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Review

The Nigerian Institutional Vocational Technical Education (VTE) Programs: The Way Forward

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This paper discussed the institutional Vocational Technical Education (VTE) programs in Nigeria using existing literature. It focused on the VTE programs in educational institutions and highlighted the early development of education in Nigeria and VTE programs in post primary and post secondary education. Concepts of VTE programs in Nigeria were also discussed in relation to other VTE programs in developed countries. Finally, the paper identified and discussed good practices in VTE programs in some countries like China, United Kingdom, France, the United States, and Germany and used these practices in making suggestions for future directions for the Nigerian VTE program.

Keywords: Vocational Technical Education; Vocational Education and Training; Career and Technical Education; Apprenticeship; Prevocational; and Vocationalization

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INTRODUCTION

The greatness of any nation is dependent upon her economic and industrial development. On the other hand, economic and industrial development propelling factors that shape the kind of education a nation desires for her citizens in the 21st Century. In order to remain relevant and stand the challenges of globalization, trade, communications, rapid technological development, and the free market economy, every nation should look inward towards educating and training of men and women who will not only be enterprising but also have the necessary skills for self reliance and competition in skill and technology economy. Vocational Technical Education (VTE), Career and Technical Education (CTE), and Vocational Education and Training (VET) are terms used by different nations and used interchangeably in this

paper to describe the type of educational program that provides individuals with skills, knowledge and, attitudes necessary for effective employment and self-reliance in an occupation (FRN, 2004).

Decades ago, Caillds (1994) reported that many nations have either embraced VET or are in the process of reviewing, adapting, or redesigning their VET programs. At present, the situation remains the same everywhere because knowledge is evolving and technology is developing very rapidly. There is abundant literature discussing the development of VTE, CTE, or VET programs (Steedman, 1990; Clarke, 2003; Malloch and Redman, 2005; Hippach-Schneider, Krause, and Woll, 2007). Most of this literature does not pay attention to the plight of VTE programs in a developing country like

Nigeria. Particularly, there is a dearth of literature examining the development Nigeria VTE program in relation to other developed countries. It is necessary, therefore, to fill this gap in the literature.

Thus, this paper discussed institutional VTE programs in the Nigerian education system. It is divided into two parts: the first part discussed VTE programs in post primary and secondary education. The second part identified common characteristics of VTE and good VTE practices in some developed countries. Finally, the paper made suggestions for future directions using the identified best practices in VTE programs in some developed countries.

An Overview of the Early Development of Education in Nigeria

As a colony of the Great Britain, the Nigerian school system was rooted on British imperialist twist – schools were largely to produce clerks for government or mercantile work, and catechists and teachers for missions (Zachernuk, 1998). As a result, British education system has a great influence on the Nigerian education system. Prior to colonization, Nigeria had a traditional form of education with the goals of (1) developing the latent physical skills; (2) inculcating respect for elders and those in authorities, (3) developing intellectual skills; (4) developing characters; (5) acquiring specific vocational training and developing healthy attitudes toward honest labor; and (6) understanding, appreciating, and promoting the cultural heritage of the community (Obiakor, 1998). Following the colonization, modern education system was introduced in Nigeria. Missionaries established the early schools in the middle of the eighteenth century (Fafunwa, 1974; Adesina, 1988). During that era the missionaries regulated school curriculum, whose primary foci were mainly translation of Bible into local languages, character training, and use of “vernacular” and English (Fafunwa, 1974). The aim of primary education during the colonial era was mainly to master the three Rs – reading, writing, and arithmetic;

It was not until the early nineteenth century that the colonial government started having some interest in Nigerian education. The establishment of education departments, commission reports, and education ordinances (Fafunwa, 1974; Adesina, 1988) were remarkable steps toward development of modern education in Nigeria. However, during this period, there was no national education philosophy and coordinated uniform education policy and program. Education was administered by different agencies like the federal and regional governments (Western, Eastern, Northern, and Lagos territory), missionaries, communities and individuals (Uwakwe, Falaye, Emunemu, and Adelore, 2008; Ifedili and Ojogwu, 2007). All these bodies were

not only operating independently, but also with different and varying philosophies, policies, and programs. For example, in 1955 and 1957, the Western and Eastern Regions/Lagos Territory introduced free primary education respectively. However, one common feature in the Nigeria education system at that time was the 6-5-2-3 – six-year of primary education, five-year of secondary education, two-years higher school certificate education, and three-year university education (Emeji, 2008; Uwakwe et al, 2008) system of education inherited from Great Britain.

