

**Challenges of Vocational Technical Teacher Education in Nigeria****Habibu A. Sara & Shuaibu Mohammed**

Department of Education (Technical)

College of Science and Technology

Kaduna Polytechnic

Abstract

Vocational Technical Teacher Education (VTTE) holds the key to effective technological manpower production in Nigeria. However, this VTTE has been encircled with enormous challenges. This paper therefore discusses the challenges facing VTTE which include; generation gap and the emergence of knowledge society through Information and Communication Technology (ICT), poor remuneration and incentives, poorly equipped Vocational Technical Education (VTE) institutions, lack of constant power supply, poor funding of VTE and structural imbalance. The paper further suggested strategies that would overcome the challenges enumerated for better manpower production in technological areas.

Keywords: *Vocational Technical Teacher Education, technological manpower, manpower production*

Introduction

Vocational Technical Teacher Education (VTTE) is a simple programme that prepares individuals to teach specific Vocational Technical Education (VTE) courses or programmes at various education levels. VTTE prepares teachers informally and formally. In the informal way, the training of individual is done under an apprenticeship scheme. Stewart (2009) described apprenticeship as a form of vocational training in which young person's often referred to as apprentice, are trained on-the-job under the tutelage and supervision of a skilled craft person often referred to as journey man or master craft man. This type of training provides an individual with the necessary skills and techniques of imparting knowledge in a chosen occupational area. In the formal method, Vocational Technical Teachers are trained in four categories. The first category is the Technical Teachers Certificate (TTC) which is designed for industrial and engineering technicians, and is undertaken in some Colleges of Education. Duration of the programme is one year.

The second category is the Nigeria Certificate of Education (NCE). Holders of this Certificate are prepared to teach at Junior Secondary Schools and their training lasts for three years in a College of Education or Polytechnic (Ali, 1998). The third category is for teachers who are meant to teach at senior secondary school level of education or head Vocational or Junior Secondary Schools. The training lasts for three or four years, depending on the entry qualification of individuals. The last category is the post graduate category; here individuals are trained to teach at post-secondary school level or to handle some departments or organizations at secondary or post-secondary school level. Their training last for a minimum of 24 Calendar months (2 years) for both Masters and PhD programmes in the VTE areas (Ali, 1998).

As stipulated by the Federal Government of Nigeria in the National Policy on Education (2014), the goals of Technical Vocational Education and Training (TVET) are to:

1. Provide trained manpower in the applied sciences, technology and business particularly at craft, advance craft and technical levels;
2. Provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development; and
3. Give training and impart the necessary skills to individual for self-reliance economically.

Looking at the goals critically, VTTE programme could be seen as a direct means of providing individuals with the skills that are more relevant to the evolving needs of employers and the economy.

Formal VTTE in Nigeria started from 1965. Sara (1998) noted that the first programmes for VTTE was established at the University of Nigeria, Nsukka in 1965. Two programmes were available: a three year course leading to Nigeria certificate in Education (Technical) and a four-year course leading to a Bachelor Science degree. The NCE (Technical) programme was only available in industrial Technical education and was discontinued and replaced with the degree programme in the 1970's.

In 1968 the Federal Government of Nigeria established the National Technical Teachers College in Lagos. The college offered a one-year programme for those who already have an approved technical certificate and a three-year programme for those who hold the west African school certificate(TTC) while the three year programme led to the award of the NCE(technical), About the same year(i.e 1968),the programmes were replicated at National Technical Teachers College, Gombe.

In the 1970's, Federal Colleges of Education (Technical) Akoka and Gombe were established to train NCE teachers. Kaduna Polytechnic also ventured into training of VTE teachers in 1974 and Institute of Management Technology (IMT) Enugu started a 2 year Diploma in 1973. Increase in the production of Vocational Technical Teachers came up in the early and late 1980's with the establishment of VTE departments in some Federal Universities of Technology, Polytechnics and some Federal Colleges of Education. Nigerian Government also made effort in training Technical Teachers through Technical Teacher Training Programme (TTTP) from 1980 -1990 through a bilateral agreement with USA.(Sara 2001)

Over the years, various Nigerian Governments have been producing and managing VTTE teachers. However, despite all the above mentioned effort, VTTE is still facing so many challenges. This paper therefore, discusses the challenges of VTTE, and recommended some strategies for the challenges.

Challenges of Vocational Technical Teacher Education (VTTE)

There are many challenges facing VTTE in Nigeria amongst which are;-

1. Generation Gap and the emergence of knowledge society through ICT.
2. Poor remuneration and incentives.
3. Poorly equipped VTTE institutions.
4. Lack of constant power supply.
5. Scarcity of qualified Vocations Technical Teachers.
6. Poor funding of VTTE and
7. Structural imbalance.

