



MANAGING CHALLENGES MILITATING AGAINST EFFECTIVE PROMOTION OF TECHNICAL AND VOCATIONAL EDUCATION THROUGH EMERGING TECHNOLOGIES AND INNOVATIONS



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Abstract

Technology and science play a key role in sustaining societies and many nations have adopted various strategies of promoting sustainable development. Global concerns in promoting sustainable development has insinuated the need to take advantage of resources available within our environments for the betterment of the society. Challenged by high cost of living, youth unemployment and poverty in Nigeria, this Paper titled "Management of Challenges Militating Against Effective Promotion of Technical and Vocational Education Through Emerging Technologies And Innovations". Focuses on the management of challenges to adopt in providing an enabling environment for Technical and Vocational Education as instrument for exploiting the nation's endowed rich cultural and economic environments. The paper presupposes that the constraints confronting the adoption and implementation of technical and vocational education in Nigerian schools' curriculum are likely to undermine the government's intentions to empower the citizenry and the nation. To provide citizenry with necessary tools for survival and contribution to the development of the nation, the paper interrogates the relevance of technical and vocational education by identifying some constraints and challenges such as poor opportunities for technical and vocational skills, counselling of students and support for personal development, inadequate facilities and poor management of funds and resources, as factors militating against successful implementation of TVE. The paper further recommends the need to invest more on technical, vocational and entrepreneurship education, provide enabling environments for technological development, skill acquisition and promotion of indigenous technology, exploit indigenous technology for sustainability and job creation, providing support and improving counselling services, creating more entrepreneurship centres and incubators to encourage youths to embrace their passions and brush their skills towards improving their personal growth and attaining the nation's desire for technological growth.

Keywords: *Technical and vocational education, managing innovations, challenges, emerging technologies*

Introduction

Innovative changes in the era of globalization and economic competitiveness has interrogated Nigeria's ability to provide broader opportunities for sustainable development. Sahid Umar 2006:115) reports that Nigeria despite her abundant human and natural resources is still underdeveloped due to the low technological activity in the country. In a knowledge-driven world, education, technology and economic growth are key to global competitiveness and as a growing nation, Nigeria has no option than to be part of the global competition. To favourably compete and remain relevant in the global village, the nation must provide the citizenry, the right knowledge and skills necessary to make them functional and contribute positively to its economic development. Owing to the changing pattern of life and the expectations for better living, it is possible for Nigeria as a nation to create a sustainable environment for its citizens, taking advantage of the



population and endowed natural resources.

Although the challenges of building a nation is immense, the declining economic situation of Nigeria has made it necessary for the nation to promote the acquisition of technical and vocational skills in order to impact meaningfully on the environment. In the sub-standards products flooding the Nigerian markets and the poor services delivered to consumers are effects of the nation's failure to develop effective technological education. Management of technical education in Nigeria requires the adoption of strategic ways and means of transforming the material world in order to satisfy the Nigerian basic needs and critical issues such as; hunger, disease, malnutrition, housing shortages, transportation and other forms of managing Nigeria's natural resources for the sustainability of the Nigerian people, Umar (2006:115). The scenario in Nigeria as observed indicate that the technological development has continue to elude the nation, with common cases of experienced shortage of essential products or fake or failed services. Recognizing the need to move forward, Technical and Vocational Education is recognised as instrument for transformation.

The central role of technology in sustainable development have impressed on the significance of providing technical and vocational education (TVE) at all levels of the educational system. At the primary school level, the national policy on education emphasises on the need to lay a strong basis for scientific and reflective thinking while at the secondary school level, the curriculum is designed to equip students to live effectively and to be able to cope with modern science and technology. The calculated value of TVE is to impact positively on individuals by providing them with functional skills that is relevant to their individual growth and the nation. Due to the large population of Nigeria that currently stands at over 207,656,430 million people (Worldometer, 2020), promotion of functional skills among citizenry becomes an asset in moving the nation forward. One of the strategies adopted by the nation is to pursue a transformative agenda that would empower the youth through the provision of appropriate technical and vocational skills that can assist them attain economic independence. Based on the national policy on education, the 6-3-3-4 system of education is expected to provide the youth with critical knowledge and skills that can help them exploit their rich cultural environments to greater heights. While the nation's population offers great advantage in mobilizing economic benefits, preparing individuals to explore and generate more resources that will help to sustain the economy. It is the development of individuals through technical and vocational skills that would permit national growth and economic sustainability.

