational Technical Education as any form of education which sufficiently prepares an individual to perform in his/her chosen occupation. He stated that Vocational Education teaches skills, develop attitudes, aptitudes and competencies that are requisite to success in a given occupation; while Osagie (1997) conceived vocational technical education based on its occupational content, such that, the trained acquire skills, attitudes, interest and knowledge to perform socially and economically, that which is, beneficial both to him and the society.

Vocational Technical Education therefore, is a training for all occupations, providing skills, knowledge and attitudes necessary for effective employment in a specific occupation. It is designed to develop skilled workers for industries, agriculture and commerce. The specific disciplines are: Agricultural Education, Trade and Industrial Education, Business and Office Education, Home Economics Education, Distributive and Health Occupation Education. Candidates for this type of education are selected based on their interests and aptitudes to benefit from training the programs. According to FRN (2013), the main focus of Vocational Technical Education is the learning of skills, that is, to ensure youths leave school as better citizens with skills sufficient to obtain employment, pursue additional career training in Post-Secondary School or further their academic education; and also train skilled workers (re-training) to function better in their place of employment. Vocational Technical Education is a functional education; it is therefore a medium for transmitting social norms and values to learners through the formal school system (Filloux, 1993). Formal education from developmental perspective is an instrument for attaining economic growth and technological progress judging by the experience of developed industrialized nations (Onyesom and Ashibogwu, 2013).

From policy perspective, investment in education is a potent means that the third world nations could explore to fast-track economic growth, technological progress and boosting of citizens' capacities (World Bank; 2008). The various perspectives of education can only be better improved with a sound quality assurance mechanism. Fadokun (2005) defined the term quality assurance (QA) as a critical examination of the objectives, attitudes, procedures and institutional control systems with a view to ensuring that set standards and quality are maintained. The essence of QA is to enhance the effectiveness of education system towards achieving set standards (Onyesom and Ashibogwu, 2013). With specific application to TVET, a quality assurance is imperative in the learning environment (school setting) to provide policy-makers with deeper understanding of vocational education, its functions, set goals and key characteristics (European Training Foundation [ETF], 2012).

Drawing from the experience of the industrialized nations, the Nigerian government established a number of TVET-oriented institutions to launch the country steadily on the path of technological progress and national development in furtherance of its commitment to TVET (Besmart-Digbori, 2011). The main objective of TVET in the National Policy on Education (Federal Republic of Nigeria [FRN], 2013) is the inculcation of practical and applied skills as well as basic scientific knowledge in students for useful living in the society. The expected outcomes of TVET are to:

- a) Provide trained manpower in the applied science and business particularly at craft, advanced craft and technical levels;
- b) Provide the technical and vocational skills necessary for agricultural, commercial and economic development; and
- c) Give training and impart necessary skills to individual who shall be self-reliant economically.

The Ministry of Education through the National Board for Technical Education (NBTE) enhanced the scope of TVET by granting approval for the establishment of Vocational Enterprise Institutes (VEIs) and Innovation Enterprise Institutions (IEIs) to complement ongoing efforts of the conventional TVET institutions in Nigeria (NBTE, 2011 and Oweh, 2013). The VEIs and

IEIs are special vocational centers empowered to train and award National Innovative Diploma (NID) and National Vocational Certificate (NVC) in contemporary courses/vocations such as Multimedia Technology, Software Engineering, Networking & Systems Security, Film and TV Production, Performing and Media Arts, Computer Hardware Engineering Technology, Automotive Mechatronics, Refrigeration and Air-conditioning, Electrical Installation, Early Child Care Management, Block Laying and Concreting, Building Construction Technology, Hospitality and Tourism Studies, Paralegal Studies, Music Technology, Telecoms Technology, Petroleum Geo-Sciences, Cosmetology and Beauty Therapy, Office Secretarial Assistant, *et cetera* (NBTE, 2011).

Despite the continued efforts of government on TVET, the pace of technological progress, employment and industrialization is still slow and unimpressive as evidenced by rising unemployment rate and level of poverty in the country (Ladipo et al., 2013). The poverty level in Nigeria despite TVET is 72%, while the National Bureau of Statistics, (2011) and Central Bank of Nigeria, (2011) reported unemployment rate at 23.9% respectively.

