

Critique Perspective to Financing Technical Teacher Education in Nigeria

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Abstract

Technical teacher education deals with the training of technical personnel for the purposes of facilitating the creation of basic awareness of technological literacy to its citizenry. Nigeria's colonial education and training system had witnessed serious criticisms based on lack of adequate manpower to manage the country's production sectors and lack of visionary orientation to provide the necessary developmental services. It is only now that Nigeria is trying to reform her educational curriculum towards science and technology which is manifested in the adoption of the present 9-3-4 system of education. The philosophy of this new system of education was to have a functional education. A utilitarian education geared effectively to the realities and needs of the labor market and to allow, for sufficient manpower application (or services) in solving the country's most pressing developmental problems. Hence, the need to train teachers who are sufficiently informed in technical education concepts and its application of its theoretical principles to practical problems. However, the system is plagued by lack of funds, personnel and facilities necessary for the envisaged training and national economic development within the foreseeable future. This paper highlights the funding requirements, imperatives for proper funding of technical teacher education, state of the funding of technical teacher education, and alternative strategies for effective and efficient means of resuscitating it.

Keywords: Technical Teacher Education, Funding, Quality

Introduction

Adequate funding is prerequisite for the success in any training activities and technical teacher education program should not be an exception (Maduewesi, 2005). There can hardly be an educational system without effective and efficient financial resources. The fact that a poorly financed educational system can lead to a serious economic, political and cultural crisis cannot be over emphasized. Financing education in Nigeria has been witnessing significant metamorphosis since after the publication in 1960s of the Ashby commission's report on higher education in Nigeria. The report criticized the colonial schooling system with strong bias towards traditional literacy and academic subjects that were meant to produce interpreters, junior clerks, clergymen, etc (Fafunwa, 1974). The early secondary schools were grammar Schools founded after the English System. No technical or vocational schools were originally established. As a result of this, education gradually became a means of avoiding manual work hence, that educational system was greatly criticized for neglect of technical skills training that would have made people to be self-reliant for national development. Since no nation would rise beyond the quality of its teachers, the quality of the technical education program is dependent upon the willingness of and resources available for teachers to develop their technical knowledge so that they will be able to provide the level of technical instruction demanded by industry and business. For technical teachers to be well equipped both academically and professionally in order to face the challenges of rapid technological change and to effectively perform their roles in the successful implementation among government, industry, business and labor, education is compulsory. Governments at all levels and other stakeholders should allocate and make available adequate funds to institutions of learning for the purpose of research, workshops, seminars, conferences and other professional activities that will help in updating the technical knowledge and skills of technical teachers, inspectors, researchers, educators and administrators.

Professional Technical Teacher Education in Nigeria

The impetus of institutional technical teacher education in Nigeria was founded with the establishment of the technical teacher training course at the Yaba Higher College in 1945. To a large extent, it was an experimental establishment of UNESCO with just a meager and unpredictable support from the colonial administration. Consequently, concerted efforts were not made at training sufficient number of technical teachers to form the knuckles of technical education in the country. A pioneer indigenous degree program in technical education was established at the University of Nigeria, Nsukka in 1962 with the financial and material support of the Michigan State University and in later years it received some assistance from the Ford Foundation (Agbulu & Olaitan, 2002). The trend was shifting such that when the first generation Federal Colleges of Education (Technical) located at Akoka and Gombe came into existence in the 1970s enjoyed only a bit of sponsorship from foreign

agencies. During the late 80s, many federal as well as state-owned Polytechnics, Universities and Colleges of Education established departments of technical education for the training of technical teachers with a view of producing enough technical teachers for the effective implementation of the 6-3-3-4 system of education. The main objective of the program was to ensure that there was a smooth transition from primary education to junior secondary school so as to ensure that learners remain in school long enough to acquire basic and life skills (Geo-JaJa & Mangum, 2003). Last two decades has witnessed an unprecedented rapid increase in the quantum of technical teacher training departments spanning from single, dual, to private ownerships. The foregoing shows that technical teacher training in the pre-independence era and the few years after independence was highly funded by foreign agencies. With the attainment of political independence, however, the government progressively assumed the role of financier of technical teacher education. The system of education at all levels underwent rapid changes and growth within a context of an unstable economy. The education sector continued to expand in the presence of substantial economic setbacks. These economic depressions had a negative impact on the education sector and played contributed immensely to the decline of the quality of education. Beside the privately generated Tertiary Education Tax Fund (tefund), financial allocation by the government has become glaringly insufficient to foot the bills of technical education. Stakeholders have identified inadequate funding as one of the constraints on technical teacher training in Nigeria (Uwaifo, 2009). The funding needs to technical education are quite different from those of general education. One of the principles of vocational technical education says that there is a minimum level of funding below which technical education cannot be effective and should not be attempted. Thus, unlike some other forms of education, technical teacher education is both expensive and uncompromisingly so. Apart from the conventional needs for infrastructures, staff remuneration and supply of stationeries, technical teacher training programs require special funds for:

