

Functional Technical Education: Pathway to Income and Job Opportunities in Nigeria

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Abstract

The study was designed to highlight the importance of technical education as education that prepared trainees to acquire practical skills, attitudes and knowledge competent enough to perform determine tasks for employment. The functions, areas of benefits, challenges, and way forward for technical education were explained and some recommendations were made which include, among others that Government at all level should provide standard and adequate instructional materials, tools, equipment and consumable material, adequate fund should be provided for technical education institutions for practical skills acquisition and adequate and qualified manpower should always be employ for technical education institutions.

Key Words: Functional Technical Education, Income, Job opportunities, Nigeria.

Introduction

Functional education pathway to incomes and job opportunities economically. The aim of education is to create wealth and reduce unemployment in the society and this can be achieved through Technical Education. Technical Education is the acquisition and application of knowledge and skills. According to Kaseem, Gazali & Mohammed (2012), Technical Education is the provision of skills, knowledge, attitude and values, needed for the place of work. This means that Technical Education is meant to prepare learners for careers based on manual and practical activities. Technical Education is defined by the National Teachers Institute (NTI, 2008) as the type of education that involves the use of the right instructional devices, methods, techniques and knowledge for developing skills. Okolocha (2010) observed that Technical Education is the bedrock of sustainable development of any nation. These explained that Technical Education is perceived in Nigeria and other parts of the world to be the greatest functional tool that can be used to achieve quick desirable changes or development of the nation's economic, political, sociological and human resources.

According to Uwaifo (2012), the aim of technical education is to train technical oriented personnel who are to be the initiators, facilitators and implementers of technologically development of a nation. In his own opinion, this training of its citizens on the need to be technologically literate would eventually lead to self-reliance and sustainability. He observed that technical education more than any other profession has direct impact on the development of the country. Okoye and Arimonu (2016) added that Technical Education is practical oriented education which makes it unique in its content and

approach thereby demanding special attention. Technical education has been identified as one of the most effective human resource development that needs to be embraced for rapid industrialization and sustainable technological development of any nation. It has been an integral part of national development in many societies because of its impact on productivity and economic development.

Therefore, Technical Education should be seen as functional instrument and mechanism that pathway to income and job opportunities for individuals to develop knowledge, skills and behaviors to create wealth and employment in the society. Unfortunately, despite all the glaring contributions of technical education in our country (Nigeria) is yet to accord this type of education the attention it deserves. This is one of the major reasons for the problems of unemployment, poverty and crimes in the society today. This paper is an attempt to explore some functions of technical education, areas and benefits of technical education, challenges and way forward for technical education, conclusion and recommendations.

Functional Technical Education

Functional education is that type of education that involves principle and practice. One of the goal of education as stipulated in National Policy on Education, (NPE,2013) is the development of appropriate skills, mental, physical, and social abilities and competencies to empower the individual to live in and contribute positively to the society. Therefore, the function of Technical Education according to National Commission for Colleges of Education (NCCE, 2022) is to provide Vocational Technical manpower with intellectual and professional background adequately and to make them adaptable to any changing situation in technological development not only in the country but also in the world at large. However, to support the above assertion, FRN (2013) observed that the functions of Vocational Technical Education shall be to:

- Provide trained manpower in the applied sciences and technology and business particularly at craft, advanced craft and technical levels.
- Provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development.
- Give training and impart the necessary skills to individual who shall be self-reliant economically.

Technical Education provides skills, knowledge and attitudes necessary for effective employment in the specific occupation. Technical Education has been identified as one of the most effective human resource development that needs to be embraced for rapid industrialization and sustainable technological development of any nation. It has been an integral part of national development in many societies because of its impact on productivity and as a tool for economic development in Nigeria. Functional technical education is designed towards.

- a. Sustainable development
- b. National economy development
- c. Manpower development

a) The aim of Sustainable Development is to meet the needs of people and their society. Jhingan (2014) defined sustainable development as meeting the needs of present generation without compromising the future generation. Sustainable development of a nation is achieved through impacting the necessary skills and attitude needed for the building of capacities for socioeconomic growth and development of a nation. It is seen as a multidimensional process, one that change the economy and the society of the countries in which it occurs. Sen, (2008) viewed sustainable development as a process of expanding the real freedoms that people enjoy. Sen, (2018) added that development requires the removal of major sources of un-freedom: poverty as well as tyranny, poor economic opportunities as well as systematic social depriving, neglect of public facilities and intolerance.

b) National Economy Development: Technical Education plays a crucial role in the social and economic development of a nation (King and Palmer, 2011). The development of a nation's economy is contingent on the quality of skilled human capital in the pool. Technical education provides student with life skills that will make them to be productive entrepreneurs as it engenders creative and innovative ideas; enlarges the economic pie and increases personal freedom. The business environment is changing at a fast pace due to the rapid emergence of technology and globalization. This has added to the increase in demand of valuable human skills necessary to respond to such drastic changes for economic progress. As a channel for entrepreneurial skill acquisition, technical education play the role of improving the economic situation of Nigeria through production and distribution of goods in different areas of specialization. This is achievable through the training of the students in different specialized fields. In the long run, this will help the students to establish their own enterprise as seen in China, Turkey, India, and Japan among other countries that have succeeded economically through vocational education. This is in line with the views of Lawal (2014) who opined that for a country to advance socially, economically and technologically, its citizens must be creative and productive with a majority becoming job creators rather than seekers. According to Sheieh, Wang and Chon (2014), lifelong Vocational Education will gradually improve the economic and social development of both the people and the country by making vocational education a channel for exploitation of human resources.

