VOCATIONAL TECHNICAL EDUCATION AND THE ACHIEVEMENT OF MILLENNIUM DEVELOPMENT GOALS (MDGs) FOR SUSTAINABILITY IN NIGERIA

Hogan Usoro, Ph.D.
Department of Vocational Education,
University of Uyo,
Uyo.

Samuel A. Ikpe
Department of Technical Education,
College of Education,
Afaha Nsit.

Udeme T. Akpan
Department of Vocational Education,
University of Uyo,
Uyo.

Abstract
This paper discusses the extent of Vocational Technical Education achievement of Millennium Development Goals for sustainability in Nigeria. It defines Vocational Technical Education (VTE) within the context of National Policy on Education to reflect the goals/objectives of VTE. The said goals are based on skills development for entrepreneurial exploits within Vocational Technical Education options. The relevance of VTE to the achievement of MDGs is undoubtedly constrained by several challenges among which are unemployment among youth, funding or undergunding, power challenge, public prejudice against VTE etc. Recommendations for addressing these in order to achieve the extension of the pursuit of MDGs to 2020 in order to achieve at least 80% of the MDGs and aggressive reduction of unemployment problems among the youth by the government.

Vocational Technical Education (VTE) has been a very lucrative educational programme having been a pre-requisite to the world of technology and capable of developing both human and material resources. The Nigerian Government on implementation of the National Policy on Education emphasized that the basic aims of technology education should be to provide trained man-power, technical know-how and vocational skills and to enable our young men and women have intelligent understanding of increasing complexity of technology. As a matter of fact, these goals need to be translated into meaningful achievements through effective
implementation of vocational technical education programme (VTE).

In Akpan’s (1999) opinion, vocational technical education is a comprehensive programme of study that prepares youths and adults for paid gainful employments or entrepreneurial living. Vocational technical education is important to both individuals and to the economic growth of the nation; it develops the capacity to address job preparation problems of youths and adults in a way that serves to strengthen other institutions in the community. An effective vocational technical education programme prepares skilled workers needed by industries and other aspects of technical occupations. Evidence of quality in vocational education system easily attracts developmental interests in entrepreneurship, industrial and private sponsorship of such quality programme.

**Concept of Vocational Technical Education**

Vocational technical education, being a utilitarian type of and workshop-based education, is designed to develop skills, abilities, understating, attitude, appreciation and impart knowledge on a useful and productive basis. The Federal Republic of Nigeria (2004) conceived vocational technical education as a comprehensive term referring to those aspects of educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitude, understanding and knowledge relating to occupations in various sectors of the economic and social life. Mohamed and Yaduma (2009), considered Vocational Technical Education as the principal engine of human development. They further opined that it can be used as an arm of economic policy to support business growth competitiveness. To Walters (2009) Vocational and Technical Education is an instrument of public policy to address equity concerns about disadvantages in the labour market. Research evidence indicates that vocational technical education has a central role of preparing individual to function as a “marketable product” either for self-dependency or for the world of work (Evans, 1971; Thompson, 1973 and Rao, 2008).

International Labour Organization (ILO) (2001) conceived of vocational technical education as referring to all forms and aspects of education that are technical and vocational in nature or under their authority, by public authorities, the private sector or through other forms of organized education, formal or non-formal aiming to ensure that all members of the community have access to the path-ways of life-long learning. Okoro (1993), maintained that vocational technical education (VTE) is any form of education having the primary purpose of preparing individuals for gainful employment in an educationally recognized occupation. FRN (2004) appears to expand Okoro’s definition of Vocational Technical, by adding that it (Vocational Education) is:

(a) An integral part of the general education.
(b) A means of preparing for occupational field and effective participation in the world of work.
(c) An instrument of life-long learning and preparation for responsible citizenship.
(d) An instrument for promoting environmentally sound sustainable development and;
(e) A means (method) of alleviating poverty.

In the light of the above definitions, it is quite in order to view vocational education as an integral part of general and workshop-based education designed to equip individuals with skills for independent/entrepreneurial living and for national development.

Relevance of VTE Goals to the Achievement of MDGs

Figure 1 illustrates the relevance of VTE goals to MDGs.

![Diagram of VTE Goals and MDGs](image)

**Figure 1:** The Relevance of VTE Goals to MDGs

Vocational technical education is a workshop-based programme in which a skilled teacher in a specific vocation uses tools and equipment as instructional resources to train students in skills that will enable them to function effectively in the society. The students’ engagement in the manipulation of tools and equipment offers them the opportunities to acquire the needed skills (cognitive, affective and psychomotor) that will make them marketable products (output) required by industries, public sectors or self independency in the world of work. The teacher using tools and equipment in teaching reduces abstraction and verbalistic responses among students. The foregoing approach is apparently useful in enhancing the attainment of the MDGs.

