INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH AND KNOWLEDGE

SSN-2213-1356 www.ijirk.com

RE-EXAMINING VOCATIONAL AND TECHNICAL EDUCATION IN NIGERIA FOR SUSTAINABLE DEVELOPMENT

UKUMA, SOLOMON

Technical Education Department College of Education, Katsina-Ala Benue state, Nigeria

JIKA, FELIX ORNGUGA

Technical Education Department College of Education, Oju Benue State, Nigeria

DEKE, NYITAR GABRIEL

Technical Education Department College of Education, Katsina-Ala Benue state, Nigeria

Abstract

This paper attempt to examine re-examining vocational and technical education for sustainable development in Nigeria. The paper discussed re-examining vocational and technical sub-sector with a view to highlighting the implications of ignoring vocational and technical education sector since independence 49 years ago. The paper also examined the important of vocational and technical education which would have transformed Nigeria like other third world countries like Singapore who got her independence in 1965 as a third world country just like Nigeria in 1960 which became a foreign nation five years earlier before Singapore. Furthermore, the paper discusses the challenges facing vocational and technical education. The paper has therefore,

www.ijirk.com 21 | P a g e

recommended/suggested among other things that, the Federal, States and Local Governments, Cooperate bodies, Philanthropist, individuals, Non-Governmental Organizations (NGOs) should jointly provide the necessary infrastructures, purchase modern equipment, hand and machine tools, improve in service training of vocational and technical education teachers and students, this would highly stimulate and strengthen the base of the Nigeria's economy hence the crude oil price has drastically crashed or fallen from the international market due to Corona Virus (Covid-19). The paper has finally drawn a conclusion to the effect that, all hands are highly and exigency requested to be on deck for the diversification of Nigeria's economy from crude oil to vocational and technical education for sustainable development of Nigeria.

Keywords: Re-assessing, Vocational and Technical Education, Economic Growth and Stability, Sustainable Industrial Development in Nigeria

Introduction

Vocational and technical education provide adequate, relevant and the desired sound technical skills and techniques to the citizens of both developed and underdeveloped countries but in Nigeria, the entire educational system appears to be in crises and in shambles. Vocational and technical education affects every individual or household either directly or indirectly, this could be the vocational and technical education teachers, students, parents, Government at all levels should know the innovations and the urgent need for Nigerian vocational and technical education system. According to the National policy on Education (FGN, 2004) section 7, subsection 40, vocational and technical education is used as 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. Vocational and technical education is further understood to be;

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

Therefore, vocational education could be defined as a job-specific education, designed to prepare individuals for entry into the job market as craftsmen and master craftsmen and for higher education in technology in tertiary institutions. These categories of skilled manpower are trained in technical colleges and vocational centers. Furthermore, technical education is a specialized education, designed to prepare the middle level manpower. This includes technicians and technologists who are also referred to as sub-professionals. Technical education students are trained in the polytechnics, colleges of education and mono technics and are awarded National Diploma, Higher National Diploma and Nigerian Certificate in Education (NCE Technical). Therefore, vocational and technical education could be defined as skills, techniques and self-reliant education that emphasizes on the advancement and wellbeing of citizens and ensures the acquisition of appropriate level of scientific and technological literacy numeracy manipulative and communication skills respectively.

Re-assessing Vocational and Technical Education in Nigeria for Economic Growth and Stability

According to John Fitzgerald Kennedy (1917-1963) 35th Us President, Democrat Politician), in Adenirange (2010) John Fitzgerald Kennedy was of the view that, our progress as a Nation can be no swifter than our progress

www.ijirk.com 22 | P a g e

in Education. However, Adenirange (2010) was of the contrary view that, it would appear our leaders have chosen to embark on destruction of the Nation with everyone has now joined in the party.

Continuous neglect or ignore of the development of vocational and technical education may be the country's greatest disadvantage, Vocational and technical education remains a subsector where the country has great competitive advantage over developed and developing nations. It is not good for Nigeria to base her sustainable developmental programmes on natural resources such as crude oil alone as it is obtainable in Nigeria today. In fact, there is a growing worry in Nigeria today that the neglect of vocational and technical education subsector if not urgently and conclusively dealt with can cost Nigeria not to fully attain the Sustainable Development Goals (MDGs) These Sustainable Development Goals were set to improve economic wellbeing, social and human development and ensure environmental sustainability and regeneration.