c) Manpower Development

In this 21st century characterized by knowledge explosion, the emphasis be on production of self-reliant citizens (Okorochoa, 2013). Technical education should empower the Nigerian youths with requisite employability skills that should be sustained. Technical education institutions should produce men and women who, at the end of their education should be able to put into use the skills they have acquired while in school. Technical education should also empower the people socially and economically so that they will be able to participate in the making of decision regarding policies affecting their lives, to make the citizens and nations to be self-reliant in the

production, distribution and consumption of goods and services. Ogundele, Akingbade and Akinlabi (2012) revealed that youth empowerment is influenced through acquired skill.

Principle of Functional Technical Education

Nwaokolo (2010), outlines the following as functional principles for technical education:

1. For technical education to be functional, the training should be directed using the equipment and facilities.
2. For technical education to be functional the individual should be trained directly and specifically in the thinking and manipulative habits required in the desired occupation.
3. The environment in which the individual is trained should in line with the environment he will eventually work in.
4. For technical education to be functional, it should permit each individual to develop his interest, aptitude and intelligence to the highest level possible.
5. For technical education to be functional, the trainers should have acquired experience in the application of such knowledge and skills they want their trainees to acquire.
6. Functional technical Education is designed for people who need it, want it and can benefit from it.
7. For functional technical education to be achieved, there is a minimum level of preparation needed in order to enable the trainees obtain and retain employment in that vocation and if the preparation is not attained up to that level, the occupation will neither benefit the trainee nor the society.

Areas of Benefits in Technical Education

Technical Education is an academic programme with various branches that can transform Nigeria into social and economic migrant nation. Its various courses are career oriented and thus, arms students and graduates with knowledge and skills to work in the chosen trade or profession. However, the following are the subject combinations of technical education courses and different skill benefits which include but not limited to:

- i. **Automobile Technology:** Auto-electricity; servicing; wheel balance alignment and greasing; vulcanizing and tyre pressure gauge, spraying painting; driving, panel beating, and battery charging
- ii. **Building Technology:** Block/bricklaying and concreting; block/bricklaying moulding; interlocking/kerb moulding and laying, pillar decoration and PoP; tiles laying; plumbing work
- iii. **Electrical/Electronic Technology:** Electrical installation; recoiling of electrical machine
- iv. **Metalwork Technology:** Forging; machining; welding and fabrication
- v. **Woodwork Technology:** Furniture making; cabinet making; carpentry and joinery; upholstery making.

Challenges Militating against Implementation of Functional Technical Education

It is very sad to note that Vocational Technical Education programmes in Nigeria is still facing some challenges despite all the money government put in to improve the situation. Students continue to graduate under ill-equipped programme to face the world of work. The current issues of concern that are facing technical education programme in Nigeria has been observed by Gowon (2010), Olaitan (2011), and Akinseinde (2010), as:

- a. Inadequate resources and facilities for practical training of students;
- b. Non-diversification of school curricula to cater for entrepreneurial skills and development;
Inadequate and improper administration of technical education by Administrators of the programme;
- c. Low awareness of the benefits of technical Education as an instrument for national development;
- d. Brain drain of technical education teachers to other professions with better wages and remuneration;
- e. Inadequate power supply to schools and Colleges for effective operations of machines and computers in the laboratories and workshops;
- f. Inadequate human and material resources in the schools and Colleges;
- g. Inadequate expertise and skilled manpower
- h. Inadequate collaboration between tertiary institutions and industries
- i. Poor quality preparation by technical teachers.

Way forward

- Provision of adequate resources and facilities for practical training of students;
- There is need to diversification of school curricula to cater for entrepreneurial skills and development;
- There is need for adequate and improper administration of technical education by administrators of the programme;
- Enlightenment on the benefits of technical education as an instrument for national development;
- Technical education teachers are also professional as other professions and should be paid better wages and remuneration;
- There is need for adequate power supply to schools and Colleges for effective operations of machines and computers in the laboratories and workshops;
- Provision of adequate human and material resources in the schools and Colleges;
- Provision adequate expertise and skilled manpower;
- There is need for adequate collaboration between tertiary institutions and industries;
- There is need for adequate preparation by technical teachers before teaching.

Conclusion

Education generally is the acquisition of knowledge and skills to improve people and their society and this can be done through functional technical education which

provides employment and a means of sustainable livelihood for people and to archive this, it requires adequate knowledge, skills, tools, equipment/machines and consumable materials etc.

Recommendations

From the study reviewed, the need for technical education cannot be over emphasized because it is the mechanism for income and job opportunities of a sustainable development and therefore, it is recommended that:

- i. Government at all level should provide standard and adequate instructional materials, tools, equipment and consumable material
- ii. Adequate fund should be provided for technical education institutions for practical skills
- iii. Adequate and qualified manpower should always be employ for technical education institutions
- iv. Improvement of collaborations between the tertiary institutions and industries

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