An Overview Of Vocational And Technical Education In Nigeria Under Secondary School Education System

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Abstracts: This paper examined the concept of Vocational and Technical Education (VTE) in Nigeria under secondary school education system. The meanings of Vocational Education, Technical Education and Vocational and Technical Education were discussed. Objectives of Vocational and Technical Education in secondary school education as contained in the National Policy on Education 2004 edition were highlighted. The scope/structure of Vocational and Technical Education in secondary school education was outlined. A concise historical development of Vocational and Technical Education at secondary school level was traced. Out of the numerous challenges of Vocational and Technical Education in general and Accounting Education in particular, some were identified and solutions were provided for the identified challenges. Recommendations were advanced to improve on the programme of Vocational and Technical Education in Nigeria such as inclusion of practical oriented curriculum, government should increase funding of education at all levels.

1 Introduction
Vocational and Technical Education (VTE) has a vital role to play in technological advancement of any country. It is a known fact that the training, acquisition and utilization of relevant skills by the people is indispensable for economic growth and national development [1]. Also, the concept of Vocational and Technical Education has changed in scope and structure since its inception. As a component of the overall educational system, it has since increased in both prominence and complexity. As this growth occurred, the number of population which are served by Vocational and Technical Education has increased. As VTE explained and established linkages with career education for the increasing population, the need to innovate a new way of publicising and the Vocational and Technical Education (VTE) has also increased [2]. The implementation and coordination of VTE program in Nigeria is usually the responsibility of the government. However, the efficiency of the program depends solely on the quality and commitment of the technical vocational teachers in charge of various sections.

2 Meaning of Vocational and Technical Education
Ekpenyong [3], said that the confusion surrounding the meaning of the terms ‘vocational’ and ‘Technical’ education can be easily traceable to the different interpretations attached to them. It is common to find the terms been used compositely when they should be used in a restricted sense and vis-à-vis. Most a times, where the terms are used conjointly, some individuals (scholars inclusive) view ‘vocational’ to mean business subjects or studies, and ‘technical’ to mean technical subjects or studies. In view of the above assumptions, VTE will be defined as viewed by various authors. UNESCO in [3] defines Vocational Education as ‘the education designed to prepare skilled personnel at lower levels of qualification for one or a group of occupations, trades or jobs. Okoh [4], also views Vocational Education as part of the total experience of the individual whereby he/she learns successfully how to carry on a gainful occupation which involves the development of skills, knowledge and attitudes required for success in the occupation. Nigerian Educational Research and Development Council [5], defined Vocational Education as those aspects of education which involves general education; the study of technologies and related science; and the acquisition of practical knowledge, understanding, attitudes and skills relating to occupations in various sections of economic and social life. Therefore, Vocational Education is a comprehensive term i.e. it prepares individuals for occupational fields and for effective participation in the world of work. Furthermore, Technical Education is that aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge [4]. UNESCO in [3], defined Technical Education as “education designed at upper secondary and lower tertiary levels to prepare middle level personnel (technicians, middle management, etc) and at university level, to prepare engineers and technologists for higher management positions. The concept of Vocational and Technical Education is therefore a single and inseparable concept used to describe the education for the acquisition of socially acceptable skills [4]. UNESCO in [3], defined Vocational and Technical Education (VTE) as “a comprehensive term referring to the educational process when it involves, in addition to general education, the study of technologies and related science and the acquisition of practical skill and knowledge relating to occupations in various sectors of economic and social life. Vocational Technical Education according to Malgwi in [1], is a systematic study of techniques for making and doing things.

3 Objectives of VTE in Secondary School Level in Nigeria
At the secondary level, [6] advocated for the three years junior and three year senior secondary school system (3-3 system). The junior secondary is described as pre-vocational and academic in nature, so that those who may not continue to senior secondary will have the opportunities provided in form of vocational training while the senior secondary is made to include technical, commercial, agricultural and other vocational courses in order to make its learners immediately employable. For details, the aim and objectives of VTE in Nigeria as enshrined in [6], 2004 are as follows:

i. To provide trained manpower in applied science, technology, commerce particularly at sub-professional grades.
ii. To provide technical skills necessary for agricultural, industrial, commercial and economic development.
iii. To give an introduction to professional studies in engineering and other technologies.
iv. To give training and improving the necessary skills leading to production of craftsmen, technical and other skilled personnel who will be enterprising and self-reliant.
v. To enable young men and women to have intelligent understanding of the increasing complexity of technology.