After Nigerian independence in 1960 and a civil war in 1970, it became obvious that the existing education system was not sustainable. There were conflicts of interests, lack of unified goals of education, and increasing demand for the education system to reflect the real needs of the country; thus the government became more involved in education (Fafunwa, 1974; Adesina, 1998). There were remarkable landmarks in educational developments in 1970s. Among them were the introduction of Universal Primary Education (UPE) scheme in 1976; the World Bank’s acceptance of primary education as an area eligible for its support; increased number of schools and student enrollments; and government takeover of schools from missionaries and communities in 1973 (Babalola, 2002; Ojogwu, 2008; Uwakwe et al, 2008; Csapo, 1983).

The most important landmark in education in the 1970s was the government’s effort to unify the fragmented education policies and efforts of the regional governments at that time (Uwakwe et al, 2008). Consequently, the lack of unifying philosophical foundation of education gave birth to the development of national philosophy of education and the subsequent National Policy on Education in 1977. In 1981, the Nigeria policy on education was revised and 6-3-3-4 system of education (6 years of primary education, 3 years of junior and 3 years of senior education, and 4 years of university education, which is a replica of the United States system) was introduced (Adesina, 1998).

Institutional VTE Programs in Nigerian Education System

Educational awareness in the 1960s gave rise to subsequent meetings of the regional school commissions to discuss the issue of schools. Consequently, formal VTE programs were established (Osuala, 1987) and were structured towards British system. An effective landmark in the VTE system was made in 1977 following the establishment of National Policy on Education which was subsequently revised in 1981, 1998, and 2004 respectively (Federal Republic of Nigeria - FRN, 2004). In comparison with the previous policies, the 1998 revised policy gave more attention to vocational education and specified admission ration of 60 to 40

percent in favor of science and technology as against literary studies (FRN, 1998) in tertiary institutions. Thus, VTE is studied in both post primary and tertiary institutions.

VTE in Post Primary Education

The new national policy on education policy provides two tier secondary education lasting for a period of six years - three years of junior and senior secondary education respectively (Badmus, 2007). The secondary education, in addition to providing a foundation for tertiary education, was designed to equip young men and women with vocational/technical skills (Babolola, 2002) needed for entry into employment and for further education in technical field. Specifically, the policy emphasized vocational/technical education with the objectives that include, among others, giving training and imparting necessary skills leading to the production of craftsmen, technicians, and other skilled personnel who will be enterprising and self-reliant (FRN, 1998; FRN, 2004).

The early VTE programs were only offered at the post primary level and for a duration of three years (Osuala, 1987). However, at junior secondary school level, pre-vocational subjects such as Introductory Technology, Home Economics, and so on are taught in preparation for the vocational and technical courses at the senior level. Presently, the VTE programs, as offered at post primary education level, are taught in technical colleges at craft and advance craft level in various trades (FRN, 1998). The craft level lasts for three years while the advance craft level lasts for one year after successful completion of craft level. Entrants into the program are candidates who have successfully completed junior secondary school and wish to pursue their career in VET programs.

VTE in Post Secondary Institutions

Students who successfully completed their post primary vocational schools and wish to further their education in their chosen vocation or related vocation in tertiary institutions have options in the career and type of institutions. In Nigeria vocational education is offered in Polytechnics, Colleges of Education (Technical), and Universities. The duration of study varies per type of degree or certificate. The program as offered in the polytechnics, college of education (technical) and university is discussed below.

VTE Program in Polytechnics

The Polytechnics, on the other hand, is structured towards the production of middle and high-level skill technicians. The polytechnic programs are structured in two phases within two consecutive years. The first two years lead to the awarding of Ordinary National Diploma

(OND) certificate after completion of a compulsory one year supervised industrial work experience. The OND program could be terminal or preparatory for further study. Upon completion of the OND program, an individual is equipped with middle level skills that will enable him/her compete for jobs, or go back to school for further study. The second phase of the two-year study in polytechnics leads to the award of Higher National Diploma (HND) certificate. Usually, the entrants into this program are holders of OND, and the program is designed to equip students with high-level technical skills.

