
Entrepreneurial and Functional Technical Education as a Means of Achieving the National Objectives of Vision 2020 in Nigeria

By

ADAMU MAIDALLAH ABDULLAHI

*Department of Electrical/Electronics,
Federal College of Education (Technical),
Bichi, Kano P. M. B. 3473 Kano State*

Abstract

Technical education serves as a means of national development. This type of education ensures development of all sectors of the society. This ranges from production of food and cash crops, provision of shelter, construction of transportation networks, health care facilities etc. This paper enumerated that technical education is non-functional, because it cannot equip students with skills required to function in trades they have learnt. The paper looked at the concept of entrepreneurship, who is an entrepreneur, traits expected of an entrepreneur, functional technical education, what is vision 2020, objectives of vision 2020 and discussed ways in which technical education could ensure attainment of the objectives of vision 2020. The paper concluded, that entrepreneurship and functional technical education is very necessary to achieve the objectives of vision 2020 in Nigeria. It recommended that: the federal government should ensure expansion of technical education programmes, private organisations should be involved in the provision of this type of education, provision of tools and equipment and teachers should use different strategies for teaching skills.

Introduction

Technical education serves as a means of national development. This type of education ensures developments of all sectors of the society. It ensures production of food and cash crops, provision of shelter, construction of transportation networks, health care facilities etc. Yaduma (2007) affirmed that technical Education is acknowledged worldwide as a means of attaining faster economic growth. Thus, it is very essential for developing countries to enhance their socio-economic growth and development.

The Nigerian nation have acknowledged that technical education is essential for development, that is why its goals in the National Policy on education (2004) reflects these concerned for National Development. The goals of technical education are as follows:-

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- Provide trained manpower in the applied sciences technology and business particularly at craft, advanced craft and technical level
- Provide the technical knowledge and vocational skills necessary for agriculture, commercial and economic development.
- Give training and impart the necessary skills to individuals who shall be self-reliant economically (NPE 2004).

In fact, these goals of Technical Education are supposed to have taken effect fully throughout the country in 1982, but, upto 1985. Adamu (2004) pointed out that only Kano and Anambra out of the then 19 states in Nigeria have actually started the new system of education. In states that the policy took effect, it was partially implemented, while almost all the other states either delayed the take off of the program or altered its format as a result of shortage of funds, teachers, workshops and equipment. Ahmed (1998) affirmed this position; hence he lamented that technical schools in the country are in a pathetic situation.

Problems mentioned above and many others have rendered Technical Education in Nigeria non-functional and in a state of confusion. Therefore, Technical Education programmes in the country lacks the quality expected of its products of this type of education hardly function in employment opportunities offered them and more over, they lack skills and entrepreneurial knowledge that could make them to be self-reliant.

Concept of Entrepreneurship

Entrepreneurship is the process of creating something different with value by devoting the necessary time and assuming the accompanying financial, psychic and social risks and receiving the resulting rewards for most personal satisfaction (Lankford, 2003 in Aluwong 2004). Yaduma and Mshelia (2007) viewed entrepreneurship in Technical Education as a way of thinking and operating. It has to do with students to think about problems that can be solved in real life. This includes providing students with role models and providing career pathways, self-employment opportunities and business in the community, developing understanding of how organization operate.

Entrepreneurship in technical education could be seen as the process of introducing students to use skills they have acquired to become successful business owners by providing goods and services in technical fields.

The Entrepreneur

An entrepreneur as defined in Webster's dictionary (2000) is someone who runs a business at his own risk. Aluwong (2004) asserted that the entrepreneur starts from the scratch and nurtures the business venture to maturity. Madu (2000) in Onwukwe and Kanu (2009) explained that labour, land, machines, finance, material resources and technology have to be combined in a particular way in

order to ensure optimum results. He makes vital decision for the enterprise, determines what to produce, how to produce it, when to produce and for whom. Such a person needs to possess some traits.