Similarly, the quest to attain technological progress and industrialization through TVET is far from being actualized because Nigeria has no place among technologically-advanced nations. The nation still spends huge proportion of its budget on importation of tractors, lathe machines, drilling machines, cars, trains, industrial equipment and ICT accessories (Uwaifo and Uddi, 2009). The UNESCO rated Nigeria low in the 2012 education assessment report, stating that the country's TVET performance manifested some disturbing indicators relative to other countries across the globe (Oweh, 2013). Whereas, wherever TVET is vigorously pursed and encouraged, it improved skills of learners and enhance employability (Maclean, 2011). The inability of Nigeria to develop technologically despite its adoption of TVET calls for objective policy retrospection and investigation. Based on the foregoing, this paper examines quality assurance in TVET in Nigeria with specific focus on Tertiary Schools especially in North East Zone of Nigeria.

## **TVET and Quality Assurance**

TVET is a specialized education designed to empower learners through the development of their technical skills, human abilities, cognitive understanding, attitudes and work habits in order to prepare learners adequately for the world of work or positioned them practically for self-employment after graduation (Oni, 2007). Badawi (2013) defined TVET as: "A comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of 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"

Considering the importance of TVET to national development, it has attracted different names such as Technical Education (TE), Vocational Training (VT), Vocational Education and Training (VET), Technical and Vocational Education and Training (TVET), Occupational Education (OE), Apprenticeship Training (AT), and Career and Technical Education (CTE) in education research literature (Wahba, 2010). The Ministry of Education has consistently articulated its commitment to VET in the national policy on education (NPE) because of the

prospects of poverty eradication, job creation, sustainable development and actualization of the transformation agenda (Oweh, 2013 and Ladipo et al, 2013).

Apart from poverty reduction potential of TVET, its effective implementation could also serve as instrument for curbing social exclusion, where cost of higher education is out of the reach of the majority and as antidote for youth unemployment, where the labor market is saturated (ETF, 2012). Furthermore, Maclean (2011) asserts that TVET if well positioned could play multidimensional roles of stimulating economic growth, social development, improving conventional education, empowerment, wealth creation, poverty reduction and skills enhancement. In a nation with recurring incidences of youth restiveness, TVET is well suited to help youths and adults become self-dependent and self-reliant, while for those working in the industry, TVET is helpful in the areas of skills enhancement, mitigation of high job turnover and risks of obsolescence (Okolocha, 2012).

As laudable as the philosophy of TVET is, it is misconstrued by different people in the society. Parents and their wards view vocational education as a form of education designed for drop-outs and those found to be less intelligent (ETF, 2012 and Ladipo et al, 2013). TVET to some Nigerians is a low quality education suitable for the less privileged students or second class citizens (Okolocha, 2012). According to Amodu (2011), the issue of negative perception of TVET is not limited to parents and ordinary Nigerians, the policy makers are equally not immune from negative impression about vocational education. The implication of negative perception of TVET is threefold, as follow:

- (a) Low societal estimation of TVET in the society
- (b) Gross gender imbalance in TVET implementation, and
- (c) Inadequate human, material and financial resources for TVET institutions.

Quality assurance (QA) refers to performance measures designed by the authorities for assessing the performance of educational institutions with a view to ensuring that the learning outcomes meet the needs of each society (Onyesom and Ashibogwu, 2013). From another viewpoint, QA refers to established procedures, processes and standard systems that support and ensure effective delivery of educational services (Kontio, 2012). Therefore, QA represents a potent "tool which enables policy makers to determine national educational needs, assesses new approaches to resolving issues, and to evaluate the effectiveness of policies and strategies" (Asian Development Bank, 1996:1.) An effective QA should focus on critical elements such as access/participation, funding, relevance and quality of TVET (King, 2011). The relationship between the four elements above and TVET can better be measured through effective monitoring and evaluation of its supply, demand and financing elements (King, 2011).

To ensure that quality and standards are maintained, different nations and TVET institutions (formal or informal) do have in place QA mechanisms that suite their socio-economic and educational aspirations. For instance, the United States of America employed the accreditation systems as QA mechanism at regional, national and specialized levels for effective monitoring and coordination of educational services. Whereas, Australia created a full-fledged QA unit called Australian Universities Quality Agency (AUQA) to ensure effective quality control of educational services in tertiary institutions (Mohsin and Kamal, 2012). Similarly, the government of Nigeria established supervisory agencies to enforce quality assurance in tertiary institutions.