VTE Program in Technical Colleges of Education

The other VTE program is available at the technical colleges of education; this program prepares vocational education teachers who will, after successful graduation, teach vocational subjects in junior secondary schools. It is a three-year program that leads to the award of the National Certificate of Education (Technical)-NCE(T). Students in this program contend their time with learning vocational knowledge/skills and teaching pedagogy. These results to limited practical experience; hence, Federal Government of Nigeria introduced in 1973 Students' Industrial Work Experience Scheme (SIWES) to bridge the gap between theory and practice in institutions' curricula (Ogwo, 2000). The scheme is under the auspices of the Industrial Training Fund (ITF) – national training authority financed by the training tax (Middleton et al, 1993).

VTE Program at University

In addition to science and technology studies, some universities offer vocational and technical teacher education programs. The duration of the programs depends on entry qualifications. For holders of ordinary level certificates, National Diplomas (OND/HND) or other advance certificates, and National Certificate in Education, it is four, three, and two years respectively for degree programs and more for postgraduate degrees. The vocational and technical teacher education programs leads to the production of vocational and technical education teachers in varying vocations and capacities. Upon graduation, students are equipped with sufficient knowledge and skill necessary to excel as an educator or practitioner in their chosen area.

By and large, entrance into Nigeria VTE programs in higher institutions (universities, polytechnics, and technical colleges of education) is highly competitive and regulated by an examination body called Joint Admission and Matriculation Board – JAMB, (Ofoegbu and Ojogwu, 2006). Very recently, there has been a concern and doubt on correlation between candidates' JAMB examination performances and students' actual abilities and performances in the universities in their chosen

areas of study; as a result, some institutions have started further scrutiny of candidates posted by JAMB by conducting further examinations (Ofoegbu and Ojogwu, 2006). Irrespective of proactive planning and good intentions of policy maker toward any education program, there is always need for improvement. Consequently, this paper discussed suggestions for future directions and conclusion in the next section.

Suggestions for Future Directions and Conclusion

All the policies, modifications, and intentions of Nigerian VTE programs notwithstanding, it is obvious that, for better VTE programs that will meet the challenges of the 21st century, the present Nigeria VTE programs are not sustainable. More still needs to be done to improve the quality and quantity of Nigerian VTE programs. Examining the quality and quantity, administration or funding is not within the scope of this discussion, but a few things need be pointed out. In both developed and developing countries, VTE shares few common characteristics and is perceived with little contempt. For instance, in China, regular schools are considered superior to work-study, vocational or workers' training schools (Hanyoe and Shapae, 1981); in UK, VET is perceived to be unattractive owing to employers' dissatisfaction with academic standards associated with VET and the inherent difficulties in progression onto higher education courses (Winch and Clark, 2003); and in France, VET is less prestigious and attractive than traditional technical education -lysees d'enseignement general et technologique, or LEGT (Clark, 2003) as students who failed basic subjects (French and Mathematics) in later are directed toward VET (Caillods, 1994). Similarly, in Nigeria, there is a conception that VET is an education designed for somebody else's children and meant for the children of the poor and low academic achievers (Osuala, 1995). This perception is still held by Nigeria public today.

There is no doubt that any effective VET blueprint, be it as it may, will be marred by negative or poor perception of the program by the public. Literal approach still dominates the Nigeria education system; hence, there is a lack of social regard among the populace and poor remuneration of holders of VET qualifications (Nwanorue, 2000). For a good VET program to excel in Nigeria there is the need to reorient Nigerians on the importance and prospects of VET in economic development. Although, the concepts of VET could be relative across countries and cultures; thus creating a varying approaches and perceptions relative to industrial and socio-political history of each country and influenced by the prevailing socioeconomic context (Caillods, 1994), Nigeria should look up to some of the developed countries with outstanding history in VET. For an instance, Germany with the "Dual System" has excelled in VET more than

any country in the world. In Germany, VET is considered a collective good, which everyone contributes beyond his/her own self- interest (Rieble-Aubourg, 1996); as a result, it is regarded in high esteem, and VET degrees are recognized nationwide and offer opportunities for further study.