- (a) **Equipment Procurement and Maintenance:** Technical teacher training programs should be able to acquire new models and more efficient machines found in the world of work. Equipment and machines for training technical teachers need to be in working condition all the time. This means that these facilities have to be put through routine checks, servicing and repairs when they break down. Furthermore, it implies the construction of standard workshops, installation of appropriate security and surveillance measures. A major theft in a technical teacher-training program could disrupt training and sometimes lead to the phasing out of the program. The situation where such programs still rely on obsolete machines and subserviced equipment is most unfortunate and retrogressive.
- (b) **Instructional Materials and Workshop Consumables:** Machines and equipment for technical teacher education are provided to enable students practice. This does not mean running the machine to see how they are operated but using them to perform the functions for which they were designed. Each machine or piece of equipment has its functions and expendable materials needed for it to function. Student-teachers cannot practice with woodwork equipment unless a regular supply of wood, nails, glues and other materials are provided. Welding machine cannot be used without electrodes and metal, gravel and rods Regular supply of these instructional materials and workshop consumables is as important as regular update of machines and equipment themselves.
- (c) **Students Industrial Work Experience Scheme (SIWES):** Supervised Work Experience is a component of a good technical teacher education program initiated by the Federal Government through the Industrial Training Fund (I.T.F) in an effort to enhance the trainees' acquisition of practical and applied skills. The SIWES aimed at helping the students undergoing courses in engineering and technology and other professional courses to acquire the necessary practical skills in the Industry in addition to the theoretical knowledge gained in the classroom. Payment of allowances to technical teacher trainees as approved in the scheme partly serves as an inducement into the profession as well as a means to acquire personal tools for practice. Unfortunately, (Agbulu & Olaitan, 2002), regretted that the scheme was fast degenerating into a mere formality, as the student-trainees are neither assigned to challenging jobs nor exposed to experiences in handling equipment, tools and machines that may not be available in their educational institutions. This indicates that school-industry partnership which ought to be the bedrock of technical development and innovations for the country has not been established.

Pertinent Issues of Funding Technical Teacher Education in Nigeria

Generally speaking, the funding of technical education in Nigeria is far below the level desired. Kayode (1989) observes that the development of education in Nigeria before 1952 was random and uncoordinated, there were financial problems, and the attitudes of the colonial government to Nigeria was as if it were a company which should necessarily make profits for the home government. The burden of financing education was practically pushed to the missionaries, immigrant businessmen, and some concerned community groupings. Charity organizations both at home and abroad participated in financing education in Nigeria which further encouraged the colonial government's reluctance. The situation is even more critical with the funding of technical teacher

programs which have been marked with dissatisfaction and quest for further improvement particularly in the areas of resource allocation and management. Inadequate funding of educational sector as evidenced by overcrowded and mainly dilapidated structures, lack of adequate updated instructional facilities, non-payment of teachers' salaries are responsible for teachers' exodus. The rate at which education loses its manpower threatens the imminent collapse of the educational system if the government cannot fund the educational sector adequately. (Abdullahi, 2010) maintained that for effective implementation of Vocational and technical education, adequate funds need to be pumped into teacher education program to achieve desired result. Education budget remain far below the UNESCO minimum of 26% of the annual budget such that it is still not sufficient to address existing problems as well as cater for new needs. Furthermore, it was reported that funding allocations drop during the last decade (Moja, 2000). The implications are that new sources of funding should be sought while government also increases its share of the cost units per pupil. The following factors account for the poor funding of technical teacher education in Nigeria:

- (a) **Image and Identity Crises:** Technical teacher education suffers three levels of stigmatization and image crisis. Firstly the poor image of the teaching as a least paying profession and its members occupy the bottom layer of social strata. Secondly the ill notion that regards technical education as a form of education meant for people who are backward academically. Thus, Nigerian society insinuates that most people only enroll in technical teacher education as a last resort option. Finally, the benefits of a technical teacher education are not directly appreciated by industries and communities who deal with final products of technical education. Thus, it is easier for industries and communities to understand the need for their participation in funding technical manpower training than technical teacher training. For these reasons, people and communities would rather invest or contribute to Science and Liberal education than invest in technical education. Identity crisis of this nature informed the unfortunate merger of general and technical education that resulted into the stunted growth of technical education in Nigeria. That merger was a scene where the administrators of technical education are those who have little or no understanding of the peculiar funding requirements of technical education. Consequently, they are either under-scoring the needs of technical education or giving undue preference to their own sector of education above technical education.
- (b) **Misplacement of Priorities:** Before the new education system took off, successive Nigerian governments found it easier to train teachers for liberal and general education than for technical education. Up to the second republic only 20% of higher education offering courses in Education had programs in technical education. This was partly due to the initial capital requirements of establishing and running a technical training program. Instead of using resource allocation formula as a means of correcting the relative neglect of technical education, the Nigerian government has regrettably used it to perpetuate the neglect. A government that is too prudent in spending best part of the nation's budgetary allocation to human capital development should not fritter it on lesser priorities such as the promotion of sporting festivals and carnivals. Promotion of the physical fitness and culture should be of secondary concern to Nigerian youths since not many public schools in the country could guarantee them a quality instruction. The fact is so glaring that a surest way out of this predicament is to inject enough finance into the educational sector that can provide for adequate remuneration, instructional material and facilities.
- (c) **Official Corruption:** Allocating adequate money which is quite indispensable to achieving greatness is not just enough to make our educational system great, rather the use to which it is made. Part of the arguments for taking over the control of missionary schools by the federal government was to avoid such waste on educational financing and to achieve a uniform standard. Now, government officials are under serious attacks with regards to waste and embezzlement of educational funds (Kayode, 1989). Within this time, both the federal and state governments started applying budgetary cuts in the financial provision to ensure prudent financial management. The clamor for state universities from those states that cannot adequately fund their existing secondary and Tertiary schools is not unconnected with the greed for counterpart funding elsewhere and related ulterior motives. The key motivation in establishing most of private schools is profit driven with a taste of class difference, rather than the genuine desire to see the success of the students. Logics should have it that those in government who invest in private education must dutifully starve this rival educational sector. It would be worthless for the government to be investing huge amount of money on education while some unprincipled officers abuse the tax payers' money. In the wake of the ongoing deregulation, privatization and commercialization exercises self-restraint and national consciousness should be the guiding principles to salvage technical teacher education in Nigeria. Intellectual human capital is the nation's greatest capital and that money spent in training an individual is not wasted, rather it will yield good premium in the future