In recognition of the need to build the nation for a more sustainable development, it is obvious that the nation needs to tackle the challenges hampering national programs and implementation of the policy on education as should be. The National Educational Policy (NPE) recognises TVE as one of the most viable strategy of building individuals and growing the nation towards sustainable development. To effectively drive the educational system effectively and attain sustainability, institutions across levels and relevant agencies all have vital roles to play. On the other end, government is expected to satisfactorily play its role as agent of transformation would mean students of both secondary school, tertiary institutions and graduates deserve to be empowered with the right kind of technical and vocational skills necessary to bring about personal and economic growth for the nation, Nigeria.

The Concept of Technical and Vocational Education

The philosophy behind the National Policy on Education expresses that education that aims at grooming the individual to acquire functional skills necessary in generating employment, job creation and poverty reduction, NPE (2004:15). At the secondary school level, the introduction of technical and vocational education (TVE) is strategically introduced into the school's curriculum to promote policies and programs that are aimed at improving the lives of individuals. As useful as this subject matter is, the Nigerian educational system has since 1983 built in structures and relevant academic programs aimed at preparing students of primary and secondary levels with technical and vocational opportunities. The transformational agenda adopted by Government on TVE has failed to meet its objectives due to some constraints faced in its implementation. This therefore brings about the necessity to identify the challenges especially at the secondary school level in order to proffer solutions to stimulating students' personal growth and economic development of the nation. Okorieocha and Duru (2014) signifies that the potentials involved in promoting TVE are numerous but what is of most essential is managing challenges obstructing the realization of these potentials of boosting the economic development and individual productivity.

The principles of the 6-3-3-4 policy focuses on relevance and functionality of the education across levels. The policy promotes the acquisition of independent and self-reliance skills whereby students are exposed to technical and vocational education at the primary, junior secondary school and to some extent,



tertiary level. To broadly transmit the skills, students whose first three years of junior secondary education may be a terminal point are exposed to curriculum content that allow them to acquire relevant vocational skills. More still, opportunity for a broader exposure to technical education is reflected at the senior secondary schools and tertiary with the existence of polytechnics and colleges of education and universities of technology, a lot more opportunities are being created.

At the end of senior secondary school level, options are given to either proceed to technical education courses for those who are more inclined to studying technology or proceed with other courses for further higher education. The objective is to diversify options under a structure designed to cover core subjects and pre-vocational and non-vocational subjects, Emenalo (2006).

The technical and pre-vocational subjects reflected at the Junior Secondary School level include: wood work, metal work, electronics, mechanics, local crafts, home economics, business studies, introductory technology, technical drawing, bookkeeping, building construction etc. student who may leave school at junior secondary school stage may take to apprenticeship system or have the option to drop out of school. Even if dropped at this level, the vocational training provided to students would help to sustain them since people are talented differently. Invariably, technical and vocational education (TVE) provides skills, knowledge and competences that are relevant for job creation and for self-reliance. Obasi, (2000) concludes that Government's deliberate plan to inject vocational and technical education as part of the secondary school's curriculum could make self-employment after schooling more feasible. Nuru cited in Okafor (2011), indicated that the kind of changes that is needed to grow the nation's economy lies in its investment in economic business which would end up in generating high income for the graduates while their products help in contributing meaningfully to the overall development of the nation.

Okolocha (2012) defines technical and vocational education as an educational training that encompasses knowledge, skills and competences. The structural activities that constitute technical and vocational education include abilities, capabilities and all other structural experiences acquired through formal education. The TVE may sometimes be acquired either on-the-job or as part of deliberate training. What is of essence here is the acquisition of skills that capable of enhancing the recipients' opportunity to generate or securing jobs in various sectors of the economy. The potentials for empowering individuals through TVE is for them to be self-dependent and to equally grow the economy by creating jobs for the sustainability of the individuals and the nation. To properly implement and attain the desired goals of technical and vocational education requires investments in both human and material resources, followed by effective funding, quality teaching and effective monitoring to concretize the teaching and learning experiences. This also brings to the fore, the need for availability of relevant equipment, workshops for practical purposes, constant provision of electricity and technical experts to guarantee attainment of TVE goals.

