

Technology Education In a Democratic Nigeria.



NIGERIAN ASSOCIATION OF TEACHERS OF TECHNOLOGY

A CRITICAL ANALYSIS OF THE PHILOSOPHY AND CURRICULUM OF VOCATIONAL EDUCATION IN NIGERIA

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Abstract

It is observed that the curriculum of vocational education in Nigerian is not flexible enough to take care of the changing needs of the society and the nation at large. This paper therefore, established the need for a review of the philosophy and curriculum of vocational education in Nigeria, highlighted the problems inherent in the current philosophy and curriculum of vocational education in the country and suggested a format for the implementation that will accommodate democratic aspirations of various communities within the country. Conclusions are drawn and recommendations made to guide the teaching process in order to entrench the flexibility that will allow for changes and for modifications to accommodate local needs and inputs without much central administrative bottleneck. This is the best way to hasten the achievement of the aims and objectives of vocational education as stipulated in the national policy on education especially during this democratic governance.

Introduction

Western education was introduced in Nigeria; and for so many years administered by missionaries. The primary aim of the educators was to train clergymen or preachers and/or interpreters who could read, write and speak elementary English; serve as shop assistants; or tax collectors who should understand simple arithmetic. Government later got involved in education and worked with the missionaries and even after them, to find possible ways to promote the standard of education in the country and to train people to fill administrative posts and technical service, and other sensitive positions.

Today, education in Nigeria is still facing a number of problems that militates against the required development of the country. For one, the curriculum though "worded" to advance the country's economic, political and social systems has not been properly translated to benefit the people, secondly the products of the present educational system have little to offer the traditional occupations of the citizens. There is clearly a contradiction in the educational policy and its implementation, which has adversely affected the culture and economy of the nation. Adelaragbe, (1972) sees this problem as being the result of our reliance on British as well as the American system of education without adequate consideration of our culture and social background. This reliance has manifested in our values such as our mode of dressing, way of life and general cultural outlook; universities and other higher institutions in the country are no longer the reflection of the environment in which they are established. They are, rather, a mini-European environment.

Unfortunately, parents no longer think of making their children better farmers, blacksmiths, craftsmen, fishermen and so on but device ways to escape from the village to the overcrowded urban centres to look for "white collar jobs". This trend is equally harmful to the nation's economy. Nigeria like other developing countries is faced with the problems of unemployment and under utilization of "trained" manpower. Many young men and women graduates from universities and other higher institutions are roaming the streets without jobs. This is a complete negation of both African and Nigerian's aims of education that emphasized much on self-reliance. Yakub, (1997).

The educational sector in Nigeria is poorly funded. Primary, secondary and tertiary institutions suffer from poor financial management. This has resulted in the establishment of private schools that are established as a profitable venture rather than service oriented. The rich and highly placed public officers resort to sending their children to expensive schools in Nigeria and overseas (abroad). This makes them unconcerned about the predicament of education in Nigeria. But the concern of any patriotic Nigerian should be to improve education for genuine national development. A closer analysis of our current practices suggests the review of the curriculum of our entire educational system for more mobility.

Concept of Vocational Education and the Nigerian Experience

Vocational education is a form of organised educational programmes that are directly related to the preparation of individuals for a career in an occupation. It could also be defined as that portion of an individual's organised education that specifically prepares him for self-support; it includes technical, agricultural, home economics (home making), musical and commercial arts education. Fieldman, (1968) on the other hand viewed vocational education as that aspect of educational experience which helps a person discover, define and refine his talents and use them in working towards a career.

Vocational education as defined in National Policy on Education (NPE) is concerned not only with the manual skills involved in an occupation. It is concerned with all of the competencies needed to function effectively in employment. This includes the cognitive and psychomotor skills required in the particular occupation. It is also concerned about the attitudes and values of the worker the effective domain.

NPE (1981) gave implicit recognition to the type of vocational curriculum that would give birth to a creative nation, a nation capable of solving its economic and technological problems, and raising a self-reliant citizenry. The Federal Government recognizes vocational education as forming the basis for Nigeria's technological development and the feed for adequate provisions, to develop the necessary vocational skills. However, the success of any educational programme hinges on the availability of adequate number of professionally trained, committed, motivated, conscientious, skilled, creative and efficient classroom teachers "as no education can rise above the quality of its teachers. Akinpelu, (1986). However, there is lack of adequate skilled, professionally trained vocational teachers in

Nigeria. The current practice is such that once operational, the same programme is operated year-in, year-out without any review for modifications in order to maintain the dynamism with which vocational programmes are known.

Inherent Problems with the Philosophy and Curriculum of Vocational Education in Nigeria

Philosophy is defined as a conceptual framework for synthesis and evaluation that represents a system of values to serve as a basis for making decisions that project vocational education's future. Philosophy thus provides a framework for thinking about vocational education. It helps the vocational educator sort out competing alternatives and provides a basis for final course of action. It also provides guidelines for practice, contributing to decisions about programme development, selection of learning activities, curriculum, goals, resources utilization and identification of other essential needs and functions in vocational education.

