

VOCATIONAL AND TECHNICAL EDUCATION IN NIGERIA: PROBLEMS AND PROSPEO

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Abstract

The importance of education in the overall development of a nation cannot be over-emphasized. This is even more pronounced in the technical and vocational education sub-sector of the educational enterprise. This vital segment of total education is purposive, useable and performance-based. Technical/vocational education proffers, saleable skills and competence and so, any stagnations in this vital area will be a recipe to social decay. Also, a temporary delay by teachers of technical/vocational education in thinking ahead with tantamount to training our children for the society of yesterday. This paper, therefore, in its introductory part, explains the meaning and principles of technical vocational. Part two discusses recent invocations in the curriculum for technical/ vocational education, while the third part treats the problems facing technical vocational in Nigeria and possible solutions to these problems. The paper then concludes by highlighting the prospects of this hub of any nation's technological advancement.

Introduction

Technology education is made of vocational and technical education. Vocation is any form of education whose primary purpose is to prepare persons for employment in recognized occupations. It provides the skills, knowledge and attitudes necessary for effective employment in a specific occupation. Vocational education assumes that a choice of an occupation has been made and that appropriate training is needed to enable the individual enter or advance in his chosen occupation. Any education which is necessary for effective employment in an occupations is vocational education, while any education which is useful to an individual irrespective of his future life vocations is general

education. General education may be useful in several occupations but not normally and essential part of any particular occupation. Vocational education is education for a particular occupational preparation. The skills and knowledge acquired while training for one occupation, many be of little or no relevance in other occupations (Okoro, 1993).

Technical education is a post-secondary vocational training programme whose major purpose is the production of technicians. It is a special grade of vocational education which can be distinguished from other vocational education programmes because more mathematics and science are required is the training programme. Graduates of technical education programmes usually bridge the gap between the professional engineer and the craftsman. Technical education is most often found in trade and industrial education.

Oranu (2004), for the purpose of clarity and brevity, defined vocational education as that skill-based programme designed for sub-professional level education and based on specific vocation. Technical education on the other hand, facilitates the acquisition of practical and applied skills as well as basic scientific knowledge. In effect, every vocational education programme is technical in nature while not every vocational education programme is vocational in nature.

The objective of today's, technical/vocational education is the development of functional and marketable knowledge, skills and competences in education. Consistent with the foregoing, Eyster (1979), avers that, Technical/ Vocational Education (TVE) is " important to the people, to the society and to the economy of the nation. In the same vein, Ulinfun (1986), asserts that,

technical/vocational education (TVR) accounts for over 60% of the vital Nigeria's national growth. The technical/vocational education area of education is expectedly in a process of change (Nwosu, 2005). The report of the second international congress on technical/vocational education (1999), affirms that, these monumental changes can be coped with using what it refers to as the four pillars of education. These are:

- Learning to know (knowledge)
- Learning to do (skill)
- Learning to live together (environment) and
- Learning to be (survival).

There is absolutely no doubt that TVE which provides for the educated the opportunity not only to live but also how to make a living, is the foundation on which societal progress is built.

Prosser (1949), developed the principles guiding the provision of technical/ vocational education in and outside the formal school system. These principles, which should be worthy of serious consideration by every administrator of technical/vocational education, specify the minimum standards below which effective technology education cannot be offered. Some of these Prossers theorems or principles are stated thus:

- Technology education will be efficient in proportion as the environment in which the learner is trained is a replica of the environment in which he must subsequently work;
- Effective vocational training can only be given where the training jobs are carried out in the same way, with the same operations, the same tools and same machines as in the occupation itself;
- Vocational education will be effective in proportion as it trains the individual directly and specifically in the thinking habits and the manipulative habits required in the occupation itself;

Effective vocational education for any profession, calling, trade, occupation or job can only be given to the selected group of individuals who need it, want it, and are able to profit by it;

The administration of vocational education will be efficient in proportion as it is elastic and fluid rather than rigid and standardized;

Vocational training will be effective in proportion as the specific training experiences for forming right habits of doing are those of the finished skills necessary for gainful employment; The effective establishment of process habits in any learner will be secured in proportion as the training is given on actual jobs and not on pseudo jobs;

and eight (8) other theorems/principles (not listed here).

