

CHALLENGES OF QUALITY TECHNICAL EDUCATION IN YOBE STATE

By

EVELYN NWAMAKA CHIOKE

*School of Technical Education,
Federal College of Education (Technical), Potiskum,
Yobe State.*

ABDULHAKEEM BABALOLA

*School of Technical Education,
Federal College of Education (Technical), Potiskum,
Yobe State.*

And

GAMBO JIBIR

*School of Science Education,
Umar Suleiman College of Education, Gashua,
Yobe State.*

Abstract

Nigeria like other countries of the world recognize education as the major instrument for national development. Education is crucial for social, economic and political development. These goals of education can be fully attained if quality delivery is assured in technical education. Technical education of good quality is critical for Nigeria to become globally competitive. This article identified and discussed the challenges of quality technical education such as inadequate facilities, inadequate funding, brain drain, poor staff training, bribery and corruption and also suggest ways of improving the teaching and learning of technical education with greater interest and enthusiasm.

Key Words: Challenges, Quality, Quality Education, Technical education and Quality Technical Education.

Education is actually the basic instrument of economic growth and technological advancement of any society. It is a process that enables an individual to live a useful and acceptable life in the society (Aigbepue, 2011). Also Igbinedion and Ojeagu (2012) see education as a veritable means of progress for nations and individuals. Similarly, Ayonmike (2014) opined that education is a process of updating the knowledge and skills of the individual that will be useful to himself or herself and to the community. Education helps individual's to gain ideas, knowledge and experience that will make him/her useful to his/herself and the society.

Technical education is the type of education that is concerned with imparting knowledge, skills and attitudes to learners and preparing persons for the world of work. The National Policy on Education (FGN) (2004), maintains that technical education is the study of related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of the economic and social life. According to Ezeji (2001) technical education is special training which helps to qualify a person to engage in some branches of productive industry. Makama (2005) stressed that technical education is that branch of education which can be used to bring about change in technology as well as the economy of the nation. This implies that technical education is the type of education that equips one with skills for sustainable living in the society.

According to Okoro (2006), technical education is that type of education which "equips the individuals with the requisite knowledge, skills and attitudes necessary for the individual to live a useful life in the society economically, socially and spiritually. Olaitan (2003) defined technical education as education planned for those who desire to earn their living in an occupation in which success is largely dependent upon technical information and understanding of the laws of science and technology as applied to design, manufacture, production, distribution and services of wide variety of products.

Again, technical education contributes so much to the society ranging from electrical and electronics technology, metal work technology, mechanical/automobile technology, building technology, wood technology etc. That is technical education which makes it unique in its content and approaches thereby demanding special attention.

The objectives of technical and vocational education and training (TVET) as enshrined in the national policy on education (FRN, 2004) include the following:

- (a) To provide trained manpower in applied sciences, technology and commerce particularly at sub-professional levels
- (b) To provide people who can apply scientific knowledge to the improvement and solution of environmental problems for the use and convenience of man
- (c) To provide the technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development
- (d) To give an introduction to professional studies in engineering and other technologies

(e) 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-employed.

Conceptual Clarification

Quality

The concept of quality has attracted many definitions from several scholars. Kalusi (2001) noted that quality is a complex concept and there is hardly any consensus. According to Dubrin (1997) quality is a desirable attribute of a product or service that distinguishes it for the person seeking the attribute. Viewed from this definition, quality could be said to have the attribute of worth and acceptance. Nevertheless, Dubrin maintained that good quality should possess the characteristics of conformity to expectation, requirement, excellence and value. Asiyai and Oghurba (2009) defined quality as a measure of how good or bad the products of education institutions in Nigeria are in terms of their academic performance and meeting established standards. Majasan (1998) defined quality as the totality of features and characteristics of a product or service that bears on its ability to satisfy stated needs. According to Ekong (2006), quality builds knowledge, life skills, perspectives, attitudes and values. When quality education is high enough to meet set standards, the products of education would be able to perform well in the world of work in real life situation. When quality is low, performance cannot meet the set standards.