Strategic Financial Plan to Salvage Technical Teacher Education

From the foregoing presentation, the funding mechanisms for education must be re-thought. A sustainable

financing arrangement must be developed if Nigeria is to regain the ground it has already lost and become a serious player in the new global economic, social and political order. Recent initiatives by the federal government of Nigeria to reform the education system is both appropriate and timely. The federal ministry of education is committed to seeking an increase in funding allocation for the education sector as outlined in the National framework and to the implementation of transparent, efficient and effective mechanism for the funding of its activities (Santcross, Hinchliffe, Williams, Adediran, & Onibon, 2009). The federal ministry of education is committed to the following policy objectives:

- (a) increased government investment in education in order to eliminate the deficiency in public investment between Nigeria and others Sub-Saharan and developing countries
- (b) Strengthening governance frameworks and the skills of education administration at all level, in order to entrench and promote a culture of accountability, effectiveness and efficiency in the management of public investment in education.
- (c) Strengthening and harnessing policy and capacity to draw in and effectively utilize resource from international development partners.
- (d) Developing allocation mechanisms that ensure the investment of funds goes to areas of priority and need, whilst promoting equity and access.
- (e) Bringing significant and sustained increase in private investment in education both from individual and institutional sources, in order to augment public investment.
- (f) Establishment of a framework for government intervention fund and counter funding.
- (g) Establishment of operational guidelines.
- (h) New thinking and focus for public private partnership model.
- (i) Establishing a funding framework for new initiatives such as the READ campaign. CATI, Safety NETs, LIFE clubs and adopt a school program.
- (j) Seeking an increase in Government spending on education from the then 8% of budget to 26% in the following phases:
 - 2010 15%
 - 2015 20%
 - 2020 26%
- (k) Seeking an increase in education spending from less than 5% of GDP to at least 10% by 2020 in the following phases:
 - 2010 6%
 - 2015 8%
 - 2020 10%

Conclusion

Financial efficiency is critical and could be attained through the improvement of administrative and management practices, rationalization, much better and more realistic planning. Though availability of financial resource is a prerequisite for the rapid development and transformation of any society, it must be emphasized that the provision and efficient management of this scarce resource is best facilitated by discipline and national consciousness. The National Policy on Education has stressed education as a right to all not a privilege exclusively reserved for those that can afford to pay (F.R.N., 2004). No country can develop without paying attention to the development of her human capital and that a nation cannot prosper beyond the quality of its teachers. Thus, for the required manpower development to attain in Nigeria educator had to be paid, adequate equipment must be procured including any other materials that will enhance efficient and effective teaching-learning process. In the absence of all these, the desire to attain the requirements of manpower development and technological advancement – whether hired or purchased would remain an illusion. The most recent initiatives on education sector reform suggest policy movement in the right direction as it attempts to address pertinent issues of funding and quality service delivery in technical teacher education.

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Biography

Abubakar Sadiq Bappah was born in Gombe, Gombe state of Nigeria on 25/11/1968 and is currently an Associate Professor of Technical and Engineering Education at the School of Technology Education, Abubakar Tafawa Balewa University Bauchi, Nigeria. He holds Bachelor Degree in Technical Education (Electrical-Electronics) from Ahmadu Bello University, Zaira, Nigeria (1994); M.Eng (Electrical) from Abubakar Tafawa Balewa University Bauchi, Nigeria (2000); and PhD in Electrical Engineering (Control and Systems) from Bayero University Kano, Nigeria. The author is a member American Society of Engineering Education (2012), Institute of Electrical Electronics Engineers (2010); International Federation of Automatic Control (2009); and Nigerian Association of Teachers of Technology (1991) where he serves as its national vice president (North-East). His research interests include innovation strategies; system modeling and simulation; and technical teacher education and training. Dr Bappah is happily married with two children.

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