Goals/Objectives of Vocational Technical Education and Those of the MDGs

The Federal Republic of Nigeria (FRN, 2004) has clearly stated the goals and objectives of vocational education in Nigeria. The philosophy of vocational education in Nigeria threads through the stated goals and objectives in their expanded states. The goals and objectives of vocational education appear to subsume the MDGs but the question to raise is: What role can vocational education play in the achievement of MDGs for sustainable development of Nigeria? Borrowing a lift from the report of Usoro, Usoro, Akpan and Otu (2010) is in order. The achievement of the goals/objectives of technical and vocational education is a serious guarantee that the foundations are laid for the attainment of MDGs even though the deadline (2015) for the
attainment is unrealistic. A breakdown of the eight service areas of technical and vocational education yields well over one thousand careers. Skills training in more than 1000 careers or occupations produces more than the required manpower for the pursuit and accomplishment of the MDGs.

**What are the MDGs?**
There are Eight Millennium Development Goals formulated to:
1. **Eradicate extreme poverty and hunger**
2. **Achieve Universal Basic Education**
3. **Promote Gender Equality in Primary, Secondary and Tertiary Institutions.**
4. **Reduce child mortality by 67%**
5. **Improve maternal health by 75% reduction of the proportion of women who die during child birth**
6. **Combat AIDS, Malaria and other Diseases**
7. **Ensure environmental sustainability by reversing the loss of environmental resources so that a good proportion of people may have access to clean drinking water and basic sanitation. In addition, by 2015 a significant improvement in the lives of at least 100 million slum dwellers is apt to be attained.**
8. **Develop a Global Partnership for Development.**

Consequently goal 8 commits north and south to working together to achieve an open, rule-based trading and financial system, more generous to countries committed to poverty reduction and relief for the debt problems of developing countries. It draws attention to the problems of the least developed countries and of landlocked countries and small Island developing States which have greater difficulty competing in the global economy. A close examination of the goals/objectives of vocational education and the MDGs reveals the similarity of the two sets of goals for personal and national developments. Sequel to the foregoing observation, it is quite clear that vocational education is a sure instrument for pursuing and attaining the MDGs for sustainable development of Nigeria, but there are problems hindering the former from playing its messianic role. What are some of the problems plaguing the efforts of vocational education towards attainment of MDGs?

**Constraints of VTE Efforts to Attain MDGs**
Usoro, Usoro, Akpan and Otu (2010) and Usoro, Udoutin and Udofia (2010) have provided the following constraints against VTE as an instrument for pursuing and meeting the MDGs in 2015.

1. **The Power Challenge**: Nigeria is experiencing inadequacy in power supply which has caused a lot of factories to close down. About 6000MW is expected to be generated to feed the nation of about 140 million people for effective operation of machines and equipment in industries. Some communities cannot develop because...
of inadequate electricity to boost business operations.

The Challenge of Unemployment among Nigerian Youths: About 80% of Nigerian youths are unemployed and 10% are underemployed due to improper education (Susu, 2010). Vocational technical education has all it takes to face this challenge and equip Nigerian youths with skills in job areas for sustainability. But it needs government support.

The Challenge of Funding: Vocational technical education being a utilitarian nature of education needs funding for skilled training and job creation. UNESCO recommended about 26% of the national budget for education but Nigeria has been able to allocate just 10% (Usoro, Udoutin & Udofoia, 2010). The funds would take care of training materials, maintenance, consumables, replacement of tools and equipment, allowances etc.

The Challenge of Difficult Business Environments: The cost to establish and run industries in Nigerian environment becomes very difficult due to lack of power and high cost of running generators. The environments are not conducive due to hostage taking and armed robbery occurring nearly everyday inspite of the security agents flooding the roads. Higher institutions in Nigeria lack training tools for equipping the students with skills for employment or self-reliance. The prevailing challenges are inimical to skills development and job creation for sustainable national development. (Otu, Udo and Usoro, 2010).

Low Adult Literacy: The adult literacy rate (66.5%) in Nigeria is low compared to other advanced or industrialized countries like China (95%), Singapore (92.5%) and even South Africa (86.5%) exceeds that of Nigeria (Susu, 2010).

Government Expenditure on Education: The level of government total expenditure on education is 0.6% of GDP compared to South Korea (43%), Mexico (4.9%) United Kingdom and U.S.A. (4.8% and 5.0% respectively).

Percentage of Degrees Awarded in Science and Technology in Universities: Research evidence shows that 48.4% of degrees are awarded in sciences and technologies in South Korea while South Africa and Nigeria have 18% and 11% respectively (Susu, 2010).