Traits of an Entrepreneur

Aluwong (2004) stated that generally the entrepreneur should possess the following characteristics:-

- (i) Self-confidence:- they believe in themselves and what they can do; they do not accept the *status-quo*.
- (ii) Self-reliance:- they are self-reliant individuals thus, the urge in them to do it all alone.
- (iii) Innovation:- they are both innovative and creative; they believe in doing things in new or different ways.
- (iv) Hard work:- they believe in hard work and this explains why they work longer hours than other workers particularly those in public sector
- (v) Goal Setting:- they set goals for themselves and do all that it takes to accomplish those set goals.
- (vi) Risk Taking:- they take all sorts of business risks upon themselves from financial investment to marketing.
- (vii) Independence:- they enjoy being independent and being their own bosses; and these motivate them to be action – oriented.
- (viii) Achievement Drive:- they have a strong desire for achievement, they never contemplate failure; they work to achieve success and good returns on investment.

Functional Technical Education

Technical education as defined Okoro (1991) is an instruction in a skill or process usually of a mechanical type and at a level between that of the professional scientist or engineer and that of a skilled craftsman. Technical education is designed to prepare technicians for the industry, agriculture, commerce, home-economics which is usually provided at senior secondary or lower tertiary levels. It is a special grade of Vocational Education programme because more mathematics and sciences are required in the training programme. Graduates of Technical Education usually bridge the gap between the professional engineers and the craftsmen. Furthermore, Oranu (2010) asserted that Technical Education facilitates the acquisition of practical and applied skills as well as basic scientific knowledge. The Microsoft Education (2010) explained that functional technical skills is technical knowledge and skills for one to do his or her job at a high level of accomplishment, demonstrates active interest and ability to enhance and apply new functional skills. The UNESCO (2010) identified that the new concept of functional education, emphasizes the all round development of basic skills and the effective use of these skills in individual development and societal improvement. The objective of functional Technical Education is to conduct training for people who will under take

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various social and economic tasks in order to reach the goal of reducing poverty and improving the quality of life.

Vision 2020

According to Maslow (1952) as in Shehu (2009) Vision 2020 may be interpreted as the vision for the year 2020, or better still, as a formulation of perfect vision. Andresen (2001) in Shehu (2009) defined the ideal vision as transforming the present disgruntled society into a happy one in which one and all are empowered to enjoy all the six Maslow hierarchy need. From this definition vision 2020 could be said to be a social and economic agenda which seeks to achieve developments in all human endeavours such as health, social welfare, education, manufacturing, communication, transportation, housing, tourism, agriculture etc.

Objectives of Vision 2020

The objectives of Vision 2020 according to the federal government as pointed by out Chinned (2010) is for the government to eradicate poverty,(the ultimate target is to eradicate absolute poverty among the people of the country). Thus, eradication of poverty is to ensure that all Nigerians are provided with: source of real income; high purchasing power; abundant, good quality and high nutritional food; basic health care facilities; good quality education; good quality drinking water; good standard housing units; good quality roads and other means of transportation; stable and affordable power supply; good urban and rural communication facilities; cheap and affordable quality consumer products; conducive environment for production and provision of quality services.

Technical Education for Achieving the Objectives of Vision 2020

Indeed, functional education is the education that emphasize all round development of basic skills and effective use of those skills in individuals development and societal improvement. Therefore, entrepreneurial and functional Technical Education will ensure achievements of these objectives through the following major trades of technical education:-

- (i) Automobile Technology Education
- (ii) Building Technology Education
- (iii) Electrical/Electronics Technology Education
- (iv) Metal work Technology Education
- (v) Wood work Technology Education

(i) Automobile Technology Education: This involves training students with functional automobile knowledge and skills that would make them to work in industries or work on their own by establishing private businesses. This will ensure achieving objectives of vision 2020 especially the objective that has to do with provision of good and quality roads and other means of transport. Automobile technicians would be employed in automobile industries and assembly plants for the production of good, quality vehicles, maintenance and repairs of vehicles in the

country. This will ensure achieving regular and stable power for the country. Automobile technologist will be employed in electrical generation plants for the running and repairs of generators. Obviously, some automobile personnel's could be self-employed carrying out trades such as automobile electricians, auto-body work, diesel/heavy duty mechanics, auto-tractor mechanics.