Statement of the Problem

In Nigeria, public outcry on issues related social and economic development has unfolded that in spite of efforts to inculcate functional skills in order to promote national development, factors such as low investment in technology and vocational education, inadequate training of technological personnel, adoption of poor concept of transfer of technology, neglect of adaptive research etc militating against the development of scientific and technology have undermined the attainment of the national goals (Ijaiye, 2014). The impact of these factors have contributed to slowing down the nation's vision bringing about high graduate unemployment and increase in importation of goods and services. In the past decades, the nation has experienced hundreds of young graduates roaming the streets with no reliable jobs despite their educational qualifications. The idleness caused by unemployment among the school leavers jobless have equally led to increase in the rate of crimes, drugs addiction and all sorts of social delinquency. (Emenalo and Okonkwo 2015). This situation if not re-examined can deny the nation potentials to economically grow and compete favourably with other nations globally.

As a growing nation, we require a more responsive technical and vocational education that can lead the nation towards growth and development. In the context of sustainable development, it is necessary to interrogate the vibrancy of technical and vocation education in Nigeria by examining the constraints and challenges of providing appropriate skills that can impact on the nation quest for sustainability. This paper focuses on constraints and challenges of promoting functional TVE with the intention of proffering strategies for improving the nation's quest for attaining economic independence and sustainability.



Purpose of This Study

The general purpose of this study is to ascertain the constraints and challenges militating against effective promotion of Technical and Vocational Education in attainment of sustainable Development in Nigeria. The paper dwells on seeking for better solutions for engaging youth towards exploring viable opportunities for protecting the environments through employment. It further seeks to identify constraints that will help to preserve the cultural heritage and values by increasing the chances of empowering the younger generation through the provision of appropriate technical and vocational skills. The paper focuses on the content, process and provision of effective management and resources needed for TVE in Nigeria.

Mitigation and Managing Strategies for TVE and to forestall Environmental Degradation for Job Creation

Ijioma, Ihediohanma, Opara, Unamma (2016) opine that evidence available demonstrate that when the volume of heat trapping gases advances, emitted gas into the atmosphere has sufficient potentials to elicit climate change for decades to come; creating the necessity to combine both mitigation and adaptative strategies to combat the climate changes. Mitigation means reducing green house (GHG) emissions to prevent dangerous climate change while adaptation means coping with those impacts that cannot be avoided particularly in countries like Nigeria that are vulnerable to the impacts of climate change (Ofoh, 2009).

Forest and climate are closely related both positively and negatively. Forests are the main carbon reservoirs (carbon conservation) and they are the most efficient ecosystems to capture CO₂ from the atmosphere (carbon sequestration) as already stated, carbondioxide (CO₂) emissions have been dominated by the energy sector (through gas-flaring, electricity generation, transport, etc) the energy sector has the most expensive options for CO₂ reduction which involves the use of fuel efficient vehicles/generators and reduction of gas flaring which is very expensive. Man by his action and inaction has been responsible for excessive CO₂ emission. Obasanjo (2008) buttressed this fact and stated that human being are the main cause of green house gas production as well as the climate change that results from this. Just as humans have caused it, they have to provide solutions and sort out this mess they have made. In addition to this mess is the high illiteracy rate, particularly among the rural population, hence the prevalence of ignorance, fear, superstition and undernourishment. There is lack of national commitment, patriotism and indiscipline, with people deep in greedy materialism. In this situation, everyone is preoccupied with what he can tap from the environment regardless of how the tapping takes place. The government and agencies like the federal environmental protection agency (FEPA) and others have the major task to play in getting the present future citizens to become a lot more aware of the need to protect and preserve the environment for continuous sustenance of any meaningful development.

The Role of Technical and Vocational Education in Sustainable Development in Nigeria

Recently President Buhari (2019) enjoined FUTO at its convocation and by extension other Universities of Technology, as well as conventional universities nationwide to embrace and follow the entrepreneurship/technical education policy of the Federal Government. The era of handing certificates to our graduates without self-sustaining skills is no longer sustainable because the growth and establishment of new industries to absorb them is rather too slow. There is a need to re-double efforts in turning out graduates with self-sustaining, globally competitive skills and talents for the realization of national goals of building a free, democratic, just and egalitarian society, a united, strong and self-reliant nation, a great and dynamic economy, a land full of bright opportunities for all citizens. He also challenged our universities to key into modern trends in computing and Information Technology, cybersecurity, artificial intelligent, solar and alternative energies, and modern biomedical technology and so on as that is where the future is heading.