It is worthy to note that, re-assessing vocational and technical education programme is not negotiable given the poor and dilapidated state of vocational and technical education infrastructures in Nigeria institutions of learning, the pace of the country's development will be too slow except government spends on infrastructural development in our institutions of learning. It is also interesting to note that, without sound and reliable vocational and technical education structures on grand economic activities will continue to be hampered. Nigeria will continue to incur unnecessary cost constructing roads, importing goods such as rice, other household items such as China, doors, ceilings, torch light, China cell phone, radio, etc. The money which could have been channeled towards real investment. Furthermore, industries and companies would have employed millions of Nigerians which would have greatly reduce unemployment but as it is so, real incomes have continued to shrink and dwindling as cost of living remain high in so many parts of Nigeria today. Nigeria has not invested heavily in vocational and technical education as other countries like United States of America, Canada, Germany, France, Britain, Italy, Japan, China and other developed and developing countries do. Vocational and technical education is not taken seriously. Political considerations have limited Nigeria's ability to drive maximum value and benefits from vocational and technical education is not given the desired consideration as other developed and developing countries do.

Today, it is now clear that, the transformation agenda and Nigeria dream of achieving the Sustainable Development Goals would be a mirage if there is no aggressive drive in the establishment of vocational and technical education courses in Nigerian Universities, Polytechnics and Colleges of Education and the establishment of new manufacturing factories, companies and industries for vocational and technical education graduates to practice during and after graduation.

The need for possible transformation of Nigeria could be done if vocational and technical education is revamped. Past vocational and technical education policies and programmes have been faulted as ineffective and a waste of Government's resources towards acquisition of skills techniques and knowledge. Inadequate allocation of money to vocational and technical education subsector and implementation of vocational and technical education policies have been credited for non-revamping of vocational and technical education. Today, the Nigerian dream of achieving the Sustainable development goals and becoming one of the 20th economies may be a mirage.

It is disheartening to note that, most of the old universities and none of the nine recently or newly approved Federal and private universities recruited staff and took off without establishing no vocational and technical education courses; and this is contrary to the Federal Republic of Nigeria National policy on Education (2004). Section 1 subsection 9 (b) which states that, life-long education shall be the basis of the nation's educational policy. Section 7 subsection 50 also states that, vocational and technical education (Technology) shall continue to be taught in an integrated manner in the schools to promote in the students, the appreciation of practical application of basic ideas and section 8 subsection 82 states that, at the very early phases of the education system,

www.ijirk.com 23 | P a g e

efforts shall be made to inculcate an attitude of respect for and appreciation of the role of technology in the society. To accomplish this, students shall be made to appreciate the dignity of labour by using their hands in making, repairing and assembling things.

Challenges of Vocational and Technical Education in Nigeria

It is very wrong for vocational and technical education subsector to be allocated or share equal amount of money with other fields of study because no constant retraining and upgrading of teaching and learning facilities is needed in other field of study like vocational and technical education. It is in this regard that, it is very easy to establish and effectively teach such non-practical oriented and professional courses in Nigerian higher institutions of learning. Umoh-mac and Nkuma (2003) critically x-rayed the challenges of vocational and technical education in Nigeria at misunderstanding of the meaning of vocational and technical education. Nigerian Government policy on vocational and technical education in Nigeria has been poor organization and management of vocational and technical education, low enrolment in to vocational and technical education programmed and poor funding of vocational and technical education. Umoh-mac and Nkuma suggested that, the present developed nations of the world has similar problems at their initial stages of developing and implementing their vocational and technical education but with perseverance they surmounted those problems and today they are the giants in technological inventions. Nigeria must not compromise cost with the implementation of quality vocational and technical education programmes. Implementation of quality programmes is the only panacea for her current economic, social, political and military slavery to the economically and politically super-powers of the world.

A critical look at the challenges affecting the repositioning of vocational and technical education in Nigeria includes: inadequate funding of subsector; inadequate manpower to facilitate Government policies on vocational and technical education, improper supervision and monitoring of vocational and technical education programmes and non-implementation of the National Policies on Education. In town, cities and villages across the federation, it is a clear picture to find vocational and technical education students shearing a measuring instrument in an unequipped work shop such as vennier caliper, ammeter and other hand machine tools, sitting on class room floors and standing up during lectures and class room and workshops practical's because of insufficient desks and chairs, vocational and technical education teachers evading workshop practical and theory classes due to poor preparation of the teachers before graduation. Vocational and technical education subsector in the past and present would still elude millions of vocational and technical education students in Nigeria. How possible is Nigeria's drive towards achieving the transformation agenda for sustainable national development. It is interesting to note that, vocational and technical education is cost-intensive and it is this sellable and skill type of education that can only advance strengthen, stimulate and sustained our economy. Therefore, it is important for policy makers and implementers to note that a substantial amount of money should be allocated to vocational and technical education subsector. To achieve the transformation agenda in Nigeria, personnel has to be retrained in line with global standards, new equipment, machines, hand tools, upgrading of laboratories and consumable materials has to be purchased hence technology too is dynamic.

