

CHAPTER ELEVEN

TECHNOLOGY EDUCATION: A VEHICLE FOR SUSTAINABLE YOUTH EMPOWERMENT IN NIGERIA.

By

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Abstract

The technology objective of the National Policy on Education FRN (2004), centred on increasing the productive potential of the Nigeria youths thereby increasing the chances of producing better goods and service. The socio-economic development of Nigeria is strongly tied to effective implementation of technology education programme. Empowering the youths with relevant knowledge, productive skill and work habits, appear indispensable. This paper addressed technology education as a vehicle for sustainable youth empowerment. Strategies for this empowerment were discussed and recommendations made for its sustainability, among which are: organizing workshop/conferences on the "how to" and "benefits" of technology education, and encouraging young graduates on initial establishment of small scale trades were highlighted.

Introduction

In a rapid developing and changing world of technology, the quest for technological advancement in the present world of work cannot be overemphasized. Every nation therefore, seeks a new conceptual model of technology education to sustain her economy through youth empowerment. No nation can rise beyond her productive capacity which is a function of the quality and quantity of her workforce.

Youths in Nigeria today constitute the bulk of the population and forms about 47% of the economically active population (Obadipe, 1992). It is expected of them to contribute towards development of the nation as they are invaluable assets, leaders of tomorrow and constitute the major workforce of the nation. Technology education brings about technical advancement, improving the knowledge, imparting the appropriate skills and inculcating proper work habits on the people. Gilbraith in Nduka (1983) says, "no improvement is possible with unimproved people".

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The National Policy on Education FRN (2004) defines technology as that aspect of education which leads to the acquisition of practical and applied skill as well as basic scientific knowledge. Oghurba and Akpotu (2004) further describe technology education as that education purposefully designed to equip learners with a professional skill which enables them to make life more comfortable for the citizens through positive manipulation of available materials within their environment. Technology education therefore, provides adequate programme for sustainable youth empowerment hence, preparing them for world of work. Furthermore, youths acquiring education for work must develop problem solving and decision making abilities involving human and material resources, processes and technological systems. These will sustain the empowered youths occupationally, economically and better equipped to contribute to national development.

The Concept of Technology Education

Technology education is very vital to the sustenance of technological development of every nation. Technology education is described as the academic and vocational preparation of students for job involving applied science and modern technology (Encycloedia Britannica, 2001). Technology could mean the systematic study of techniques for making and doing things. Miller (2003) describes technology as the application of scientific knowledge or principles to practical task for developing and producing goods and services for mankind. Education, on the other hand, was described by Nneji (2004) as a process of polishing the heart, the head and hand of the individual to enable him/her to live a worthy self-reliant life.

Technology education is a time-honoured process which deals with acquisition of skill and knowledge in chosen occupation to enable an individual to earn a living. This type of education helps to identify potential in individuals, develop it to the degree at which the individual skills, knowledge and attitude required for employment in a particular occupation, group of related occupations or to function in any economic activity including agriculture, commerce, public and private service.

Technology education is the term given to high-level vocational and technical education offered at universities, polytechnics, and college of education (technical) for the production of technologist, engineers and other professionals in chosen area of disciplines (Owoso, 2002). At different educational levels, technology education aims at the production of low-high level manpower but the degree of the scientific knowledge and the skill acquired has been an indication of the effectiveness of the content, organization, and the teaching method employed. Programmes in technology education are organized and designed to equip one with work and life skill

which include divisions such as trade, industrial education, agricultural education, occupational or vocational business education, fine and applied arts, distributive education, home economic and technical education. (Adebayo, 2005). Sowande (2001) posits that technology education was brought about as a result of its role in the process of all round development, economic performance and general welfare.

Implications of Technology Education for Youth Empowerment

Youths, according to UNESCO, are young men within the ages of 18 and 35 years. They are full of energy. The energy of the youth can be described as the dynamo and adventurous for nation building hence, the need for sustainable youth empowerment. According to Webster Dictionary (1996), empowerment means: (1.) To give official authority or legal power, (2.) To enable (3) To promote self actualization or influence.