The above enumerated challenges are therefore discussed sequentially.

Generation Gap and Emergence of Knowledge Society through ICT

In Nigeria, VTTE teachers have a generation gap. There is at least one generation gap between the learners and the teachers. Majumbar (2011) noted that, there are four generations in recent time and they are as follows:-

- (1) Matures (1900 - 1946)
- (2) The Baby Boomers (1946-1964)
- (3) Generation X (1964 -1982)
- (4) Generation Y or Generation Net (1982 - to date).

The generation Y learners are indeed very different from what their teachers were as students. Most of them have never worn a watch, counted with shillings or coins, calculated with slide rules, and rarely made a handwritten letter. They have hardly known a world without computers. Today's school age generation knows much about technology and computers than their teachers. Young kids get disturbed when asked to calculate without using calculator or computer. They also get bored when they are doing only one function at a time; they need multiple stimuli. For instance, new generation of learners watch their computer screens and at the same time listen to music and converse with one another. They have the attitude of take-it-all at once.

They experience a technologically saturated childhood, unlike their teachers or adults, they are not surprised by the emergence of new technology because they are used to it.

Due to the ICT revolutions and the above mentioned challenges posed by the Y generation, VTTE teachers are forced to learn computers, Numerically Control Machines,(CNC) and be able to operate ICT facilities in order to help them facilitate the teaching-learning process.

Poor Remuneration and Incentives

Teachers work harder and become efficient in their work when given necessary remuneration and incentives. Mbiti (1974) and Edem (1982) in their views on how incentives could influence efficiency, maintained that; some methods of cultivating motivation among teachers are attractive salaries, adequate teaching facilities, promotion opportunities, annual leave, retirement benefit study tour in another country, in-service training and interpersonal relationship in the work place. The above mentioned are good things that will bring about good teaching/learning of VTE. However, some of the above mentioned incentives are lacking. For instance, despite the salary increase for public servants in the previous years, the authors observed that there is still mass exodus of teachers to other profession. In the past, the pre-service training of VTTE teachers for Technical Colleges was not without stipends or subsistence allowance in addition to the training being given completely free. That condition of course attracted entrants into the training in the past.

Poorly Equipped Vocational Technical Teacher Education Institutions

Facilities are ingredients that could ginger up VTE. Hardly can a VTE teacher teach without the required training facilities and this is really a challenge. For instance, Sara, (2010) noted that VTTE training institutions are not well equipped with the right training facilities, such as tools and equipment. Where they are equipped, the tools are mostly obsolete. These in turn affect the quality of VTE graduates produced from such institutions. It is therefore, not surprising to find a mechanical technology graduate in Nigerian schools who could not differentiate between a ball pein and a cross pein hammer.

Lack of Constant Power Supply

Energy is one of the requisite ingredients that can make school shops and other Government facilities function. In fact, without energy, there will be no meaningful development. According to Sara (2010), energy forms the backbone of any industrial revolution. Europe developed because of constant power supply. Nigeria is blessed with abundant deposit of Gas and Coal. Yet Power Holding Company of Nigeria (PHCN) can hardly supply constant electricity to Nigerians and VTTE institutions in particular. Soludo (2007) reported that despite the energy reform, only 1,700 MWH was available as against 50,000 MWH needed by the nation. These really negate the running of VTTE institutions.

Scarcity of Qualified Vocational Technical Teachers

The scarcity of qualified VTE teachers in Nigeria has reached an alarming proportion. The impact of the crisis has already manifested in Vocational and Technical examinations conducted by NABTEB and WAEC bodies. For instance, in 1988, the report of Aina Panel (cited in FME, 2000) indicated that there was a shortage of 96.4% VTE teachers in the country. Aina (2000) revealed that; survey conducted by NERDC in 1997 had indicated that there was shortfall of about 270,000 VTE teachers representing 74% of the total need. This shortfall was discovered in 23 different subjects. Similar survey conducted by NBTE in 1998, also showed that there was a short fall of 78% Technical teachers needed in the country.

Aina (2000) pointed out that, in 1999, the University Matriculation Examination (UME) conducted by JAMB attracted about 260,000 candidates out of which only 10,000 wanted to be trained as teachers. Less than 1,000 or 10% of this number wanted to be train as VTE teachers and only 4% had the opportunity, probably because of low score in JAMB examination or because of inadequacies in O'level. In other words only 40 applicants actually qualified to be trained as VTE teachers.