To realize the objective of building a better society is to revamp vocational and technical education and achieve transformation agenda of the present Government. Nigeria as a developing nation is faced with the challenges of inculcating vocational and technical education skills, techniques and knowledge for all her citizens. It is important for vocational and technical education administrators and all stake holders in vocational and technical education to go back to the drawing board to provide lasting solutions for repositioning of vocational and technical education for attainment of sustainable development goals. Ukuma (2010) argued that, the provision of appropriate technological and vocational education skills and techniques will be an important intervention to

www.ijirk.com 24 | P a g e

increasing the productivity of Nigeria's work force. Lack of quality publication or standardized machines or equipment is the problem hampering vocational and technical education skills development in Nigeria. The Nigerian Government should create an enabling environment to support the rapid development and stimulate investment through tax in captives or financial support 50 and to increase the capacity and quality of training through the view of apprentice ship acts they are our dated to meet solar challenges in defense technology at vocational education for scientific and technological development.

Relevant of Vocational and Technical Education for Sustainable Industrial Development in Nigeria

Vocational and technical education helps to satisfy the personal work needs of the individual. Adequately trained workers are more efficient and productive than poorly trained workers and consequently earn higher income. They work faster, understand their job better and make less mistakes in the work and are therefore. More likely to be promoted than in efficient workers. Okoro (1999) opined that, the relevance of vocational and technical education is not to reduce peoples need for work but rather to make work more pleasant and productive. Okala (2003) in Umoh-Mac stated that, vocational and technical education benefit both the society and the individual of supplying skilled workers to employers. Thus, it has a significant role in a nation's economic development, because workers with the right skills are required to support a developing modern economy. Similarly, Ogwu and Oranu (2006) stated that, the economic growth of Nigeria has not matched her efforts in enlarging the education system. Thus, by this enlargement, the discrepancy between the number of School products and the numbers of existing job vacancies has perpetually been cut of sort. Ukuma and IPusu (2008) rightly pointed out that, vocational and technical education is crucial in Nigeria for the achievement of all the seven points agenda, sustainable development goals because this is very essential for enabling Nigeria to achieve the level of economic growth needed to tackle poverty and make sustainable development a reality and vocational and technical education will also enable Nigerians transform their own lives and the country (Nigeria) in which we live. Ukuma and Ipusu (2008) rightly observed that, Nigeria cannot afford to toy with her future; hence all concerned must work together to salvage our crumbling ivory tower the Nigerian vocational and Technical education system. The past must teach us lessons for the present and the future, otherwise history will not forgive our past and present Nigerian leaders, vocational and technical education and the entire educational policy implementers, or all the stakeholder in education sector for failing to do the right thing when they had the opportunity to do. Rugmayo (1987) in Aminu (2010) opined that, industrial technical education aims at producing person who have the creativity to apply actual knowledge to new situations, the competence to get things done, the curiosity to discover and understand the world around them and the compassion to apply what they have learnt to human needs. Ukuma and Deke (2010) confirmed that, vocational and technical education has tremendous effects on the economic growth, revenue generation, employment and self-reliance of Nigeria. The Federal, States and Local Governments should be zealous to reposition vocational and technical education subsector because vocational and technical education it is the corners stone of economic Development. They traced further that, vocational and technical education has long been neglected but if repositioned, it would improve the dilapidated state of infrastructures in our country such infrastructures like bridges, roads and manufacturing of tools, equipment and if repositioned, Nigeria would not be over dependent on oil as the only source of revenue. Agu (2014) stated that, Federal Government of Nigeria sees vocational and technical education as a mechanism for social and economic transformation of the Nation. For these goals to be achieved, vocational and technical education must be reinvigorated and repositioned to lay the foundation for true and total National Development of the Nation. Ukuma, IPusu, Attah and Ochedikwu (2014) insisted that, if vocational and technical education is repositioned, the products of the new system if encouraged will definitely help in pushing the country into rapid scientific and technological development. Furthermore, Agbayoko-Agu and Kor (2014) stated that, Nigerian economy is under

www.ijirk.com 25 | P a g e

crisis. This has drastically reduced the standards of living of ordinary and poor peasant have hit by the skyrocketing inflation which has placed millions of Nigerians on the starvation line.