Youth empowerment, therefore, means developing competencies needed to become a successful contributing member of the society. Empowerment can also become one of the most effective strategies for providing youths with opportunities to develop saleable skills which will not only be for their empowerment but also bring about the much desired industrial and technological development of the nation.

Empowering youths, according to Pitman and Wright (1991), is a process through which adults begin to share responsibility and power with the young people. It is the same idea of teaching the youth skills that they will need to survive in life. However, it is important that youths are empowered as it will lead to competence, then self-esteem. Charles (1998) while writing on youth empowerment observed that technology education would put the whole youth under subjection to discipline as his intellect, his hand, mind and will are all involved in a combined form.

One other basic need for youth empowerment, according to Miller (2004), is the desire to equip the young individual skillfully and proficiently enough in a chosen trade. Apart from the fact that it will empower the youth with what it takes to excel in the performance of a task, the benefits that accrue to skilled individuals are numerous including: income generation, ability to become self-reliant and employers of labour.

In a deregulated and industry-driven economic nation like Nigeria, this heightens the need for the youths to be empowered to enable them assist in generating a dynamic economy. With this kind of economy in mind, it becomes imperative that the youths pose relevant skills that will make them attractive to employers of labour who prefer skilled and experienced workers, thereby increasing the production capacity and boosting the economic strength of the nation. Soniake, (1989) in (Oranu 2001) viewed the characteristics of

technology education in developing countries such as Nigeria as follows. Low in capital cost and use of local materials when possible. Create jobs, employ local skills and labour, intensive rather than capital intensive. Understood, controlled and maintained by indigenous people. Enable further innovation. Do not involve patents, royalties, consulting fees. Generate relevant skills and attitudes commensurate with national needs and priorities.

From the characteristics mentioned above, technology education training can prevent human labour and youthfully energy wastage by transforming the unskilled labour and over-crowded occupations into remunerative occupations. Nigerian youths should be trained (empowered) technologically to solve the problem of unemployment or involuntary idleness and imperfectly employed or untrained.

Strategies for Sustainable Youth Empowerment

Empowering Nigerian youths is indeed a great step in the right direction at this time of bleak economy in the nation. Unfortunately however, this could not only be achieved by mere exhibition of certificates but by being actively involved in the doing aspect. Youths must be ready to learn skills, knowledge and proper work habits needed for creativity and productivity. Technology education must be financially sustained not only by the government, but also the private sectors and the society, not only should it contribute financially but also ensure that the equipment and facilities are adequately protected from premature damage and vandalization.

The Nigerian society should recognize the fact that every citizen should be equipped to contribute effectively to the economy of the country. The highest possible welfare is achieved only when each individual produces to the limit of his capacity. In view of this, empowering the youths must be carefully studied by those responsible for development of technical education programme if the institutions will meet the need of the industries and the society at large. There should also be periodic appraisal of the effectiveness of the programme in satisfying the interest of the youths while running the programme and also be well motivated to establish small scale trade after graduating from the institutions by giving them soft loans and monitoring the progress of their trade.

Sustainable youth empowerment through technology education is achievable with a change of attitude on individuals, government and the society. Government must encourage small and medium scale business and workshop in acquired area of apprenticeship training. Individuals should be involved in acquisition of skills necessary for occupation while the society should patronage the locally produced goods for economic sustenance. Acquisition of appropriate skills, abilities and competences will lead to

sustainable youth empowerment as the individual lives in and contributes to the development of the society.