5 Scope/Structure of VTE in Secondary School System in Nigeria

According to [3], the National Policy’s aims and objectives on career oriented as enshrined in the NPE document are designed to achieve both technological and economic advancement of Nigeria. Thus, at the junior level (JSS) seven programme areas of pre-vocational education have been identified. Each of these programme areas is treated in an integrated basis at the JSS level while opportunity is given to students at the senior secondary level (SSS) to concentrate on three components of each programme in the first year of the SSS. This is intended to allow the students to have a more in-depth study and preparation for not only the SSS final examination, but also for entry into the world of work or further studies. The following are the structures of pre-vocational and vocational subjects in Nigerian secondary schools as contained in the 2004 edition of the NPE. They are all elective subjects except Introductory Technology (Basic Technology) which has been listed as a core subject at the JSS level.

5.1 Pre-Vocational Electives (Junior Secondary School (JSS) Level)
1. Agricultural Science
2. Business Studies
3. Home Economics
4. Local Crafts
5. Computer Education
6. Fine Arts (Culture and Creative Arts)
7. Music
8. Introductory Technology

5.2 Vocational Education Electives (Senior Secondary School (SSS) Level)
1. Agricultural Science
2. Applied Electricity
3. Book-keeping and Accounting
4. Building Construction
5. Auto Mechanics
6. Commerce
7. Computer Education
8. Electronics
9. Clothing and Textiles
10. Food and Nutrition
11. Home Management
12. Metal Work
13. Technical Drawing
14. Wood Work
15. Shorthand
16. Typewriting
17. Fine Arts

6 Historical Development of Vocational and Technical Education in Secondary School System in Nigeria

The aim of all education in the Nigerian traditional society was character training and job orientation. In order to ensure job orientation, vocational training was run on the apprenticeship system by the member of traditional society [4]. He went to say that, usually, the children are not as in most cases, trained directly by their parents, rather they are sent to relatives or master craftsmen. The idea behind this is to ensure discipline and concentration in the trade to be learnt. The apprenticeship system was therefore, a part of a wider education process by which the members of the indigenous societies of Nigeria, in this case passed on or transmit their cultural heritage from one generation to another. The vocations open to young people at that time includes farming, animal rearing and care, fishing, weaving, carving, smithing, boat making, priests, witch-doctors, shrine keepers [4]. Vocational Education, in one form or the other was in vogue even before the introduction of western education into Nigeria. Despite the vocational training offered to young people through apprenticeship system, mission schools, which flourished during the missionary era in Nigeria introduced farming, bricklaying and carpentry as part of the curriculum. But for the fact that these skills were not seriously regarded by both the learners and parents, the programme was not sustained for too long, except for the Blaise Memorial Industrial School in Abeokuta, founded by some Nigerians and West Indians; and then the Hope Waddle Training Institute in Calabar established by the CMS in 1895. Furthermore, the improvements made in the area of vocational education seem to be parallel with the economic development of Nigeria. The Nasarawa school which was opened in 1909 had a technical wing attached to it. In the technical section, courses were offered in; leather work, carpentry, smithing and weaving. Hope Waddle Training Institute in Calabar which also had a technical wing offered courses in carpentry and tailoring among other crafts. The policy statement on Education of 1925 helped to uplift the image of vocational education in Nigeria. Government was invited to take a more active part in the provision of technical education which required more costly equipment as well as properly qualified staff/manpower. As a result, the Nigerian Government opened some trade training centres and technical institutions. Thereafter, a lot of schools were established by the missionary and Nigerians. A study contained in the UNESCO (2000) outlined the state of education in Nigeria, the nine year Basic Education programme introduced in 2002, which could not stand the test of time. Comprising six years of primary and three years of Junior Secondary (JSS) education was to re-echo the policy as contained in the 1981 NPE policy document. The renewed emphasis, and in particular, the objective of the 9 year Basic Education was among other things to: Ensure a smooth transition from primary to JSS level and impart the rudiments of creative skills at the JSS level where Introduction Technology and vocational subjects would be emphasized.
7. Challenges of Vocational and Technical Education in Nigeria

Since accounting education is a component of Vocational and Technical Education, by implication the challenges of accounting education will form part of the general challenges of VTE. Therefore, this paper shall discuss few among numerous challenges of VTE in particular. Idialu [7], outlined some challenges in his work. Thus;

a. Poor Organization and Slow Pace of Implementation: Those who formulated the National Policy on Education had a clear vision of an intended mission that is the vocationalising the school system particularly at the secondary school level. Unfortunately, the programme is bedevilled by organizational and implementation problems. According to [8], most secondary school principals are products of general education, which brings about problems in the implementation of vocational education policies. These general education principals will definitely give priority to their own type of education before considering vocational education and this action to a great extent will reflect in the quality of the Vocational and Technical Education system.