Recent Innovations in Curriculum for Technical/Vocational Education

Curriculum is generally defined as all the learning experiences provided by the school to assist the learners in attaining the designated learning outcomes, goals, objectives to the best of their ability. It is an educational programme with three components: programme of study; programme of activities; and programme of guidance. Curriculum is different from syllabus because it contains features, which are absent in the latter. Specifically the curriculum contains aims, goals, detailed course outline, objectives usually stated in behavioural measurable terms, list of learning activities and evaluation procedures.

Just as the aims of education change from time to time, place to place and tend to reflect the needs and circumstances of time and age, so does curriculum change reflect changing circumstances. By innovation in curriculum, we mean reforms or a set of approaches which guide the teacher/educator to develop situation-specific models of technical/ vocational education programmes to suit specific needs at a particular

time and place. This includes responding to challenges of science and technology, demands of the economy and expectations on infrastructural facilities for the effective delivery of instruction.

The curriculum for technical/vocational education of today should adopt the worker-centered approach that accommodates the personal, social, cultural and vocational need of the worker at the same time. This ensures all-round development of the learner. The outdated utility-oriented curriculum emphasized productivity and used task analysis to determine skills and competences required for specific vocations and jobs.

Again, it would appear that the present Nigerian technical/vocational curriculum is restrictive. There is therefore need to broaden it to accommodate the various levels, genders and strata of the society, hence, present and future technical/vocational curriculum should emphasize not the needs of men, women and children but also the projected thrust of the economy (both formal and informal).

Furthermore, the scientific and technological achievements have impacted positively on the technical/vocational educational practices. For instance, in the business education sector, there has been a significant adoption of technological software and hardware in the processing and dissemination of information. Consistent with this, Owens (1982), affirms that, the curriculum should include at various levels, modules on word/text processing, information storage/retrieval systems etc.

Finally, the incorporation of *ICT and entrepreneurs hip skill* courses should be done. As in other spheres of human endeavour, technological advances have sharpened the focus and practices of technical-vocational education. For example, the information communication Technology (I.C.T) has significantly revolutionized office and business procedures through the use of electronic gadgets. Closely related to the significant role of ICT is the impact of entrepreneurial skills in tech-voc education.

The co-operation between tech-voc education and the world of work is of much significance and benefit. In fact, technical-vocational education cannot be effective without the critical role of the enterprise. The report of UNESCO (1997), succinctly highlighted this role of enterprises in the preparation of entrepreneurial skills of workers. These skills can be acquired through various models such as entrepreneurial trait, non-formal education, apprenticeship, role, formal managerial training, and expansion/refresher course models.

Problems and Proffered Solutions Poor Students Enrolment: The situation whereby the number of technical institution in Nigeria is less than the grammar schools leads to the present enrolment ratio of 1:102 in favour of general secondary education (Nwaokolo, 2003). South Korea found herself in this situation until 1990 - 1995 when the government adopted the policy of increasing enrolment into vocational/ technical schools. By the end of 1995, enrolment ratio clocked 50:50 in favour of vocational/ technical education. With this balanced ratio, unemployment rate was reduced to 2.6% in 1997. Let Nigeria emulate South Korea in order to reposition technical education.

Non-involvement of Industries: The greater percentage of technical manpower available in Nigeria are employees of industries. It is unfortunate that industrialists stand aloof in the technical manpower development instead of contributing substantial funds in technical trainings. They only wait as watch-dogs, much poised to smartly absorb any qualified technical personnel. Oranu (1994), categorically stated that, technical educators and industrialists should work closely together in order to understand and evaluate the developing needs and problems in the area of industrial technology.

Also, government should involve the industries in designing technical education curriculum to entice financial supports from industries.