In the recent past, the Nigeria government, in an attempt to empower the youth and alleviate poverty, launched various programmes such as National Poverty Eradication Programme (NAPEP), Family Economic Advancement Programme (FEAP), National Directorate of Employment (NDE) and National Economic and Empowerment Development Scheme (NEEDS). As commendable as these efforts of the government were, their greatest problem has been the unsustainability of these empowerment programmes. The term sustainability as defined by Ukpongson and Mathews-Njoku (2002), implies that whatever efforts, strategies or programmes designed or prescribed to tackle youth problem must offer enduring solutions that are capable of meeting the needs of the present as well as future generation. In view of this, therefore, the various agencies must sit up, knowing that it is not over until it is over. Consistency in effective policy implementation technology education and other related programmes by the stakeholders will go a long way in empowering the youths which will heighten the socio-economic development of our dear nation.

Conclusion

Technology education is the bedrock for sustainable youth empowerment. Having considered the implications of technology education for youth empowerment and various strategies for its sustainability, it has become expedient for the youths, technological institutions, governmental and non-governmental organizations, private sector and the society at large to maximally contribute to the empowerment programmes of our youths acknowledging that it holds the solution to providing job opportunities, reducing crime rate and encouraging creativity and competitiveness in nation building, economic growth and self reliance.

Recommendations

The following recommendations are considered expedient for the realization of sustainable youth empowerment through technology education.

1. **Financial assistance to the youths:-** Federal and state government should continue the promotion and administration of schemes for the financing of youths, by award of loans tenable in various vocations for the development of self-reliance.
2. **Change of negative attitude:-** The government's effort at rising youth socio-economic status should be encouraged, also increase their awareness of the importance of technology education, their roles and what they stand to benefit from the programme.

3. There should be periodic review of the curriculum of technology education programme. The changing need of the society and the industries invariably determine what should be taught and learnt in the technology institutions.
4. There should be proper funding of technology education at all levels and special scholarship for the students.
5. Well-equipped workshop/laboratory should be provided to facilitate acquisition of relevant skills in technology education institution.
6. Agencies that are entrusted with the management and supervision of technology education programmes should advise the government appropriately on the appointment of key officers for technology institutions. This is so because only experts will fully appreciate the problems encountered by teachers and learners of technology education.

References

- Adebayo, S.A (2005). "Technology Education as a Vehicle for Nigeria Industrial Transformation and Youth Development". In 10th Annual National Conference, River 2005, NATT
- Charles J.L (1998). "When it comes to empowerment are you shifting power or simple passing the BUCK?" Gary Hamel and CK Prahalad, Harred Business School Press.
- Encyclopedia Britannica (1994-2001). *Technology Education Encyclopedia. Britannia Inc.*
- Federal Republic of Nigeria (2004). *National Policy on Education*. Lagos: National Education Research and Development Council (NERDC).
- Miller 1.0. (2004). Skill Acquisition in Metalwork, a panacea for Self-Reliance in a Deregulated Economy. A paper presented at the 1st National Conference of School of Technical Education. Federal College of Education (Technical) Akoko.
- Obadipo, J.K (1992). "Youth Development and Nation Building" *Education Today*. 5(3).
- Ogbuvbu, E.P & Akpotu, N.E (2004) Factor Affecting the Attainment of the Objectives of Technical School Education. *Nigeria African Journal of Education and Developmental Studies*. 1(1).

Oranu, R.N (2001). *Appropriate Technology Adaptation for sustainable poverty Alleviation in Nigeria*. 14th NATT Annual Conference 2-6.

Owoso, J.O (2002). *Constraints, Misconceptions and Contributions in the Implementation of the Curriculum of Technical Education Programme in Nigeria*: Woli conference proceeding.

Pitman, K.B.S.Wright, F.E (1991). *A New vision promoting youth Development*. Washington, D.C: Testimony press.

Sowande, K.G. (2001). Vocational and Technical Education for self-reliance Issues and Relevance. Unpublished conference lead paper. Tai-Solarin College of Education Ijebu-ode.

Ukpongson M & Mathcios-Njoku EC (2002). "Women Participation as an Indispensable Asset in Sustainable Poverty Alleviation in Nigeria". *JONATT*, 4, (1), 70-77

Webster Dictionary (1998). Center for youth and Development Washington, DC