Nebo (2019) undoubtedly, technical, science and technology have made our life easier and faster, we should always hope, make an effort and ensure that the inventions and discoveries in these fields are always used for the benefit of entire human race. Henceforth, with the help of Science and Technology, let's make Nigeria a better place, for the benefit of all Nigerians. According to him if Nigeria is not developed, it is because Technical, Science and Technology have not taken their due places in our national lives. In fact, the difference between one country and another is the level they have attained in Technical, Science and Technology. These are important because they influence most aspects of everyday life, including food, energy, medicine, transportation, leisure activities and many more.



The application of Technical, Science and Technology is very important in the industrialization of a country, particularly in the mode of production. Industrialization is the operational process by which an economy is transformed from primarily agricultural to one based on the manufacturing of goods. Individual manual labour is often replaced by mechanized mass production and craftsmen are replaced by assembly lines, this leads to higher productivity, which is the key to growth. To do this our Technical, Science and Technological inventions must be real and practical. Our Government should invest in quality education for youth, continuous skills training for workers and managers, and should ensure that knowledge is shared as widely as possible across society.

Today in Nigeria the development of Technical, Science and Technology have fundamentally altered the way people live, connect, communicate and transact business for effective economic development. To promote Technology, Tertiary Institutions of Learning in Technical and Science subjects need to be properly engaged and challenged to focus on specific areas of invention particularly for our local use like turning our primary raw materials to finished goods.

Technical, Science and Technology has brought succor to Nigerians both at urban and rural setting in the area of transportation, medicine using herbs to making drugs, computers have helped in communication and house-hold machineries. It has also aided so many sectors of the economy such as the advertising sector, sports and fitness (weight loss), transportation etc.

Finally, adopting appropriate technical, scientific and appropriate technologies can directly lead to higher productivity, which is the key to growth and sustainability. In societies that have large stock and flows of knowledge, vicious circles that encourage widespread creativity and technological innovation emerge naturally and allow sustained growth over long periods. In societies with limited stocks of knowledge, bright and creative people feel stifled and emigrate as soon as they can, thereby creating a vicious circle that traps those who remain in a more impoverished space. As has been the case with brain drain syndrome in Nigeria, such societies remain in poverty and dependency. Incidentally, Nigeria's greatest exports are brains, not oil (Nebo, 2019).

Constraints Militating Against Attainment of Sustainable Development through Technical and Vocational Education in Nigeria

It is glaring that the aim of government is to train children that will contribute to the society through the skills acquired from school. This is to be realized through the teaching of prevocational subjects. Despite the relevance of prevocational subjects in the life of individual and economy of the country, Adetayo, cited in Adeola (2011) lamented that presently, the performance of students in prevocational subjects is low, and there is also low enrolment in prevocational subjects.

Nigeria as stated by Dike (2005) looks down on graduates of vocational and technical education. Perhaps, this is one of the main reasons for the low interest in technical schools. Okoro cited in Maaji (2010) regrettably noted that many students leave school ill-prepared for the challenges of work and adulthood. They are unready and unmotivated to carry on learning throughout their life. Therefore, development of better, stimulating teaching methods should be a continuous process.

Adeola, (2011) further asserts that the problems such as poor school infrastructure, lack of qualified teachers, poorly equipped workshops and laboratories affect the teaching of prevocational subjects. Technical and vocational teacher now turn the programmes into a literary kind of education where only theoretical aspects of the lessons are taught. There is need for qualified technical teachers and those that are on the job were not perfectly taught practically in their school days hence the problem becomes a vicious cycle (Oji, 2012). Further, he asserts that tools and machines in school workshop are in short supply, obsolete and non-functional and cannot meet the facility requirements of the schools and colleges. Facility like classroom, workshops, laboratories, studios, equipment and materials are grossly inadequate in our schools and colleges. The difficulty in the procurement of facilities does not give room for the practical acquisition of skills by learners. According to Toby cited in Onele (2015), students cannot learn skills of their chosen occupation at maximum efficiency with poor and obsolete equipment, neither did the students develop positive attitudes towards the use of tools and equipment of their trade if the laboratories/workshops are not properly managed and facilities adequately maintained.