The National Universities Commission (NUC) maintains oversight functions over the Universities; the National Board for Technical Education (NBTE) oversees the Polytechnics; and the National Commission for Colleges of Education (NCCE) takes charge of the Colleges of Education. These agencies have over the years developed the Minimum Academic Standards (MAS) as benchmark for QA and institutional self-assessment (Onyesom and Ashibogwu, 2013). The MAS is used by supervisory agencies for institutional accreditation; it covers among others: teaching quality/effectiveness, floor space for lectures, minimum laboratory facilities per students, minimum library space, minimum staff/student ratio, minimum teaching facilities/equipment and office accommodation (Uvah, 2005).

From the purpose of Accreditation Exercise in USA, Australia and Nigeria therefore, is to ensure that standard and quality of higher education are strictly regulated, maintained and enhanced by educational institutions in line with changing needs of the society and the industry (Mohsin and Kamal, 2012; Onyesom and Ashibogwu, 2013).

# **TVET and Quality Assurance Indicators**

To avoid measuring TVET performance haphazardly by the rule of thumb, educationists have developed quality assurance indicators (QAIs) as measures which give information and statistics about educational effectiveness, efficiency and performance in different contexts (Chalmers, 2008). There are several quality assurance indicators, but the common point of convergence among all the quality metrics is the need for objective evaluation and quality improvement. According to UNESCO (2002), the five key components of quality assurance indicators are:

- (a) What learners gain;
- (b) Quality Learning Environments;
- (c) Quality Content;
- (d) Processes that support Quality; and
- (e) Outcomes from the learning environment.

According to Ehindero, (2004), additional quality assurance indicators include:

- (i) learners' behavioral characteristics, attributes and demographic factors,
- (ii) teacher's professional competencies/pedagogic skills,
- (iii) teaching processes, curriculum and learning environment, and
- (iv) The outcomes of education.

Quality assurance indicators could be classified as simple quality indicator, performance quality indicator and general quality indicator (Cave et al., 1997 and Chalmers, 2008). In practice, simple performance quality indicators are quantitative in nature. The simple indicators are employed by quality assurance evaluators for providing a relatively unbiased description of a situation or process in the school system. The result of such QA is often expressed as absolute figures devoid of value judgment. Performance indicators on the other hand are QA that is tied to a particular standard of learning/teaching, educational objectives, goal of examination, evaluation of management/teacher/amenities et cetera. The outcome is relative rather than absolute and it is heavily depended on valued judgment. The general indicators however are used for QA that is essentially externally driven to elicit opinions, survey findings or general statistics (Cave et al., 1997 and Chalmers, 2008).

Quality assurance indicators could also be classified as Input, Output, Process and Outcome indicators (Borden, and Bottrill, 1994; Burke et al., 2002; Warglien and Savoia, 2006). Input and output indicators are quantitative in nature. The input indicators are employed in QA for measuring the quality of human, financial and physical resources available within the formal school systems. The result of input indicators because of its quantitative nature is constrained by its inability to determine clearly quality without extensive interpretation. Output indicators are used in QA for measuring concrete results produced in the learning environment, including infrastructural/instructional resources utilized to produce the reported results. The limitation of output indicators is that it reflects numerical value only, but the quality of the reported numbers is entirely disregarded. For the process indicators, they are employed for measuring qualitatively the means used to deliver educational programs, activities and services within the school environment. The process indicators look at how the education system operates within a particular context; it is a good measure of inter- and intra-school quality comparison. However, outcome indicators are employed in QA by institutions and policy-makers to measure the quality of educational objective, academic activities and impact of service delivery. Outcome indicators do not generate results in numerical data like output indicators, but measure complex processes qualitatively.

Furthermore, QA could be carried out using four quality indicators, namely: finance, access/participation, quality adequacy and relevance of TVET program (ETF, 2012). Whereas, Ayeni (2012) proposed six quality indicators, viz: learning resource inputs, instructional process, teachers' capacities development, effective management, monitoring and evaluation, and quality learning outcome. However, Cheung (2001) submitted that there are seven areas of improvement that is often directed. These include: Teaching Improvement, Learning Improvement, Curriculum Improvement, Evaluation Improvement, Classroom Environment Improvement, School Management Improvement and Teacher Education Improvement.

From the discourse above, the purpose of QA could be summarized into two, viz to:

- a. Evaluate brilliant academic performance of students in standard examinations; and
- b. Determine the relevance of the learning experience to the needs of the students, the community, and the society at large.

### **Theoretical Framework**

The paper is based on Human Capital Theory (HCT) and Critical Conflict Theory (CCT).