Quality Education

Quality education is regarded as an instrument for development and self fulfilment in any society which may be given to all citizenry. Ndioma, (1989) argued that such needs must meet the standards in health, growth and physical survival in a complex and globalized world. It implies that education is worthwhile and empowers the recipients with relevant skills, knowledge, ideas, values and attitudes needed for him/her to make informed decisions and live a self-sustaining life. Quality in building technology education refers to the worth of the inputs made to access quality education, such as, teachers, lecturers, instructional facilities and evaluation procedures which translates to the outputs. Majasan (1998) maintained that quality education is value-loaded arguing that quality education should produce disciplined behavior, hard work, improved cultural heritage and mutual respect within and outside the school community. If a society expects quality manpower for rapid development and transformation, quality education is “a must do affair” (Majasan, 1998). This he continued is because quality education is expected to address critical issues like the dignity of labour, quality leadership and committed citizenship, industrial harmony, political stability, religious tolerance, self-reliance and security. Quality education entails that the products of any institution should be able to perform according to expected standard and compete favourably with their peers in other countries of the world. Quality education is the

education that produces a complete person. Complete in the sense that the person is intellectually, morally, physically, emotionally and socially developed. Hence Adepoju (2007) argued that education without quality can even be more dangerous than no education, stressing that without quality, education has no value.

Technical Education

Technical education is a post-secondary vocational training programme whose major purpose is the production of technicians. Technical education can be distinguished from other vocational education programmes because more mathematics and sciences are required in the training programme. Their graduates are called craftsmen. It is more often found in trade and industrial education.

According to Osuala (1987), technical education is a training and retraining programme which prepares individuals as semi-skilled workers, technicians or sub-professional bodies including programmes such as that designed for professionals who require a Bachelor degree or higher degree. Technical education is therefore for youths as well as adults. It can take place in a formal environment such as schools, trade centres and technical colleges.

Akpan (2004) viewed technical education as a programme for the training of an individual in a formal environment for the acquisition of occupational skills (trade) under the supervision of a technical officer or expert. It is education meant to prepare individuals, to enter a chosen occupation both professional and non-professional for livelihood. Technical education embraces a number of programmes such as metal work, auto-mechanic, electricity, electronics, technical drawing etc. All these sectors/areas of education enhance speedy transformation of the nation's economy.

Quality Technical Education

The quality of technical education begins necessarily in curriculum and instruction. No form of technical education can assure quality if it does not pay attention to the maintenance of high standards in its assessment of programmes and facilities and in its constant updating of facilities and curriculum. Interest in the quality education level led the national council for occupational education to develop and promulgate criteria for excellence in Applied Science Programmes in (1999) but this concern with instructional excellence is not unique to post-secondary career and technical education.

Despite their common interest in providing excellent instruction, there are aspects of post-secondary technical curriculum and instructional facilities that are different from secondary technical education. Though secondary education may address these aspects in some ways, but the widely diverse student body that post-secondary education must address makes attention to quality indicators absolutely critical at the post-secondary level.

Challenges of Quality Technical Education in Yobe State

Several factors pose challenges to quality technical education. These factors are highlighted and discussed below:

1. **Inadequate funding of technical education:** No doubt, technical education has made some notable impacts on the society, especially in respect to the products of the training programme who are contributing their quota to the economic growth and development of the state through various industrial establishment (Odu, 2013). Inadequate funding of technical institutions has led to the turning out of half-baked graduates because there is no fund to build and maintain workshops, laboratories or even purchase modern equipment (Abenta, 1985). Staffing of technical education is generally inadequate because of poor funding. Experienced and skillful teachers may not be employed. Those that are employed, because of poor remuneration do not stay long in the teaching profession, but they drift to some other more lucrative jobs especially in the industries and abroad. Consequently, inexperienced and unqualified technical teachers are employed thereby losing academic standard, resulting to wastage in the achievement of technical education goal (Agbionu, 2003).

2. **Inadequate facilities:** Most technical education departments do not have laboratories or workshop space, let alone useable equipment and where they exist, they are grossly inadequate, as the workshops only have items or equipment that were provided when the departments were first established of which most of them are already obsolete or grounded (Ojimba, 2012). It is quite unfortunate and surprising to know that most technical departments still depend on engineering workshops and lecturers to teach technical education concepts. The available facilities, programme as at today are inadequate quantitatively and qualitatively and beside that they are outdated. OryemOriga (2005) opined that only 40% of institutions in Nigeria have laboratory or workshop space for technical education programmes. The remaining 60% do not have laboratory or workshop space and this has resulted to the low quality of technology programme in our institutions.