It is pertinent to note that, even though the present administration have been funding agricultural sector, the vocational and technical education subsector too should be given the desired consideration because it is the highly skilled technologist, technicians and craft men produce that can manufacture or service and repair the agricultural implements, machines, tools and vehicles. However, the above-mentioned skilled men can only be found in vocational and technical education institutions of learning such as polytechnics, colleges of education and technical colleges.

Recommendations/Suggestions

Government should provide as a matter of urgency construct workshops or laboratories and purchase modern equipment, tools, machines, and constant training of vocational and technical education teachers/lecturers should teach with diligence, students should be ready to learn and stay away from unwholesome practices so that, we can all create a brighter future for today's children and generations yet unborn.

Improved teacher's supervision, regular and prompt payment of salaries which will drastically improve and motivate service delivery and provision of instruction. All the three tiers of Government in Nigeria should forth with jointly operate a windfall account for the development of vocational and technical education without this, it is dangerous especially when we compared Nigeria with other African countries who now have enormous savings, highly organized and effectively implement their vocational and technical education policies and programmes.

Revamping vocational and technical education would highly stimulate and strengthen the base of the Nigeria's economy and raise the Gross Domestic Product (GDP) hence the crude oil price has crashed or fallen from the international market due to (Covid19) Corona virus. Therefore, all hands should be on deck on the diversification of the Nigeria's economy from crude oil to vocational and technical education for Nigeria's economic development and sustainability.

Conclusion

Worthy of note is that, the Nigeria Government should use the money obtained from the windfall savings to invest into upgrading of vocational and technical education infrastructures in Nigerian institutions of learning to drive maximum value from it. The National Master Plan for vocational and technical education which the effective date of implementation commenced year 2000 to 2010 was not diligently and adequately implemented. This, in a sense do not represented a productive use of the oil windfall. At present and in future, Nigeria could look back and celebrate utilizing the wind fall to successfully address re-examining vocational and technical education problems and challenges once and for all. Also, accusation of improper planning and effective implementation of vocational and technical education policies and programmes are still hanging on vocational and technical education and the entire educational sector.

The three tiers of Government can strike an agreement to invest in vocational and technical education rather than spend everything on project that would not revamp our economy. Apart from oil crude there is no any other basic infrastructure to keep the economy growing which is already in place. Nigeria has very poor social and economic infrastructures but if vocational and technical education is revamped, Nigeria could afford to save billions of dollars away for the future generations. Nigerians are in dire need of vocational and technical education which is one of the fundamentals to economic growth and sustainability.

www.ijirk.com 26 | Page

Another problem which is hampering the development of vocational and technical education is the complex ethno- political configuration which is a major factor in the way vocational and technical education and the economy are managed, what would work in USA would be exposed to the politics of Nigeria. Politics almost always triumphs over vocational and technical education and the economic common sense and there is always this feeling of the country being locked up in a vicious circle. Vocational and technical education should be given the opportunity to stimulate the economy not crude oil. The Government has spoken quite encouraging about diversifying the economic base. Despite our under development in Nigeria since independence, as a result of non-repositioning of vocational and technical education. It makes a whole lot of sense for the three tiers of Government in Nigeria, policy makers and implementers to pause and think of the dangers that lie ahead of this great country. Nigeria vocational and technical education should be repositioned, monitored, and properly managed to avoid a crippling fiscal crisis.

References

Adeniranye, W. (2010) Education and Nigeria's Development. The Guardian Newspaper, Tuesday, December, 7th 2010.

Aminu, T.U., (2010) Vocational Technical Education in Nigeria and its Contributions towards National Development. Journal of Vocational Educators (JOVTED) Vol. 11NO.2

Agbyoko-Agu, G., And Kor, J.O., (2014) *The Deepening Economic Crisis and the Challenges of Transformation in Nigeria*. Makurdi; Vast Publishers Limited

Agu, P.A (2014) Repositioning Technical and Vocational Education for National Development: The Nasarawa State Experience. Benue State University *Journal of Education (BSUJE)* Vol.13, 2014. P.32-38

Adenuga Jnr (2009). Daily Sun Tuesday may 5th 2009 p. 39.