Lack of Encouragement of Research in Vocational Technical Education: Susu, (2010) expressed that, it is from the Research and Development group that a modern economy derives its stock of technological and scientific innovations. Research evidence shows that the number of scientists and engineers engaged in Research and Development per million of population, Nigeria has 15 persons, Brazil-165, China-459 and India-158 persons. These factors constitute the
indicators for assessing economic development of nations.

(9) Placing Premium on Academic Qualification to the Detriment of VTE Degrees: Dike, (2007) observed that every one needs university education. But in Nigeria, vocational technical education has suffered neglect to the detriment of national development. Their degrees are regarded as inferior to regular academic degrees whereas in the industrialized nations, vocational technical degrees are highly regarded.

(10) Inappropriate Method of Students Admission into VTE Programmes Vocation technical education is yet to admit students on the basis of aptitude test into VTE institutions. The current JAMB and aptitude test measures are grossly inadequate for VTE admission system.

(11) Dearth of Qualified Teachers However, there are complaints of inadequate of vocational technical teachers that can effectively use the training resources to impart skills and knowledge to the students. This must be properly addressed.

(12) Poor Representation of Females in VTE Affairs Women have been regarded as weaker vessels who cannot withstand the stress of VTE. This notion requires new kind of mindset to promote gender equity for national development.

(13) Absence of Legislative Act in Support of Growth and Advancement of VTE This issue has posed serious limitations and hitches against VTE because of the huge amounts of money involved in running it, coupled with the government’s indifference towards the development of VTE.

(14) Unsuitable Curriculum Curriculum developers choose to adopt curriculum that is practiced in developed countries. Presently, engineering/technical curriculum is borrowed from Britain and U.S.A. where there are very substantial technical infrastructures based on more than a century of industrial development (Usoro, Usoro, Akpan and Out, 2010). Such curriculum is unsuitable here because of lack of infrastructures for students’ learning experiences.

(15) Large Class Size as well as Improper Student Teacher Ratio in Tertiary Education Inspite of the government effort to improve the standard of education in Nigeria, there is still low literacy rate compared to other developed countries. The situation becomes more pathetic everyday as pupils' enrolments are greater than the structures leaving the pupil to learn under the trees, roofless building or uncemented floors. In some cases the size of the class is so large that the teacher cannot control or speak to their hearing. Similarly tertiary institutions also experience large class sizes in general courses which sometimes make the learning environment unconducive for the
students. This invariably affects the academic performance of the students.

(16) Ignoring Women and Handicapped as Untapped Resources for National Development Inspite of the fact that women and handicapped are citizens of this country, and by virtue of their citizenship, they are supposed to be treated as first class citizens. But they have been pushed aside because of some stereotyping, assuming that they are unable to meet certain work demands of emotional toughness and stability. There is also the complaint against women for engaging in extra workload arising from domestic obligations. This limits their involvement in matters of national development. Other challenges include poor remuneration of teachers of vocational technical education, public prejudice against vocational technical education in the scheme of affairs, lack of indigenous texts, weak dependence on locally produced training materials, inadequate teaching aids and lack of integration of computer services into vocational technical education training.

As long as the foregoing challenges are not aggressively addressed, it is almost impossible to ascertain the extent of vocational technical education contributions towards the attainment of MDGs.

Conclusions
Vocational technical education has many options leading to skills development as well as entrepreneurial living or paid employment. The aim is to reduce unemployment among the youth in Nigeria and foster sustainable development. As a matter of fact there are constraints to the achievement of the Millennium Development Goals (MDGs) which can be addressed with the effort of the government to compromise with impending constraints. Also, the efforts of vocational technical education experts in their different fields of endeavour are apt to create an impact on the search for solutions to problems associated with MDGs attainment.

Recommendations
Sequel to the focus of this paper the following recommendations are to be proffered:
1. Vocational technical education should be given priority in the agenda of activities for national development.
2. Nigerian youths should be empowered by giving them the basic foundation for future prosperity. The government of Nigeria, in the course of preparing the youth for the future should encourage families to establish mini vocational technical workshops for their children. This will help to integrate technology into our society.
3. Since there is still much to achieve in the MDGs, it is rational to extend
the period beyond 2020 while the nation prudently maintains its focus and employs all available resources to reach the target as scheduled.

4. Curriculum borrowed from UK and USA should be modified to reflect the Nigerian culture and emerging societal needs.

5. Vocational technical education should be appropriately funded to meet its objectives and should be given the recognition it deserves as the pillar of the nation’s economy.

References


Walters, A. B. (2009). Address by Minister of State, Ministry of Labour and immigration of Barbados at the ceremony to award the National Vocational Qualification (NVQ) on Tuesday, February 10, 2009 at the Hilton Hotel.