To reduce the burden of unemployment and poverty among school leavers in this country, there is need for Nigerian government to take it upon themselves to fund critical sector in other to enable students develop their skills in the study of technical and vocational education to be self-reliant. Dike (2005) is of the view that



about 1% of resource (if not less) for secondary education is channelled towards technical and vocational skills in the country. These resources invariably are not sufficient to neither maintain nor manage the sector.

It has also been noted that the attitude of technical and vocational education teachers and principals to innovation is poor. Maaji (2011) states that if vocationally technical education is well articulated in the primary and post-primary schools, it would also enable the young people to learn how to think and do better. In the school, the principal is at the helm of school administration. He or she plans, organizes, coordinates and controls the available human and material resources to the realization of educational objectives and goals. In the same vein, ensures a high standard and all round education of a child in such a way as to achieve and produce quality students who will be functional members of the society. The extent, to which the principal is able to do this, will engender students to learn and develop skills that will assist them to be self-reliant and as well functional members of the society. In view of the fact that principals have the task responsibilities of human and material resources in the school, it behoves on them to ensure the provision, utilization, maintenance of resources as well as the motivation needed to attract students to technical and vocational education subjects.

In addition, Eze (2017), came up with some of the factors affecting effective implementation of policies on technical and vocational education to include:

- Weak policy support for technical and vocational education
- General public attitude towards technical and vocational education
- Inadequate human and material resources
- Poor student enrolment
- Non-involvement of other agencies outside government
- Inadequate curriculum for technical and vocational education
- Inadequate teaching equipment or instructional materials
- Absence of alternative power supply source

Since the public power supply is not always available, without light the programme is ineffective in terms of practicals.

- Inadequate professionals, policy continuity, while Giants in technical and vocational education have failed to hand over the profession to professionals like Lawyers, Doctors and Engineers.
- Government policies and priorities which are often short term and limited only to meeting of the basic needs of presentday provision of shelter food, portable water, health care and education without significant long term development plans for sustainability of such policies.

In addition to these problems, Toby cited in Onele (2015), stated that students cannot learn skills of their chosen occupation at maximum efficiency with poor and obsolete equipment, neither will the students develop positive attitudes towards the use of tools and equipment of their trade if the laboratories/workshops are not properly managed and facilities inadequately maintained. This confirms the views of Dike (2005) that 1% of secondary school funds is channelled to Technical and vocational education. How then would a student develop interest and study TV subjects when the needed resources for practical works are not in existence and teachers inadequate.

This scenario explains why Okoro cited in Ma'aji (2010) maintained that many students leave school ill-prepared for the challenges of work and adulthood. This invariably explains the fact that workshops/laboratory for these vocational subject are not functional in school and this makes the students half-baked in the subject, without acquisition of the needed skills for job creation. This situation makes teachers to teach TV subjects like story telling. Oji (2012) further asserts that Vocational/Technical teachers now turn the programme into a literary kind of education where only theoretical aspects of vocational education are taught to the detriment of the practical aspects of the lessons. This does not give room for the acquisition of practical skills by the learner for creation of job and wealth in future to reduce poverty.

In the effort to provide the needed TVE resources, principals make routine spot checks of the available resources and make contact with the ministry of education and philanthropist but do not reach out to companies. However, principals limited effort to ensure the provision of needed workshop equipment, teachers etc is understandable being guided by the bureaucratic nature of the school system.

In ensuring the utilization of resources, for students' acquisition of skills for job creation to reduce poverty, principals merely ensure the installation and maintenance of the equipment and teachers attendance to classes



but do not insist on technical teachers teaching TV subjects, do not facilitate students' practical work, and do not ensure teachers adoption of proper teaching methods. This situation cannot help students' acquisition of skills for job creation. It is evident that unqualified teachers, non-functional workshops and equipment must have impeded principals' proper and effective utilization of resources for skills acquisition because one cannot utilize what one does not have.

There is no proper motivation of students for TVE, which is a big missing gap. Students ought to be motivated to arouse their interest in TVE as decried by Dike (2005) that Nigerians look down on graduates of TVE, which has caused low interest in the subjects.