Dike V.E (2010) *Technical and Vocational Education: Key to Nigeria's Development.* http://www.nigeria villagesquare.com/articles/victor-dike/techincal.

Elekwa, I., Bamiro, O.A., Oluyide, A.O., Ladoye, D.L., Nurudeen, A., Akuru, I.O., And Olopade, O.L. (1994) *Introductory Technology for schools and Colleges book1*, Evans Brothers (Nigeria Publishers) Limited.

F G N (2004) National Policy on Education; Lagos Nigerian Educational Research and Development Council Publishing

Federal Government of Nigerian (FGN 2000) The National Master Plan for Technical and Vocational Education (TVE) Development in Nigerian in the 21st century with the blue print for the decade 2001-2010. An outcome of the National Seminar on Technical and Vocational Education in Nigeria in the 21st century (Vision and Action) held 31st October to 2nd November, 2000 at Abuja, Nigeria.

Laguda (1979). Daily times p. 32 July 19, 1979

Nyiahule P.I., And Andrew, S.I. (2007) Vocational Perspective of University Education in Nigeria in the 21st Century. *Journal of Qualitative Education*, Volume.3 No.3 May, 2007. P.89-93

www.ijirk.com 27 | P a g e

Ngbeha E.M. (1999) The role of Technical education relation to the current Economic depression in Nigeria. Paper presented at the seminar organized by the school of vocational and technical education, college of education, Ankpa

Okala, O.F. (2003) the Role of Vocational Technical Education in National Development in Umoh-Mac (2003). An Introduction to Vocational and Technical Education in Nigeria. Calabar; Frandoh Publishers (Nig) Ltd.

Okoro, O.M. (1999) *Principles and methods in Vocational and Technical Education*. Nsukka University Trust Publishers.

Olaitan, S.O., Nwachukwu, C.E., Igbo, C.A., Onyemachi, G.A., Ekong, A.O, (1999) *Curriculum Development and Management in Vocational Technical Education*, Onitsha Cape publishers Ogwu, B.A and Oramu, R.N (2006) *Methodology informal and Non-formal Technical/Vocational Education*, Nsukka University of Nigeria Press Ltd

Olaitan S. O. (1997) Vocational and Technical Education in Nigeria: Issues and Analysis: Onitsha Noble Press

Okorie, J. U. (2001) Vocational industrial education: Bauchi League of research Publishing

Okoro, O.M., (2005) Programme Evaluation in Education. Anambra, Pacific Publishers

Tikly, L. (2001) *Globalisation and Education in the Post-Colonial World towards Conceptual framework*: British graduates School of Education.

Ukuma S. And Deke, N.G. (2010) Repositioning Nigerian Vocational and Technical Education for Sustainable National Development. *Journal of Educational Innovators*, Vol. 3 No. 2 July, 2010. ISSN: 118-5283. P.114-120

Umoh-Mac And Nkuma, O.U.,(2003)The Basic Justifications for Vocational and Technical Education in Nigeria. In Umoh-Mac (2003). An Introduction to Vocational and Technical Education in Nigeria. Calabar: Franedoh Publishers Limited.

Ukuma S., Ipusu, K.A., Attah M.E. and Ochedikwu J.O. (2014) *Technology and Vocational Education for achieving Millennium Development Goals (MDGs) in Nigeria* Makurdi; Vast Publishers Limited

Ukuma, S. And Ipusu, K.A (2008) Vocational and Technical Education: A key Driver to achieving Federal Government's sevenpoint Agenda in line with Millennium Development Goals (MDGs) for National Development. Nigeria *Journal of Science and Educational Research* Vol.4. No.1. p.233-241. ISSN: 0794-0882

Ukuma, S., Tyowuah, M.N., And Deke, G.N. (2017). Transforming Nigeria Through Technical and Vocational Education Research for National Growth and Higher Productivity. *International Journal of Education and Research* vol.5. No.5 May, 2017 P.181-188

Ukuma, S. (2010) Quality Science and Technical Education for Sustainable Development in Nigeria. *Journal of Quality Education* Vol. 1 No.1. May, 2010 P.104-111

World Bank (2007) Nigeria Not yet Good for Business. Daily Independent Newspaper of the year Vol.3 No. 1320. Thursday September September 27, 2007 page 1.www. Independent ngonline.com.

www.ijirk.com 28 | P a g e