

REAPPRAISING VOCATIONAL TECHNICAL EDUCATION FOR FUNCTIONALITY AND SELF RELIANCE: ISSUES AND CHALLENGES.

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Abstract

The relevance of Vocational Technical Education as a requirement for technological advancement of any nation cannot be over emphasized. The challenges of vocational technological education in the era of globalization are almost known to every member of our contemporary society. Vocational technical education therefore, remains the most important avenue for measuring a country's socio-economic, national growth and productivity. This paper, examines Nigeria's movement towards functional and self-reliance vocational technical education in the 21st Century, the concept, scope and goals of vocational technical education. Major problems militating against the realization and attainment of VTE were examined and some recommendations made as remedy and improvement on the present situation. The paper concluded by supporting the reappraising of VTE for functionality and self-reliance by providing relevant programmes and appropriate skills for today' and tomorrow's world of work.

Introduction

The relevance of a truly functional and qualitative vocational and technical education programme to this country cannot be over emphasized. Every citizen of this country owes it a responsibility to contribute his or her own quota and in accordance with his/her capability to the overall growth and development of this great country.

In Nigeria, the inability of formal education to provide quality and efficient education and the deep dissatisfaction fostered among students, parents, teachers, educators and political leaders were instrumental to the origin and development of educational reforms.

(Fafunwa 1982). These reforms are made to improve the well-being of the Nigerian people by strengthening a broad range of social economic and institutional adjustment programmes. Many Vocational and Technical Policy measures were introduced in the past with the overall objectives of reducing poverty and unemployment, as well as attaining overall economic growth and development, it is equally hoped that these reforms will help to thrust the country into the forefront of modern technology.

Despite the foregoing, the task facing Nigeria today is even heavier than ever before. The challenges for instance, of extreme poverty, social injustice and high level of unemployment, etc, are still in many ways disturbing and requiring urgent solutions much more than ever before. It is also obvious that many efforts made in this country to activate and propel the economy through these same policy reforms and adjustment programmes have met with little success as human conditions still remain precarious. The only option left for this country therefore, is the re-introduction of a truly functional and qualitative vocational and technical education programme. This programme should aim at development through alleviating poverty and unemployment, re-orienting student's attitudes towards rural society, halting urban migration, youth empowerment and the transmission of skills and values that are useful in employment.

Concept, Scope Goals of Vocational and Technical Education

Vocational and Technical Education is that form of education which is obtainable in technical colleges. This is equivalent to senior secondary education but designed to prepare individuals to acquire practical skills, basic and scientific knowledge and attitude required as craftsmen and technicians at sub-professional level (National Policy on Education (NPE 2004). Vocational and Technical Education according to Sanusi is a form of Education that prepares mankind in terms of acquisition of practical skills ahead of a chosen carrier or profession. Vocational and Technical Education is also seen as an occupational orientation type of education that is expected to produce personnel for such area as Agriculture, business, health, home economics, industry, transportation, communication and housing among others.

Although these two terms vocational education and technical education are often used as one giant field of knowledge, little distinction exists between them. Igew, as cited by Aina (2002:2), remark that it is an embodiment of vocational knowledge and skills needed for entry level employment and advancement in a broad range of business careers.

Vocational education prepares students mainly for occupations requiring manipulative skills or non-technical occupations in such areas as Agriculture, Business, Home Economics, painting, decorating etc. The course is designed to develop skills, abilities, understanding, attitudes, work-habits and appreciation encompassing knowledge and information needed by workers to enter and make progress in employment.

Technical education on the other hand is designed to prepare the learner to enter an occupation requiring technical information and an understanding of the laws of science and technology as applied to modern design and production. In a nutshell, technical education emphasizes the engineering aspect of vocational

education, such as electrical/electronics, carpentry and joinery, block and concreting, plumbing, air condition and refrigeration etc. Despite the difference, however, vocational and technical education are compliments of one another.