In the NERDC survey earlier referred to, the natural short fall in the production of VTE teachers was shocking. The shocking situation was that the following VTE trades which are offered in Nigeria's Technical Colleges have actually no avenue for teacher training:-

1. Painting and Decoration
2. Plumbing and Pipe fitting
3. Carpentry and Joinery
4. Machine wood working
5. Furniture making
6. Vehicle body repair
7. Catering craft practice
8. Ladies and Men garment making
9. Printing
10. Upholstery
11. Hair dressing
12. Cosmetology
13. Beauty care practice
14. Foot wear and leather trade and

15. Laundry and dry cleaning.

In the past, teachers for these trades were trained abroad but since the domestication of Technical Teacher Training Programme (TTTP) in Nigeria, the training no longer exists. Personal observation by the author has indicated that, due to the scarcity of the VTE teachers, NCE (Tech) and Diploma holders are made to teach at Technical Colleges which of course is contrary to the National Policy on Education (NPE).

Poor Funding of Vocational Technical Teacher (VTTE) Programme

Fund refers to the amount of money set aside for a purpose. Fund is needed in order to solve some financial incorporation in the administration/teaching and learning of VTE. As enumerated by Olaitan (cited in Sara, 2009), funds are needed in VTE for the following reasons:

1. Regular purchase of equipment
2. Regular maintenance of equipment
3. Funding of Students Work Experience Programme
4. Regular supply of expendable materials
5. Security needs and payment of enrolments and other allowances.

However, funding of VTE in Nigeria is in great shamble due to the following reasons;

1. over reliance on “oil” revenue.
2. under investment of resources.
3. Lack of continuity in VTE.
4. Under utilization of available educational resources also add to the problem of VTE in Nigeria. Uyanga (1989) observed that, inflation and its effect on learning materials and under/over estimation of cost of programmes also add to the funding problem of the programme. Apart from the above mentioned challenges. Private Sector participation in VTE is inadequate (FME, 2000).

Structural Imbalance

As the nation aspires to attain rapid technological and socio-economic development, it is expected that; VTE graduates will use their hearts and brains to turn the economy around.

However, there exists structural imbalance in the nation's education system. For instance, National Policy on Education and its implementation documents provide for Post primary streaming ratio as follows:-

1. Secondary 60%
2. Technical Colleges 20%
3. Vocational Training Centers 10%
4. Apprenticeship Schemes 10%

The ratio suggested that, there should be as many Technical Colleges as one third of the number of Secondary schools. However, the reality on ground is that there were about 5,100 secondary schools and only 157 recognized Technical Colleges (made up of 19 Federal, 136 States and 3 private) with a total enrolment of 92,216 (86.1% male and 13.9% female)(FGN,2011). This is in a ratio of 38:1 instead of 3:1. The enrolment figure for Senior Secondary Schools as at 2006 was 1,586,179 and that of Technical Colleges was 92,216 which translate to a ratio of 32:1. This is an inverse ratio, therefore a clear case of structure distortion which is not healthy for the administration/teaching and learning of VTE.

Strategies for Enhancing VTTE in Nigeria

To overcome the enumerated challenges and bail the country out of its lingering VTE quagmire, the following strategies are offered:

1. Every VTE institutions must ensure that its staff, most especially academic staff is computer literate. This could be achieved through seminar, workshop and short term computer training for the staff.
2. Federal government in collaboration with National Salary and Wages Commission should propose a living wage for VTE teachers.
3. Adequate provision should be made by VTE institutions as regards to incentives such as annual leave, retirement benefit, promotion opportunities, adequate teaching facilities, and provision for seminars, workshop and in-service training.
4. VTE institutions should make adequate provision of up to date facilities such as tools and equipment for effective teaching/learning activities.
5. Federal Government should improve in the administration of Power Holding Company of Nigeria (PHCN) for better efficiency. Alternatively, government should partner with individuals or organizations for effective service delivery.
6. Due to the acute shortage of VTE teachers in the country, Federal Government should encourage students through counseling, enlightenment campaign, to undertake a career in VTTTE. Moreover, more VTE departments should be established by the Universities, Colleges of Education and Polytechnic.
7. Federal Government should establish Technical Education Trust Fund (TETF) so that adequate funding of VTE could be met. In addition, private individuals, philanthropists, Alumni associations should be encouraged to contribute to the funding of VTTE. This could be done through endowment funds or personal appeal.
8. The enrolment percentages of 60% secondary, 20% Technical Colleges, 10% Vocational Training Centers and 10% Apprenticeship, should be implemented by the States and Federal Government through proper monitoring and evaluation.

Conclusion

The paper enumerated some major nagging challenges facing the Vocational Technical Teacher Education in Nigeria. It as well suggested some strategies that would overcome the challenges. Therefore effort should be made, by governments and other stakeholders to ensure that the strategies mapped out are addressed or implemented so that better progress could be attained in the nation's quest for technological development.

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