3. **Brain drain:** This refers to the movement of technical teachers and lecturers of technical education which are very much needed for the socio-economic and technological development of Nigeria from one school to the other or to other professions where they feel that they will offer them better conditions of service. According to Bassi (2004) about 45% of all Nigeria professionals including technical education professionals have left the Nigerian shores over the years. Between 1997 and 2007 alone, Nigeria lost over 10,000 middle level and high level managers to the western economy.

4. **Staff training and retention:** Training of academic staff is a continuous exercise to ensure consistent improvement in the quality of their products. The training

can be acquired either locally or overseas. Usually, local training within the country is cheaper than overseas training but more strenuous because of inadequate facilities, literature and distractions rising from the need to meet the necessary demands. Overseas training requires a lot of foreign exchange but the enabling environment exist to achieve success in a record time. However, overtime, it has always been difficult to get the trainees back to their respective countries after the completion of their study. The salary and service benefits paid to technical education teachers in Nigeria are about the lowest in the world (Ojimbu, 2012). This leads teachers to migrate to other countries for better pay.

5. **Curriculum of technical education:** The curriculum of a subject with practical content is generally organized into an average of 67% for the theoretical classes and 33% for workshop. Olunloyo (2002) noted that one of the issues confronting the design of appropriate curriculum for technical education is preparing students for the shift from the fordist to information communication and technology (ICT) paradigm in technology practice. Ojimba (2012) identified six problems associated with the current curriculum in Nigeria. They are:

1. The curriculums are based on foreign model which has evolved under ideal conditions (staff, equipment, infrastructure, training opportunities, etc.) that are not easily duplicated in developing countries.
2. There is a basic lack of textbooks in the area and most of the available textbooks have foreign background and often illustrated with examples from outside the local environment.
3. There is usually a shortage of highly competent indigenous teaching and support staff with sufficient practical experience of technology.
4. The curriculum are adjudged to be too academic and overloaded with intellectual content in pure science and mathematics at the expense of basic engineering and technology.
5. Inadequate provision of humanities, social sciences, business management concepts and entrepreneurial skills development. Because of the inadequate preparations of the students for the industry, some employers retain the graduates to make them productive in their organizations.
6. The teaching approach follows the conventional method of transferring knowledge across through the lecturer reading out to the students, who would then take down notes. The educational system continues to place considerable value on this method of teaching.

6. **Apathy of political officers/law makers:** education generally and technical education in particular has been grossly neglected in Nigeria. Technical education has the greatest challenge of convincing the law makers on the reasons why they should give priority attention to the programme in resources allocation. Many option of getting

positive results have been advocated at different form namely; lobbying, participation of technical educators in programme in Nigeria. Therefore, Nigeria will ever remain a technologically backward and dependent nation if this negative attitude and trend is not reversed.

7. In the value system in Nigeria today, too much emphasis is placed on university qualification not minding whether the holder possesses the required knowledge and skills. But in advanced societies those with technical degree are highly regarded. In fact, the value system in those countries depend on the person's skills and knowledge, and not on the stack of academic degrees one has. In the public service, graduates of technical education are often discriminated against and their career prospect is limited. For this reason, secondary school leavers and parents prefer university education to technical education (Nworlu-Elechi, 2013).

Conclusion

The number of people wanting to be educated will continue to increase simultaneously with global increase in human population. The task of providing quality education that would engender national productivity in this era of changes imposed by advances in science and technology is in the hands of vocational and technical education teachers. To be able to withstand demands on the emerging horizon so as to tackle challenges of access and quality, teachers are needed who can teach students to think and use the knowledge acquired for self sustenance and job creation.

Way Forward

The following suggestions were made to enhance quality of technical education

1. Adequate resources should be allocated to technical and vocational education. Inadequate funds affect the provision of essentials such as well-equipped laboratories and workshops, relevant textbooks and training manuals.
2. Technical education requires skilled and proficient teachers. Teachers' preparation should be given a priority attention. There is the need for regular in-service training for teachers of technology to upgrade their skills. Periodical industrial training for teachers is a sine-qua-non in other to keep them abreast with the technological changes in the industry.
3. There is the need for our technical institutions to establish good relationship and linkages with similar institutions abroad as this will promote cross-fertilization of ideas and enhance technology transfer. By doing this, the technical institutions will have access to new developments, exchange programmes and other numerous benefits available at those institutions whose technical programmes are well developed.
4. When there is collaboration between technical institutions and industries, the relationship will enable the parties appreciate and understand their needs and proffer the right solutions for the benefits of the society.