Lack of Human and Physical Resources:

Akamobi (2002), stated that, vocational technical education cannot achieve much in producing qualified skilled manpower when human-physical facilities necessary for the training are inadequate. Such facilities are in the areas of infrastructure; number of qualified technical teachers, funding, remuneration/conditions of service, equipment and consumable materials etc. Okorie (2002), advanced that, if stratified measures such as improved funding, improving human resources development, proper management of available infrastructure and regular maintenance among others are adopted and implemented, the situation which is approaching crisis stage, would be improved.

Lack of Professional Continuity. Professionals like lawyers, engineers, medical doctors etc in Nigeria usually ensure that at least, one of their children or close relations specialized in the same fields as to keep the profession functional while they are alive or dead. By this action, they ensure professional continuity. Turning to the professional educators' (i.e. the

professional/technological academic lords), the reverse is the case. This is most unfortunate. All of them propagating and championing the course of technical/vocational education pay lip-service to the profession. For the continuous existence and growth of technical/vocational education, these technological academic lords should increase their efforts toward encouraging and sponsoring more students and structures in the profession.

Inasmuch as these academic giants have failed to handover the relay-race baton to younger ones, technical education would remain dispositioned because of lack of this professional continuity.

The audience or personnel that usually respond to academic conferences, seminars and workshop calls on technical vocational education should campaign for continuity in the profession by inviting top-class politicians like Mr. President, Governor. Ministers etc and not

academic talking to themselves every time. Also the formation of an umbrella organisation, say, National Association of Technology and Technical Educators of Nigeria (NATEN), for all cadres of technical educators, can be used to campaign for continuity in the profession.

"Continuity" is the only magic word that brought Obasanjo and group, back to the presidential seat for second tenure. This magic word can also help to place back technical education to its equilibrium state. Other -problems facing technical education in Nigeria include:

- Improper examination and screening of fresh students: the polytechnics and colleges of education (technical) should conduct strict internal qualifying examinations to select the candidates that will benefit from the programmes;

Use of obsolete curriculum: the National Commission for Colleges of Education (NCCE) should organize and sponsor workshops in which experts in technical education, computer and curriculum engineers will meet to fashion out a curriculum that will satisfy the taste of. the society; and

Structural Constraints: government policies by structural design relegated technical education to ridiculous state both by definition and by reserving it for those who are unable to proceed to the liberal education after the JSS III programme as well as the handicapped. Also, there is a certificate limit to holders of technical education. These derogatory references by the government dampens the morale of technical educators and educands.

To reposition technical education, government as a matter of urgency, should allow people to progress from vocational school through technical colleges to polytechnics and higher degrees, if they so choose. A situation whereby an HND holder is not allowed to go straight for higher degree just as his B. Eng/B.Sc

holder counterpart does not augur well to technical vocational education.

Conclusion

Technical education has a bright prospect in the present -day Nigeria and even a brighter prospect in the foreseeable future. Among the major challenges confronting the Nigerian government today are how to reduce unemployment and poverty. Establishments like the NAPEP and NDE have been put in place but their effects appear merely palliative in confronting the unemployment "monster" which put poignantly, has become "a frightful doom for the Nigerian youth". It is the tech-voc education that will provide the antidote that can effectively confront the "monster". This is because a functional TVE programme has the capacity to provide effective and efficient training for the head, the heart and the hand. In order words, TVE develops the relevant skills for employments and advancements in tech-voc career. This will not only give rise to economic development but also checkmate poverty considerably among the citizenry.

In conclusion, the paper has discussed the meaning of tech-voc education and its principles. Problems of tech-voc education in Nigeria and possible solutions were highlighted. The state of affairs in the curriculum of tech-voc education was treated. The prospects of tech-voc education in Nigeria were also elucidated. In final analysis, it needs however to be admitted that as Christianson (1977), affirmed, "we cannot simply prepare kids for every situation they will face, but the tech-voc educational programme will surely give them the skills they can use to deal with the challenges they will encounter in life."

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