There are also some elements of the model in France VET that are worthy of consideration. The Nigerian VET system, probably by design, is leaning towards the French model. In Nigeria, just as in France, VET is almost entirely the responsibility of the government and more institutionalized (Caillods, 1994). Because education is in the concurrent list of the Nigeria Constitution, both Federal and State Government have legislative power in the administration of VET programs. Notably, in Nigeria, the Federal Government is solely responsible for VET with States playing very minimal roles. The Local Government, which is the third tier of the government, has a very minimal /no role or participation. The France's Compagnons de Devoir (CDD) program that is training applicants to have technical skills and other skills as citizens of a community and seeking to develop a whole person (Malloch and Redman, 2005) is an objective comparable with the objective of Nigerian VET programs. These similarities notwithstanding, Nigeria needs to set a policy that will make VET more attractive and remunerate holders of VET qualifications higher than non holders of VET qualifications as is obtainable in France (Steedman, 1990).

Vocational education is generally cost intensive - the vocationalization variants are costly per student class-period because of the expense on facilities, equipment, and consumables (World Bank, 2002). Hence, many models in developed countries are structured in such a way that the costs are shared among the stakeholders. At present, the Nigerian government is almost entirely responsible for the cost of the system, whereas in developed countries it is the contrary. For an instance, in 2007, the cost of running a public community technical college (equivalent to Nigerian polytechnics) in the United States was shared among states, school, local authority, federal, and others at 38, 20, 19, 7, and 16 percent respectively (Center for Innovative Thought, 2008). Similarly, in Germany, the responsibilities are shared among the federal, federal state (land), region, and company (Federal Institute for Vocational Training – BIBB, 2003). Specifically, in Germany, element of school-based vocational training is financed by the Land and local authority with Land bearing the cost of internal school affairs – supervision of schools, curricula, teachers' training and pay; the local authorities bear the cost of financing external school affairs – construction, maintenance and renovation of school buildings, ongoing management, and procurement of teaching and learning materials (Hippach-Schneider, Krause, and Woll, 2007).

Although there is training tax – ITF that absorbs the

cost of students' industrial work experience or internship (Middleton, 1993), this industrial financial responsibility is not enough as very few industries pay the tax. In addition, industrial work experience is only but a meager part of the VTE training program. Thus, for training individuals for 21st Century technology, the current financing pattern of Nigerian VTE programs is unsustainable. There is, therefore, the need for establishing statutory financial responsibilities to the various tiers of the governments and other stakeholders toward making commensurate financial contributions for the running of the VTE institutional programs. This will, no doubt, accelerate VTE as well as industrial development in Nigeria.

Furthermore, Nigeria should also tap from the United Kingdom's (UK) VET model where there is a provision for legal and functional apprenticeship scheme. This scheme involves active participation of employers - employers were relied on providing education and vocational training (Steedman, 1990). The UK apprenticeship system passed through some reforms from Youth Training (YT), which was work-based scheme aimed at providing training at semi-skills (Ryan and Unwin, 2001) to formation of Modern Apprenticeship (MA) program with two levels of apprenticeship – Foundation Modern Apprenticeship and Advance Modern Apprenticeship programs, which provides training at craft and technician skills respectively (Winch and Clark, 2003). Nigeria should create an apprenticeship system that should not only provide training for those not in vocational schools, but also for those who are in vocational schools. This program will supplement the student industrial work experience.

Finally, the enrollment into the Nigeria VTE schools is too competitive; the existing system should be decentralized. Qualification requirements should be streamlined to closely reflect and relate to the various vocations. Performance in the competitive entrance examination may not be a perfect predictor of students' abilities. Just as in the United States, recruitment of candidates into the vocational schools should be vested on individual institutions as this will open more opportunities for candidates and will lead to increase enrollment and subsequent production of more skilled individuals in the society. However, caution should be taken in order to have balance student-instructor and student-facility ratios as over-crowded institutions or programs will end up producing personnel with insufficient skills for practice, which will be detrimental not only to the technological development but also to the system.