The Nigerian philosophy of education therefore is based on the integration of individuals into a sound and effective citizen and equal educational opportunities for all citizens of the nation at all levels of education, both inside and outside the formal school system. For the philosophy to be in harmony with Nigeria's national objectives, it has to be geared toward self-realization, better human relationship, individual national consciousness, national unity, as well as social, cultural, economical, political, scientific and technological progress. National Policy on Education (NPE, 1981).B

Basically, the term "Curriculum" is the programme of the school meant for the learners. It is the means by which the school attempts to prepare people who will hopefully, make progress in the process of nation building. Curriculum could also be defined as a series of courses designed to achieve a particular educational goal. In vocational education, the goal is the preparation of individuals for employment in occupational areas of their choice and training. Activities in the curriculum are carried out in schools and the school in turn exists purposely to influence the society. For any meaningful development in any society, the curriculum must reflect the need and aspirations of that society. Therefore, the role of vocational education must be enhanced in Nigerian education curricula as contained in section 5, sub-section 29 of the National Policy on Education (NPE, 1998) that states in part:

The goals of vocational education shall be to:

- Provide trained manpower in the applied sciences, 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 individuals who shall be self-reliant economically.
- However, the curriculum of vocational education in Nigeria has a lot of constraints. Some of these constraints include the following:

- Vocational education is capital intensive, because of this, it receives less priority in terms of resource allocation and execution of programmes. Lack of knowledgeable policy makers and administrators of vocational education in government compounds the problem. The curriculum is not planned to accommodate changes of various types in economic, and/or political structures, socio-cultural patterns and technological demands. Selfishness and corruption of our government functionaries does not help at all in funding of vocational education. Olaitan, (1997) maintained that inadequate funding is often quoted as the root of all evils but serious lack of knowledgeable policy makers and administrators stands out as a more serious problem facing vocational education.

- Scarcity of human and non-human resources; that is, shortage and sometimes, complete absence of vocational teachers and facilities such as workshops, machines, tools and other infrastructures. Equipment provision and staff development have suffered immensely, especially since 1985 till now. Yet we hope to equal our peers in the comity of nations. Akaninwor (2001).

- Emphasis is placed more on the theoretical aspect to the detriment of the practical aspect that will lead to skill acquisition. This may be as a result of inadequate provision of enough facilities and insufficient quality trained vocational education teachers and instructors.

Format for the Implementation of Philosophy and Curriculum of Vocational Education

The need for effective curriculum implementation cannot be over-emphasized. The curriculum has to be implemented to ensure that its objectives are achieved. This means that appropriate resources for effective teaching and learning must be made available. Skill development in vocational education is predominantly workshop based. It is also a well-known fact that theoretical concepts must blend with practical concepts for vocational training to be meaningful. Vocational education in the new millennium requires that old habits must be replaced as far as instructional strategies are concerned. New instructional methods and equipment must be introduced in the training institutions.

- Observational mode of learning (imitation) which has been described by Bandura, (1960) as one of the fundamental means by which new modes of behaviour are acquired and existing ones modified should not be left out. Discovery learning according to Taba, (1962) takes place when students are not presented with subject matter in its final forms, but are rather required to organise by themselves, is also a wise option in vocational training. This approach is more fruitful when dealing with average and above average students who are prone to high cognitive and psychomotor performances. Expository teaching in which materials are organised is more profitably by the teacher and presented to the students in relatively final form is also helpful especially while dealing with below average students. Ausubel, (1963).

- Relevant instructional strategies to be adopted should include demonstration, simulation and individual / group projects for the students. Programmed instruction

that is another powerful tool for instruction should also be employed. The modular approach that emphasises the break down of abstract phenomena into units for effective unit - by - unit presentation to enhance adequate subject matter concretisation and conceptualisation is also a necessary option.

Computers have become permanent features in vocational training institutions and workshops in Asia, Europe and America. Some African and South American countries are also in the race, but Nigeria is yet to make headway. Technical drawing equipment such as drawing board, T-square, set square, etc have been relegated to the background in European and American schools due to the upsurge in computer graphics and computer aided design (CAD). The replication of Computer-Assisted Instruction (CAI) in Nigeria is quite imperative in view of its advantage.

Conclusion

The need to develop curricula that can guarantee the realisation of the goals and objectives of vocational education is now better felt than imagined. Since the primary goal of vocational education is to meet the manpower needs of the society, the curriculum should be geared toward societal needs. The students need to be adequately skilled in their various field of specialization to meet the challenges of the future. With the appropriate skills acquired in the training institutions, the students will be able to get involved in employment or self-employment for economic self-support after graduation.

Recommendations

In order to achieve the goals of vocational education as stipulated in the National Policy on Education, (1998). The following recommendations are made:

- The curriculum should be made flexible enough to accommodate changes of various types in political and economic structures, socio-cultural patterns, and technological demands. It can also be reviewed from time to time to meet the changes in demand of the society.

- Appropriate monitoring and supervisory scheme should be provided by Federal Ministry of Education to ensure that the curriculum is evaluated from time to time to ensure that its objective is being achieved.

- In planning the curriculum, emphasis should be more on the practical aspect whereby individuals will acquire skills that will enable them to be employed or become self-reliant thus, contributing to the development of their society and the nation at large.

- Non Governmental Organisations (NGO's) should collaborate with Ministry of Education in the planning and development of curricula for vocational education inline with the stipulation of the National Policy on Education. This will ensure that courses to be offered at the affected schools are relevant to the needs of the society as well as national economy.

- Government should ensure that those that are in-charge of policy formulation and administrators have in-depth knowledge of vocational education so that they will

formulate good policies that will be implemented for the development of vocational education.

The private sector, manufacturers and other employees have a very big role to play in vocational education. One quarter (¼) of the Education Tax Fund (ETF), contributed by companies should be kept in special account dedicated to vocational education. The money should be used to procure equipment, machines, tools and other infrastructural facilities as well as for the employment of qualified and experienced teachers. In addition the organised private sector should fund courses and research in curriculum for vocational education.

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