# **Human Capital Theory**

Most research works in the field of education adopt the human capital theory of Schultz (1975) as their theoretical foundation. In clear terms, the human capital theory (HCT) presumes that education or training has the potential for stimulating economic growth, technological progress and productivity because it transfers useful knowledge, dexterities and skills for better life time earnings (Ladipo et al., 2013). Berker (2009) reported that investment in people is "a form of human capital which propels changes in the society. Like other forms of human capital, human hands-on ability can be increased through education, training, experience, health care, and so on." The economic growth attainment of a number of East Asian nations like Hong Kong, Korea, Singapore, Shanghai and Taiwan is associated with the quality of their workforce (Ladipo et al., 2013). As laudable as HCT is in the field of education, the woeful performance of Nigeria in

both conventional and TVET education cast doubt on the relevance of HCT. Therefore, there is an urgent need for a separate theory for TVET. Broudy (1981) cautioned several years back that although there is no specific theory of TVET, but a sound theory of vocational education should reflect a set of reasoned beliefs, goals, policies, organization, curriculum, and methods of teaching and learning TVET as well as providing a consistent set of guiding principles and policy framework for effective implementation.

# **Critical Conflict Theory**

Critical Conflict Theory (CCT) provides explanation for poor quality of TVET and its inability to stimulate economic growth, employment and national development. It strengthens the functionalist's perspective and identifies the sources of conflict in education. The need for using two contrasting theories is premised on the statement of Ball (1994) that:

"...no one interpretational mode or set of theoretical tools or interpretational stance is adequate or exhaustive of the analytical possibilities of policy analysis. The same data can be subjected to very different types and levels of interpretation".

According to the functionalist viewpoints, education emerged in human society as a socialization mechanism which facilitates learning of skills, norms and positive attitudes for the good of the society thereby reducing social inequalities (Kendall, 2010). The critical conflict theory arose to underscore the fact rather than education reflecting the noble functions enunciated by the functionalists and several other theorists, it has been used by privileged segment of the society to engender social inequalities ranging from class, race, and gender (Liasidou, 2009). The conflict of social inequalities that education engendered is historical and persists in every society. In the contemporary times, every society is still stratified between "a small group of rich men and a great mass of poor engaged in a constant class struggle" (Walsh, 2012).

So, the CCT argues that educational institutions have failed to actualize the set goals and objectives because political elites starved education of funds. The disbursement of funds is a critical component to the perpetuation of social inequalities. Despite increasing awareness on the importance of TVET, funding has been a big issue (King, 2011). To resolve this state of affairs, the education sector must undergo a fundamental restructuring in order to redress the issue of funding with a view to creating equal opportunities for all students irrespective of social status (Kendall, 2010).

The critical conflict perspective identified hidden curriculum phenomenon as another source of conflict in education. Skelton (1997) defined hidden curriculum as "that set of implicit messages relating to knowledge, values, norms of behavior and attitudes that learners experience in and through educational processes. These messages may be contradictory, non-linear and punctuational and each learner mediates the message in her/his own way." However, Kendall (2010) views hidden curriculum as the process of transmitting certain cultural values, norms and attitudes to learners through the mechanism of education. The rationale of hidden curriculum is to ensure that learners conform and obey school's rules and regulations. The hidden curriculum is tactically transmitted and nurtured in students as social norms and moral beliefs through the medium of the classroom (Giroux, 1983).

The implications of embedment of hidden curriculum on educational objectives are far-reaching. Bowles and Gintin (1976) remarked that the hidden curriculum leads to nurturing of passive and obedient learners often preferred by employers of labor because of their conformist attitude and readiness to accept the bidding of constituted authorities (subservient workforce).

Consequently, the education sector turns out stereotyped professionals in excess of the demand of the industry, a situation that keeps wages abysmally low. In the same line of thought, Hargreaves (1978) argued that hidden curriculum stifles creativity and innovation because it rewards the conformists (students who cannot think beyond what they are taught in class) and reprimands creative students (students who think outside the box) because they prefer to act independently different. Therefore, the phenomenon of hidden curriculum produce unimaginative and unquestioning work force that would be exploited and manipulated by the employers of labor in the industry. It is instructive to conclude that a routine, periodic, internal and external QA would serve a potent mechanism for curtailing all the social conflicts (inequality, funding, hidden curriculum) raised within the CCT.