The students' transition to TV institutions is not encouraged by the principals. It is expected that principals should list out and forward names of TV inclined students to the Ministry of Education for proper placement, repositioning of TVE through adequate provision of funds, judicious utilization of available resources. Establishment of more TV institutions in the state will improve the status of TVE. This definitely will make the students have interest and acquire the TV skills needed in the changing economy. This subscribes to the view of Obasi (2000) that planned vocationalization of secondary school curriculum will make self-employment after school visible more and feasible. Ma'aji (2011) explained that if TVE is well-articulated and positioned in primary and secondary schools, young students will be enabled to learn how to think and do better in life.

The Way Forward

Therefore, government should make sure the following are provided for the success of TVE programmes.

- Adequate facilities and instructional materials should be provided in schools to encourage students to participate actively in Technical and Vocational Education.
- Teachers are essential players in promoting quality education, whether in schools or in more flexible community-based programmes. The government should therefore make concerted efforts to see that qualified vocational teachers are employed, trained and retrained to meet the needs of the changing world technologically.
- Parents and guardians should continue to lay emphasis on the need for their wards to enroll in vocational programme for self-reliance and sustenance after graduation since it is difficult to secure good jobs after graduation. This will also boost vocational, economic and attainment of sustainable development.
- There must be irrevocable commitment by the government to invest in technical and vocational education being highly capital intensive and so adopt policy of increasing enrolment into Technical and Vocational schools in order to reduce unemployment.
- With the economy being more globalized than ever, it is important to have a background and a skill set that allows graduates to become immersed in the global economy right from graduation. Efforts should therefore, be made by those concerned to make sure that the student or graduates have skills in innovation, technological education and entrepreneurship to be ready to fit into the global market which today's economy depends on.
- Government should provide entrepreneurship centres in schools at all levels to help students in the acquisition of relevant skills that will help them to be self-reliant.

Conclusion

To achieve desirable results, the great divide between policy formulation and implementation which has characterised our past must bow to a resolve to bequeath a legacy of environmental protection and conservation to our younger generation. Apart from this, there cannot be any other serious strategy to achieving sustainable development and our laudable goals of vision 2025 will remain a vision, not a reality. When greater environmental protection and conservation is achieved then an enabling environment would have been created for technical and vocational education to take place and help in the attainment of sustainable development in our rural and urban areas in Nigeria. Therefore with proper management of technical and vocational subjects in Nigerian secondary schools which becomes a pathway through which students become self-reliant and turn to be employers of labour but unfortunately it lacks adequate implementation by the policy makers, school administrators and government. The facilities and equipment needed for vocational subjects are inadequate. Now it has become imperative that there is need for school managers to ensure that the needed resources for TVE are provided through making contact with state ministry



of education, as well as ensuring that students are motivated to study TVE related subjects, make efforts to ensure students transition to TV institutions and also work towards the functionality of TVE in secondary schools which will be possible through provision of enough funds, adequate utilization of the funds, updating the TV workshop and equipment etc.

Recommendations

The following recommendations, if applied would provide a serious resolve in our attitude towards the environment and promotion of Technical and Vocational Education in attainment of sustainable development in Nigeria.

- i Provision and maintenance of a friendly environment through cultural orientation and concerted efforts by Government and stakeholders.
- ii Establishing more general skill acquisition strategies and centres and encouraging relevant productive skills
- iii Promotion of indigenous technology and aggressive utilization of productive skills
- iv Promoting tree planting and gardening as part of the vocational opportunities to be promoted and sustained.
- v Developing clear policies on environmental protection and conservation and designing frameworks for implementation and sustainability.
- vi Promoting the adoption of environmental conservation, degradation and preservation content in schools and transmitting environmental responsibility to the young ones.
- vii Enact Laws and punishment for those who circumvent laws against industrial waste dump and traffic.
- viii Enact laws and enhance the existing ones to minimize the use of fossil fuel in order to reduce the level of CO₂ in the atmosphere to reduce the effects of global warming.
- ix Employ/engage appropriate subject teachers in teaching technical and vocational subjects in secondary schools based on qualification.
- x Allocate adequate funds at both State and Federal level to empower ministries of education channel enough funds and resources for proper implementation of TVE programs.
- xi Promote and encourage privatization of partnership for the development of TVE in Nigeria.
- xii Review and re-define the goals of TVE and policies surrounding its development to facilitate articulate implementation of the transition period issue.
- xiii Government should give attention to the obsolete equipment for TVE and work to replace and attract students to it and enhance teaching learning process for skill acquisition.