5. The curriculum taught in our technical education institutions should be reviewed to meet the demands of the labour market.
6. There is need to start the teaching of industry-based curriculum to increase employment opportunities for school leavers of technical institutions. It will also provide ample opportunities for school dropouts.
7. The government should urgently remove the dichotomy that exists between university and technical institutions. This will not only attract more qualified students to technical education but will also encourage exchange of qualified lecturers/institutors between the two systems.
8. It is important to monitor and regulate the informal sector that produces most of our artisans; such training outfits can be licensed to certify trainees at the end of the apprenticeship period on behalf of the government. Through this way, charlatans can be easily identified and separated.

References

- Agbenta, J.A. (1985). "An Appraisal of the education work and employment of vocational technical school graduates and trends in vocational education in Nigeria". *Nigerian Educational Research Association* 4(3):16-23
- Agbionu, E.O. (2003). *Introduction to International Economics*. Lagos; Clemeddy Educational Services.
- Aigbepus, S. (2011). *Revitalization of Vocational and Technical Education*. *JOR/ND* 9(1). Retrieved 11th March, 2013 from <http://www.ajol.info/journals/jorinl>.
- Akpan, V.C. (2004). The Role of Vocational Education in National development, Problems and Solution; *Multidisciplinary Journal of Research and Development* 3(4)
- Asiyai, R.I & Oghurba, E.P. (2009). An empirical analysis of the causes and possible solution to decline in quality of tertiary education in Delta State, Nigeria. *Journal of sociology and Education in Africa* 8(2): 1-13.
- Aynonike, C.S. (2014). Challenges of Implementing Technical and Vocational Education and Training Curriculum in Southern Nigeria Technical Colleges. *Makerere Journal of Higher Education* 6(1)
- Bassi, S.Y. (2004). *The Role of the Directorate of Technical cooperation in Africa (DCTA) in technology transfer and Acquisition in Countries*" Proceedings of 2nd

African Regional Conference on engineering Education, University of Lagos, 20th – 22nd September, pp 35- 42.

Dubrin, A.J. (1997). *Fundamental of organization behavior: an applied approach* Cincinnati: South West College Publishing.

Ekong, J.E. (2006). Standard in education and quality delivery as imperatives for national productivity. *Nigerian Journal of educational Philosophy*, 2(2): 16-24

Ezeji, S.C.O.A. (2001). *Guidance and counselling in Education*. Enugu: Chulbson International Press.

Federal Republic of Nigeria (2004). *National Policy on Education*. Lagos: NERDC Press

Igbinedion, V.I. & Ojeaga, I.I. (2012). Use of Career Education and Occupation Information Services in Boosting Enrollment into Vocational and Technical Education Programmes in Nigeria. *International Education Studies* 5(4).

Kalusi, J.I. (2001). Teacher quality for quality education. *Nigerian Journal of Educational philosophy* 8(2): 62-72

Makama, G.B. (2005). *Teaching Vocational and Technical Education*. Kaduna: Touch Production.

Ndioma, C.B. (1989). Standard and the National Policy on Education Associated Hydra Headed Problem. In: Omasteye J.N. (ed) *Quality in Education*. Benin-City: Ideal Publisher.

Odu, K.O. (2013). *Reappraising the work skill requirements for building technology education in senior secondary schools for optimum performance in Nigeria* “proceeding from Africa society for scientific research (ASSR). The first international technology, education and environment conference research society.

Ojimba, D.P. (2012). Vocational and Technical Education in Nigeria; Issues, Problems and Prospects” Dimensions. *Journal of Education and Social Research* Vol. 2(9), November, 2012.

Okoro, O.M. (2006). *Principles and methods in vocational and technical education*. Nsukka, University Trust Publishers

- Olaitan, S.O. (2003). *Vocational education in Nigeria Schools and Manpower development*. Calabar, Pentans Press.
- Olunloyo, V.O.S. (2002). *The Challenges of Globalization for the Design of Technical Curriculum in Developing Countries*. First Edition, University of Lagos Press, pp 217 – 237.
- Oryem-Origa, S.O. (2005). *Vocational education and manpower development*. Lagos: Nigerian Vocational Monograph.
- Osuala, E.A. (1987). *Foundation of Vocational Education. A Behavioural Objective Approach*, Country Press Ltd, Calabar.