# **Environmental Factors Affecting the Quality of TVET**

Nigeria's low quality TVET is linked to a number of environmental factors. The foremost of the environmental factors is the ineffective implementation of TVET curriculum. According to Onyesom and Ashibogwu (2013), the outcome of Monitoring of Learning Achievement (MLA) in Nigeria revealed that "there is a wide gap between the intended curriculum (theory) and the achieved curriculum (practice)". The constraint of translating educational curriculum into reality in the domains of Colleges, Polytechnics and Universities had been a recurring implementation issue in Nigeria for a very long time; this ugly development is linked to cluster of constraints like inadequacy of experts, irrelevant text-books, ineffective teaching method, paucity of learning tools for practical-oriented exercises and poor funding of institutions (Gabadeen and Raimi, 2012). It is therefore right to conclude that several laudable educational programs in Nigeria were compromised mid-way during implementation because of institution's inability to effectively translate the objectives of curriculum into practical realities (Okebukola, 2004).

The second factor that inhibits the quality of TVET in Nigeria is negative perception by the endusers especially parents, students and policymakers; a phenomenon linked to poor understanding and low awareness (Eze and Okorafor, 2012). Similarly, Amodu (2011) remarked that negative perception of TVET is not an attitude confined to the general public, but the policy makers in the Education sector are also not insulated from the negative mind-set about TVET. The problem of negative attitude towards TVET is not limited to Nigeria, it featured in a survey carried out in Pakistan, where respondents rated Science Education as more desirable than TVET. From a total of 683 respondents surveyed, 57% preferred Science Education, 35% favored Technical Education, while 8% voted in favor of Humanities/Arts. TVET was rated low by respondents because of negative impression that this form of education attracts lower financial benefits in the society (Reliance Services, 2012).

The third inhibiting factor against quality TVET is the inability of the program to meet the need of the industry. The Nigerian educational system at present cannot meet the needs of the industry and the society (Omede, 2012).

TVET also, experienced fall in quality on account of poor funding from government and other stakeholders in Nigeria. King (2011) reported that in several countries of the world, funding/financing of TVET has been very low; the case is worse in developing nations despite increasing awareness about the importance of TVET. Empirical finding on funding for TVET from Pakistan indicated that 75% of the respondents were of the opinion that TVET is grossly underfunded, 20% replied that TVET is well funded and 5% of the respondents maintained a neutral viewpoint. The result above is a common feature in developing nations. In Nigeria, TVET is challenged by paucity of funding from government and donor agencies (Ladipo e al., 2013). Whereas, huge budgetary allocation is appropriated to security, defense and administration by the government to the detriment of education sector (Adebakin and Raimi, 2012). Consequently, quality and standards in the educational institutions have been compromised because of lack of adequate funding; a development which stifles the capacity of institutional authorities to meet their teaching, research and infrastructural needs (Onyesom and Ashibogwu, 2013). It was this realization that informed the deliberate inclusion of funding as a key quality assurance indicator in several working papers (ETF, 2012; Reliance Services, 2012; UNESCO, 2002).

The fifth factor affecting quality of TVET is its inability to stimulate employability contrary to the widely held notion that specialized education empowers the citizens to be creative, innovative and productive thereby improving their employability (Sofoluwe et al., 2013). The rising unemployment rate in Nigeria negates the presumption that TVET stimulates employability (Ladipo et al., 2013).

The last environmental factor affecting TVET is absence of enabling environment and infrastructural facilities to strengthen skills acquisition programs (King, 2011). Absence of an enabling environment is worsened by condition of the economy, weak internal capacity of institutions, poor organizational governance, poor institutional research engagements, the phenomenon of brain drain leading to paucity of experts, unhealthy industrial actions, political tampering with policies, unsuitable policy environment, inadequate funding, shortage of instructional resources, and inconsistent educational policy (Oladipupo et al., 2007). Therefore, the factors affecting the quality of TVET could be summarized as poor conceptualization of vision and goals, competencies/expertise of instructors, teaching and learning environment, admission and assessment standards, learning environment, and employability prospects.

### Conclusion

In conclusion if TVET is to achieve its laudable objectives of educating its recipients to be acquainted with knowledge, skills and attitudes that will translate into career, employability, entrepreneurship and self-reliance for national economy development, issues of poor funding, lack of enabling environment, lack of infrastructure and so on must be urgently addressed so that the TVET curriculum may be effectively implemented, experts in the field can be retained, research can foster and the negative public impression about TVET may be forced to change when it begins to meet the needs of the society.

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