References

- Adeola, L.K. (2011). An Assessment of the Teaching Effectiveness of Prevocational Subject Teachers in Ogun State, Nigeria. *International Journal of Vocational and Technical Education* 3(1), 5-8. Retrieved from <http://www.academicjournals.org/IJVTE>.
- Buhari, M. (2019). Convocation address delivered by President Muhammadu Buhari on the occasion of the 31st convocation ceremony of FUTO on Saturday 6th April, 2019.
- Dike, V. (2005). Youth Unemployment in Nigeria. The Relevance of Vocational and Technical Education: Retrieved from www.nigeriavillagesquare.com
- Emenalo, F.C. (2006). Enhancing students interest in technical vocational subjects: A case for universal basic education programme. In P.E. Eya, I.G., Nwangwu and A.E. Onuora (Eds), UBE and nine years basic education. Human Resources Management and Utilization. Enugu: Nateze prints.
- Emenalo, F.C. and Okonkwo, B.N. (2015). Management of Technical and Vocational Education in Secondary Schools in Imo State for job creation: Volume 11 No. 5 November, 2015. *Journal of Gender and Development Issues* Pp. 266.
- Eze, P.N. (2017). Rule of Law and Sustainable Development in Nigeria. A key address presented at the 2017 law week of the Nigerian Bar Association Owerri Branch.
- Federal Ministry of Education (2013), National Policy on Education and Year of Strategic Plan for the Development of Education, NERDC, Lagos.
- Ijaiya, Y.S. (2014). Vocational training and secondary school education in Nigeria. In O.S Olu and L. Bayo (Eds), issues in contemporary Africa social and political thoughts. Vol.2



- Ijioma, B. C, Ihediohanma, N.C, Opara, P.I, Unamma, A. O. (2016). Environmental Education, Protection and Management for sustainable development in the twenty-first century Nigeria. *International Journal of Gender and Development Issues*, Volume 1 No. 7 November, 2016 pp68
- Ma'aji, C.Z. (2011). Structuring Effective Vocational Technical Education at the primary and post primary level of education. Retrieved from onwww.structuringvteinbasicedu.blogs.pot.com.
- Nebo, C.O. (2019) Achieving Economic Recovery and Growth Plan through Science and Technology being FUTO 31st Convocation Lecture Paper.
- Obasanjo, O. A. (2008). Welcome address at the high level Technical workshop on afforestation and climate change in Africa 15-17 Dec., 2008 Abeokuta Nigeria.
- Obasi, E. (2000). *The economics of education in Nigeria: Mbaise; New Vision.*
- Ofoh, M.C. (2019). Food security and mitigation of climate change through ecosystem based agriculture presented at 13th inaugural lecture of The Federal University Of Technology Owerri, Nigeria, Wednesday, 27th May 2009.
- Oji, K.O. (2012). Vocational Education Management, Self-reliant Study and Teaching, skill learning methods and competency based education management. Retrieved from [www.need for vocational education](http://www.needforvocationaleducation.com).
- Okafor, E.C. (2011). The Role of Vocational and Technical Education in Manpower Development and Job Creation of Research and Development, 2 (1).
- Okolocha, C.C. (2012). Vocational Technical Education in Nigeria: Challenges and the way forward. *Business Management Dynamics* 2, (6). 01 – 08. Retrieved from www.bmdynamics.com
- Okorieocha, C.N. and Duru, F.C. (2014). Technical/Vocational Education and Training for Industrial Development and Economic Growth: *International Journal of Innovation Education Research*. 2(1): 37 – 44.
- Onele, N.O. (2015). Planning Techniques needed to improve the teaching and learning of basic technology in the Junior Secondary Schools in Nigeria.
- Umar, S (2006) *Issues and Realities of Nigerian Education*, Lagos, Ejalonimu pub. Nigerian Population (2020) Worldometer, @<https://www.worldometers.info/world-population/nigeria-population/>