The goals of vocational and technical education as contained in the National Policy on Education (2004 revised), are as follows:

- (a) To provide trained manpower in the applied science, technology and business particularly at craft, advance craft and technical level.
- (b) To provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development.
- (c) To give training and impart necessary skills to individuals who shall be self-reliant economically.

Focal Issues and Challenges of VTE

The rapid stride in science and technology has contributed immensely to the emergence of new industries. Consequently, the presence of new technologies has given rise to demands for training in new skills in the existing and new occupational areas in order that people might fit into today and tomorrow's world of work. Therefore, any technical and vocational education programmes designs to train people for work must be one that reflects the modern trends and development in occupations and skills requirements. Institution saddled with the task of proving technical and vocational education must provide training in the acquisition of relevant and needed skills to meet the demands of modern commerce and industry.

Vocational and technical education in Nigeria is so full of problems that its inability to live up to expectations can directly be

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attributable to them. Some of these problems include:

- **Gap between VTE Schools and Industries:** specialists in industries are not consulted in students training this bring about some gap between what skills are required in industry and those that are given in school.
- **Problem of Inadequate Funding:** although government is aware that the course is cost effective e.g. "The cost of training a graduate in VTE is equivalent to that of training five (5) graduates in general education" UNESCO/ILO (2003).
- Problems of misconception by Nigerians who regard VTE as education for under achievers/those who cannot use their heads.
- **Inadequacy of Trained and Competent VTE Teachers:** Most VTE schools lack enough qualified and competent teachers with adequate industrial and teaching experiences.
- No provision is made for the training and further retraining of VTE teachers with a view to keeping them abreast to change or new developments in their areas.
- **Lack of Vocational Guidance:** Students find it difficult in making wise choices of trades. No information is available to help them in making decisions.
- **Lack of Motivation of Teachers:** Most VTE teachers are not properly motivated. They are poorly paid and most often they are hardly listened to when there is one demand or the other as it affects their training requirements/materials.
- **Lack of Functional/well Equipped Laboratories/Workshops for the conduct of Students Practical** – most machines are obsolete or have one problem or the other, hand tools are in very short supply and most of them damaged or without handles.
- **Training Methodology in VTE Schools:** This is very unsuitable as most of the method is traditional with very little or no practical.

- **Unfavourable Public Attitude Towards VTE:** People see the course as requiring too much manual labour, they prefer white collar jobs where they sit in offices with air conditioners.
- Poor implementation of policy guidelines as it affects VTE.
- Lack of early exposure of youth to vocational and technical education.
- **Lack of Power:** Absence of electricity which should be used to operate machinery, this has crippled most schools and industries.

These and so many others are among the enormous problems bedeviling the realization of a truly functional and qualitative vocational and technical education in this country.

Reappraising VTE Programme for Functionality and Self-Reliance

There is need to reappraise, update and modify the programme offerings in our technical and vocational institutions from the rigid traditional occupations to one designed to provide skills and ability for easy adaptation to new situations, ones in which knowledge and skills acquired can be applied under changing conditions. Technical and vocational educators on the other hand, must be ready to assume many functions in the face of the emerging new technologies, fast pace of innovation in production and the intensification of economic activities. Therefore, if the challenges posed by these envisaged changes are to be met, technical and vocational educators must start to look ahead for strategies for evolving a more appropriate and affecting result-oriented and vocational education programmes.

According to Ressler (1982), a more responsive technical and vocational education can be encouraged by changes in its

organizational structure to match, or to come close to today and tomorrow's industrial needs, and vocational educators should decide at once what combination of courses and programmes could reflect futures world of work and move in that direction. The transition should be planned and spread over a period of time. Planning must be:

1. Accurate- based on good data and information.
2. Farsighted -projecting needs and salient issues that will have an impact for a reasonable long period of time.
3. Reasonable-within available and projected resources.
4. Broad-based-involving many people and many issues.
5. Systematic-beginning at point A and arriving hopefully at point Z in a logical, responsible and efficient way.
6. Useful-unable by all who participated in the process.
7. Responsive-reflecting real needs, issues, problems and resolution (Dunbam, 1977).