b. Shortage of Qualified Manpower: It is a very serious problem in VTE in general and in accounting education in particular. The quest for technical personnel in the present stage of development is very important as one strive towards being a self-reliant nation, meaning that, no meaningful development can take place without a conscious effort to develop manpower. Most of the graduates from our numerous vocational and technical institutions do not like to teach, they prefer to work in the industry, and those who are ready to teach are most of the time not employed and so they become unemployed. The effect of this is that most vocational subjects are not offered in schools, while some are offered and taught by unqualified teachers. For instance teaching of Bookkeeping and Accounting by Business Administration graduates, this can greatly affect the quality of teaching and examination of the students.

c. Lack of Equipment and Infrastructural Facilities for Teaching and Learning: The shortage of equipment and facilities has been a serious problem in Vocational and Technical Education. Olatan [9], opined that the condition under which vocational education is imparted is poor. Most secondary schools and tertiary institutions lack relevant equipment for training, lack workshop and its facilities have ill-equipped laboratories and outdated laboratories.

d. Low Level of Funding: The low level of funding Vocational and Technical Education has been a problem in the implementation of quality teaching and learning of Vocational and Technical Education in Nigerian schools and Colleges. The strict implementation of this type of education will remain elusive without competent vocational and technical teachers, many of the institutions of higher learning producing vocational teachers due to low funding, lack equipment, accommodation, workshops, training materials and money for maintenance of equipment have been producing limited number of graduates.

e. Poor Remuneration of Vocational Technical Teachers: This is a serious problem affecting most states in Nigeria. Teachers’ salaries, allowances, entitlements are always paid in arrears at times they are denied of these entitlements. This problem is responsible for the poor attitude to work of some teachers, they go about doing their private businesses instead of concentrating on how to improve teaching and learning in the school. This problem also renders vocational teachers ineffective and thereby affect quality of teaching.

8 Possible Techniques of Solving the Identified Challenges

a. Concerning implementation of VTE curriculum, government should ensure that there is an orientation in form of sensitization to the non-vocational principals so as to change their attitude towards vocational subjects.

b. Teacher Education Programme: for quality preparation in training of students in vocational and technical subjects, there is the need to have high quality teachers to impart high quality knowledge, skills in competencies that are required in Vocational and Technical Education. Teacher education should aim at producing high quality teachers who are well equipped with variety and effective ways of teaching in and out of school setting. Also, there should be opportunity to train the untrained and retrain the trained. A system of feedback should be devised to monitor deficiencies present in vocational teachers and effort made to remedy, observed lapses through seminars, workshops, in-service training etc.

c. Provision of Facilities: To teach Vocational and Technical Education, there must be adequate provision of facilities in terms of space, equipments, to ensure quality of education in VTE. The training environment should be like the work environment. Teaching with real materials and real situation can help to encourage the students to learn and enhance quality.

d. Adequate Funding of Vocational and Technical Education: VTE needs to be funded adequately to enable the programme achieve its aim of empowering the learners after graduation. The funding needs of VTE are quite enormous and they need to be addressed promptly, these needs include the purchase of equipment and materials for teaching, maintenance of equipment, funding of students work experience scheme, payment of allowances to Vocational and Technical teachers. Also, the government should provide funds for vocational education to have a meaning in the country. Effort should be made by the schools to generate funds through Parents Teacher Association (PTA), host community contribution, etc.

e. Teachers’ Motivation: Teachers in Vocational and Technical Education should be motivated to enjoy the profession instead of enduring it in their salaries, allowances and their entitlements like promotions, in-service training should be given to them as at when due. The vocational teacher should be encouraged in order to
ensure this optimum performance of the job which will ensure quality teaching in schools.

9 Conclusion
In Nigeria, Vocational and Technical Education is however offered in both Junior and Senior Secondary levels and on successful completion of the senior secondary students can proceed to specialized areas in tertiary institutions. At the junior secondary level subjects offered are grouped under pre-vocational subjects. While, at the senior secondary school level subjects offered are expected to conform with the general objectives of Vocational and Technical Education in the country as contained in the National Policy on Education.

10 Recommendations
The role of VTE in secondary school level cannot be underestimated as it will go a long way to produce quality entrepreneurs in Nigeria, thereby reducing the poverty level. Therefore, the following are recommended.

1. The Federal Ministry of Education should ensure that the curriculum to be used for VTE in secondary school level should be practical-oriented.
2. Government should endeavour to develop a culture of entrepreneurial thinking by integrating entrepreneurship into nation’s education system.
3. Government at all level should increase funding of education in general and VTE in particular.
4. Government should from time-to-time organize workshops, seminars, conferences, etc in form of training and re-training of VTE resource persons (teachers).

References