REFERENCES

- Adesina S (1988). *The Development of Modern Education in Nigeria*. Ibadan: Heinemann Educational Books (Nigeria) Ltd.
- Babalola JB (2002). A reflection on the world bank education projects in Nigeria between 1965 and 2001. *McGill J. Educ.* 37(2): 177-192.
- Caillods F (1994). Converging trends amidst diversity in vocational training systems. *Int. Labor Rev.* 133(2): 241+. Retrieved May 5, 2008, from Questia database: <http://www.questia.com/PM.qst?a=oandd=5001663592>
- Clark LL (2003). Schools and work: technical and vocational education in France since the Third Republic. *J. Soc. Hist.* 36(4): 1099 - 1103.
- Csapo M (1983). Universal primary education in Nigeria: Its problems and implications. *Afr. Stud. Rev.* 26(1): 91-106.
- Emeji MJ (2008). The relevance of art education and the education of the Nigerian child: Implications for the universal basic education policy. *Int. J. Art and Design Educ.* 27 (3): 320- 331.
- Fafunwa AB (1974). *History of Education in Nigeria*. London: Allen and Unwin.
- Federal Institute for Vocational Training - BIBB (2003). Vocational education and training – An overview. Bonn.
- Federal Republic of Nigeria (1998). *National policy on education (revised)*. Abuja: Ministry of Education.
- Federal Republic of Nigeria (2004). *National Policy on Education*. Lagos: NERDC Press.
- Hanyoe R (1981). *Contemporary Chinese Education*. Armonk, NY: M. E. Sharpe.
- Hippach-Schneider U, Krause M, Woll C (2007). Vocational education and training in Germany: Short description. European center for development of vocational training. Thessaloniki, Germany.
- Ifedili CJA, Ojogwu CN (2007). An appraisal of globalization and Nigerian education policies. *Educ.* 128 (20): 10-19.
- Malloch H, Redman T (2005). A French model of craft training: Its strategic relevance and recruitment issues for British workers. *Int. J. Hum. Res. Manage.* 16(7): 1303-1323.
- Middleton J, Ziderman A, Adams VA (1993). Skill for productivity: Vocational education training. World Bank. New York, Oxford University Press.
- Nwanorue CC (2000). Improving vocational education in Nigeria: Challenges in new millennium. *J. Voc. Adu. Educ. (JOVAE)*. 2(2): 107-112
- Obiakor FE (1998). Special education reform in Nigeria: Prospect and challenges. *Eur. J. Spe. Needs Educ.* 13 (1): 57-71.
- Ofoegbu FI, Ojogwu C (2006). Matriculation related wastages in Nigerian universities. *Educ.* 127(2): 263+. Retrieved October 20th, 2008 from Questia database: <http://www.questia.com>.
- Ogwo BA (2000). Industry-based supervisions' training techniques in students' industrial work experience scheme (SIWES) in nine states of Nigeria. *Nig. Voc. Ass. J. (NVA)* IX: 38-43
- Ojogwu C (2008). Ethical crisis in the Nigerian education system: a challenge to educational administrators and parents. *College Student J.* 42(2): 593-602.
- Osuala EC (1987). *A handbook of vocational technical education for Nigeria*. Oruowulu-Obosi: Pacific Publishers.
- Osuala EC (1995). *Foundation of education*. Nsukka: Falladu publishing company.
- Rieble-Aubourg S (1996). Institutional arrangements of Germany's vocational education System; What Are the Policy Implications for the U.S.? *Int. J. Comparative Sociol.* 37(1-2): 174+. Retrieved March 18, 2008, from Questia database: <http://www.questia.com/PM.qst?a=oandd=5000393726>
- Ryan P, Unwin L (2001). Apprenticeship in the British training market. *Nat. Instit. Econ. Rev.* p. 99.
- Steedman H (1990). Improvement in workforce qualification: Britain and France 1979-88. *National Institute Economic Review*, 133, 50+. Retrieved April 5, 2008, from Questia database: <http://www.questia.com/PM.qst?a=oandd=5000120885>.
- Uwakwe CBU, Falaye AO, Emunemu BO, Adelore O (2008). Impact of decentralization and privatization on the quality of education in Sub-Saharan Africa: The Nigeria experience. *Eur. J. Soc. Sci.* 7 (1): 160-170.
- Winch C, Clark L (2003). 'Front-loaded' vocational education versus lifelong learning. A critique of current government policy. *Oxford Rev. Educ.* 29(2): 239-252.
- Zachernuk PS (1998). African history and imperial culture in colonial Nigerian schools. *Afr.* 68(4): 484.