Once the relationship of a nation's workforce and educational need are grasped by those outside in the technical and vocation community, broader support will emerge free of traditional bonds, new curricular can be generated, new combinations of courses will become acceptable and fresh attacks on old problems can be mounted. A national task force could be established to study the implications and outside it, would be impressive. The changes in structure could become the catalyst to move technical; and vocational education to the forefront of workforce development and training in the future.

Qualified Manpower/Resource Personnel

The production of a nation's manpower capable of transforming the nation's technological development cannot be done in the absence of qualified and adequate technical teachers. The acquisition of adequate tools and equipment and

the provision of adequate workshop space in the absence of adequate supply of qualified teachers amount to failure. This problem is a perennial one. Sofolahan cited in Nwoke (1989), reporting the findings of a study panel instituted by the Federal Government in 1986 to examine ways and means of producing technical locally, saw that there was a shortfall of 94.5 percent, meaning that only 5.5 percent of the nation's technical teachers requirement was being met. This report is corroborated by the recent reports of NBTE 2005. Although, Towe and Sofolahan (1989), suggested that one way to deal with the problem of quality and quantity in the supply of technical teachers is to review and overhaul Nigeria technical education programme. It appears much is already been done in that regard. The solution is going to take some time to come. What needs to be addressed is the issue of qualified technical teachers leaving the classroom. According to Towe (1989), many available technical teachers abandon their teaching jobs for more attractive opportunities in the industry and commerce. In addition to issue of poor salaries, condition of service, and the low status image syndromes of technical and vocational teachers.

It is the belief that one sure way of preventing technical teachers from leaving for the industries and commerce is for the government to give technical teachers an attractive condition of service comparable to those enjoyed by their counterparts in industry and commerce. If science teachers could receive special treatment in from allowance, why not the technical teachers enjoy some from incentives too?

Infrastructural Facilities

It is a common knowledge in vocational education circle, that a good number of equipment bought by Federal

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Ministry of Education in 1982 are still in crates for lack of workshop accommodation, practical work constitutes an essential component of technical and vocational education. It is obvious, therefore, that without suitable workshop space, programme implementation and structuring would be very difficult if not impossible. To reduce this problem, the Government should as a matter of policy provide fund for the building of workshops.

Facilities and Equipment

While efforts are being made to update curricular and introduce new one, technical and vocational colleges need tools and equipment for successful implementation of any programme. However, the cost of equipping technical and vocational institutions is astronomical and has gone up in recent time. Global financial recession has further compounded the problem. According to Imarhiagbe (1997), the high cost of procuring technical equipment and the poor resources of Nigeria during this economic recession, politicizing of education in this political period means that technical and vocational education programmes in this country cannot be current with modern industrial demands. How then are training institutions to provide access to state-of-the-art tools and equipments needed to train people for new work place? Increase funding on the part of the government will be needed. In addition, there is need for government to go into partnership with commerce and industry to create new environment for the production of capable workforce (Wolansky, 1981). Many firms may be quite willing to donate or lease equipment to schools. Nigeria's machine tools industries and other craftsmen should be greatly involved in the production of machines and machine parts. The technical colleges themselves should be involved in the production of basic hand tools, because our technical schools can produce most of the hand tools imported for the introductory technology in our secondary schools, if given some financial assistance.