(ii) Building Technology Education

This has to do with training skillful building personnels. In general, it has to do with specialised personnels in the following areas: 1. building construction. 2. heavy/civil construction. 3. industrial construction. Training such workers will ensure the attainment of the Vision that aims at construction of good standard housing units; good quality roads and other means of transport. Specialised builders will ensure that storey buildings in the country meet the standard obtainable any where in the world. Thus, this would save lives and properties that are lost in from collapsed buildings. Qualified builders will ensure conducive environment for the production and provision of quality services. Construction of dams would take place for good and quality drinking water and irrigation etc. Builders could be self –employed if wishes, by engaging in praveite practice such as construction of pre-fabricated housings, wooden –houses, etc.

(iii) Electrical/Electronics Technology Education

Functional Electrical and Electronics personnels are very necessary for achieving stable and affordable power; ensuring good urban and rural communication facilities. Qualified Electrical technologists could be employed in electrical generation plants, electrical transmission firms and distribution companies. While Telecommunication technologists could work in communication network companies, or work in Electronics factories for production of various electronic gadgets. Services of Electrical and Electronics personnels is very important in the country, because their services for domestic and industrial electrical installations, repairs of home appliances, repairs of industrial machines etc. Trained Electrical and Electronics technologists could be self- employed by establishing private business ventures .

(iv) Metalwork Technology Education

Metalwork technology has many areas of specialisation under it such as machining, foundry and forging, welding, plumbing,etc. All these are essential services needed by the society. Metalwork technology will help in achieving objectives vision 2020 through training of qualied metalworkers that can work in industries that produce industrial machines. Production of indusrial machines would support economy of the country thereby increasing the its foreign reserve. Metalwork technologists could seek employment in large industries elsewhere like those that engaged in ship building, production of earth moving machines used in road construction firms and locomotive production industries. Specialised metalworkers can work as blacksmiths in jewellery companies, work in casting industries for producing moulds for industries such plastic, shoes, glass, aluminium etc. In fact,

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metalwork technology would eradicate poverty and creating self-employments in areas like welding, brazing, soldering, plating and many other trades found in Metal work technology.

(v)Woodwork Technology Education

Functional woodworker are those that can be absorbed by construction industries. They are needed in carrying out erection of wooden formwork for concrete constructions either in domestic, industrial, or roads constructions. Woodworkers could be employed in wood furnishing companies. Skillful wood tehnologists could establish his business venture in bed making, tables and chairs, cabinets making, panel doors and windows, erection of rafters for buildings etc.

Conclusion

From the discussions above, it is glaring that entrepreneurial and functional Technical Education is very relevant for the achievement of the objectives of vision 2020 in Nigeria. Strengthening training in Technical Education is surely giving the objectives of the Vision 2020 the attention it deserves, because employed labour force will certainly bring about socio-economic development of the country. Poverty and hunger will be eradicated and the country shall be counted among the twenty top economy's.

Suggestions

- The Federal Government should ensure that Technical Education programmes are expanded , increase both infrastructures and enrolment.
- Private organisations and wealthy individuals should be urged to make more investments in Technical Education.
- The Government should ensure that Technical Education is implemented in the Universal Basic Education (UBE).
- Authorities of institutions and trade centres should provide materials for carrying out trainings.
- Technical educators should ensure they impart on their trainee's necessary skills required to function.

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Entrepreneurial and Functional Technical Education as a Means of Achieving the National Objectives of Vision 2020 in Nigeria **Adamu Maidallah Abdullahi**

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