Prospects of Functional/Self-Reliance VTE

- (i) It promotes the establishment of small and medium scale enterprise. As recipients become self-employed, they are also able to employ others. This contributes economically to the development and empowerment of Nigeria as a country and Nigerians themselves.
- (ii) **VTE for Farming:** Vocational Agricultural Education caters for the interest of individuals who are interested in mechanized agriculture. The knowledge they acquire equips them with all the relevant skills required by mechanized farmers. Their roles are very important in providing food and security to the nation. They also help in reducing over dependence on the oil sector.
- (iii) **Increased Productivity and Earning:** The productivity and earning capacity of VTE recipients is increased. Subsequently their employability and higher job mobility is increased.
- (iv) VTE helps to build a solid technological base for the nation through the creation of new systems and approaches for the production of goods, raw materials and mass productivity of goods and services.
- (v) **It reduces the Danger of Antisocial Behaviours and Crimes:** It is often said that an idle mind is the devils workshop. Because VTE provides saleable skills to recipients, the final result of which is self-employment, it helps one not to think of indulging in such anti-social behaviours or crime like robbery, kidnapping, cultism, prostitution, political thuggery, etc.
- (vi) **Peaceful Co-existence:** Functional and qualitative VTE makes an individual to live peacefully with himself and with

others. When one has a steady flow of income as a result of one's efforts, he or she will certainly have a peace of mind.

- (vii) **Meeting Manpower Needs of the Country:** Functional and qualitative VTE can be used a tool for meeting the manpower needs of the nation. It also results in satisfied employee and employer relationship in those needed occupations. Recipients are given adequate training in diverse areas of the economy with a view to meeting the overall manpower needs of the country.

Conclusion

It is very important to emphasize that the motive for functional and qualitative vocational and technical education is to ensure continued improvement in the standard of living of the people and their empowerment. Eze (1985) as quoted by Oladije (2003) agreed that the level of technological acquisition and development is the basis for determining the socio-economic development of a nation. And although successive governments in Nigeria have neglected technology education cum development, it is because they fail to realize that it is the means by which our socio-economic problems can be alleviated. It is indeed the greatest form of education that can guarantee the economic survival of any nation.

Recommendations

The authors wish to advance the following as recommendations for purposes of public policy implementation:

1. Technical and Vocational Education (VTE) students should be exposed to entrepreneurship education at the early stage of their study and be encouraged to handle vocational equipments needed to start productive businesses.
2. The Federal Ministry of Education should set up a national curriculum project on entrepreneurship development in collaboration

with specialists in the Department of Vocational Education from tertiary institutions in Nigeria.

3. State government should establish Vocational Centres in the various University, Polytechnics, Colleges of Education, while the individual institutions are left to equip them with simple tools, machines and equipment required for teaching.
4. Government should appeal to International Organisations like UNESCO, UNDP, etc for finance and assist vocational education programmes in Nigeria.
5. Vocational education teachers should be paid "vocational allowances" because poor remuneration will deny the tertiary institutions their services in favour of industries.

References

- Aina, O. (2002). Business education, technology and national development. *Business education journal*. Volume III (5) Nigeria association of business education.
- Eze, T. L. (1985). Technological Development, which way for Nigeria: implicit dangers in the under funding of technology education in Nigeria. (6th National Conference of NATT 2003).
- Fafunwa, B. (1982). *History of education in Nigeria*. Ibadan: Intec Printers Ltd.
- Federal Republic of Nigeria (2004). *National policy on education* (NPE), Lagos: NERDC Press.
- Imarhiagbe, A. (1997). *Journal of technical teacher education* Vol.1 Asaba.

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- Nwoke, G. I. (1989). Critical and competing issues in Nigerian vocational and technical teacher education: A survey of the profession's priorities. international conference of NVA, University of Nigeria, Nsukka: Nigeria.
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- Ressler, R. (1982). Redefining vocational service areas. *Vocational education*. Ed. PP. 12-13.
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- Towe, P. E. O. (1989). Present instructional capability technical and technological institutions – their constraints. Shortfalls and strategies for future development. Paper presented at the national seminar on technical and vocational education and Training Nigeria, NBTE Kaduna, September 5 – 8.
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