

AMENDING THE LAW ESTABLISHING POLYTECHNIC FOR NATIONAL TECHNOLOGY EMANCIPATION

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Abstract

Polytechnic education began to come to limelight when the decree establishing it was first promulgated in 1979 and later amended in 1993. It was established to run courses in various technical, technological and business programmes at National and Higher National Diploma levels. Although some technical/technological institutions had been in existence before the decree, it was actually in the late seventies that polytechnic education began to receive a significant level of attention. The colonial government deliberately sidelined and underrated technological education for reasons best known to them and that policy has continued till date. This paper reviews the operation of the polytechnic system from the colonial era to the current dispensation, highlighting the predicaments being faced by the various stakeholders in the system. The paper ends by postulating necessary reforms that need to be carried out in line with the National Policy on Education so as to make Nigeria a force to be reckoned with among the comity of technological advance nations.

Introduction

Since the time of the last administration of President Olusegun Obasanjo, to the present one, government seems to have realized the need to change its attitude toward polytechnic education. For the government to be taken seriously, present policies and law relating to the polytechnic system have to be reviewed.

It is an undisputable fact that the level of development of any nation depends largely on its technological achievement. Furthermore, the honour, respect and dignity a nation can be accorded in the comity of nations are proportional to its advancement in the field of science and technology. Yabani (1992) posited that technology has become a critical factor of economic and social development, as it is through the application of technology that natural resources of a nation could be transformed into goods and services for better life of the country's citizenry.

Abdulahi (1991) was of the opinion that any nation that seeks to make life of its citizens, easier by letting them do less practical task is doomed to economic stagnation and penury. Unless we are contented with being consumers and assemblers of industrial products and slaves to the industrialized world, we must seriously redirect our polytechnic education system to the production of high level and technically sound manpower.

Polytechnic education is a key sub sector in educational system for the technological emancipation of the nation (Afolayan, 2003). As vital as the sub sector is to the development of the nation, the present structure and the Acts establishing polytechnic are inimical to the realization of the goal of making Nigeria a force to be reckoned with among technologically advanced nations. According to Yakubu (2002), a polytechnic as a generic name refers to any non-university tertiary institution offering a variety of technical, technological and business programmes at the National and Higher National Diploma levels. Monotechnics and polytechnics are similar in their contents, processes and products except that the former are single-subject technological institutions for specialization programmes such as agriculture, survey, etc.

In view of great impediment the present Law establishing polytechnics have been to the development of the technological education, there is therefore urgent need to amend the Act with a view to removing those aspects that negate the effect of government investment in the sub sector. This paper therefore takes a critical look at both the past and prevailing situations in the polytechnic system and suggests necessary amendments to the Polytechnic Act of 1979 and 1993. This will no doubt alleviate the myriads of problems confronting the system and its products. Also, this will catapult the nation to its desired technological height.

Polytechnic Education System in Retrospect

During the pre-independence era, the British Colonial Government established a system of education that suited its whims and caprices. This merely produced men and women of letters who could only read, write and speak English language for the administration of British colony. Thus, the foundation was laid for Nigeria to remain mere consumers instead of creators of good and services. This foundation unfortunately, is being built upon by subsequent administrations.

Infact, according to Ajuzie (1999) and Amao Kehinde (2003), it was the Christian Missionaries in Nigeria that actually showed keen interest in education. This accounted for reasons why almost all the existing schools before and shortly after independence in 1960 were mission schools. The British Government merely acted as parasites by absorbing the products of these schools for colonial administration purposes without making serious efforts to develop Nigerian education system.

Yakubu (2002) revealed that it was around 1895 several years after the advent of western education in Nigeria that the first technical institution 'Hope Wadel Training Institution' in Calabar came into existence. Reverend Hope Wadel who was sponsored by Church of Scotland Mission (CSM) established it. The school was aimed at providing pre-vocational studies for boys and to train evangelists needed for the spread of the gospel of our Lord Jesus Christ. The school had three departments: secondary teacher training and industrial. The industrial department trained students in tailoring, carpentry etc. Later in 1898, the Delta Native Pastorate established the Boys High School Bonny, which trained people in vocational programmes such as typewriting, telegraphy, woodwork etc.

The colonial government on their part was bringing skilled manpower from its home government to man the sensitive technical areas as they are presently doing for the oil exploration in Niger Delta instead of training the indigenes. Apart from that, technical/technological schools were deliberately subjugated to 'Grammar Schools' so as to divert the interest of gifted and talented Nigerian away from it, as the situation is the case till now. In so doing, Nigeria will remain under the yoke of technologically advanced nations.

As global economic depression set in from 1930, similar to the one being experienced now. Recruitment of foreigners to man technical departments overstretched the national budget and thus the need to train indigenous manpower became obvious. Therefore various training institutions were established such as School of Survey, Oyo (1930), School of Agriculture in Zaria (1930), Technical Training School, in Lagos (1931), Post and Telecommunication School Lagos (1932), Veterinary School in Vom, Jos (1935), Nigeria Railway Training School in (1942). The Yaba Higher College was established in 1932 as the first tertiary educational institution in Nigeria to offer courses in Engineering, Medicine, Pharmacy, Teacher, Education, Surveying, Agriculture and Forestry leading to the award of Diploma. This school was later moved to Ibadan and transformed into University College in 1948. A new institution was later formed at Yaba to run courses mainly in engineering

(Civil, Mechanical and Electrical) as well as Building and Architecture. This was how Yaba College of Technology had its origin.

It was during the review of the second national development plan of 1970 – 1975 that the government noted shortage of manpower at intermediate level as major constraint in the execution of the development plan. Attention was then paid to polytechnic sector. For instance polytechnics were given autonomy with governing council instead of remaining under the direct supervision of ministry of education. The reform eventually led to the promulgation of Federal Polytechnic Decree of 1979, now polytechnic Act.

Current Situation in the Polytechnic System

The current goals of the polytechnic as stipulated by the National Policy on Education 4th Edition, 2004 Section 8 are:-

- 1) To provide full time and part-time courses of instruction and training in engineering, and other technologies, applied science and business management leading to the production of trained manpower.
- 2) To provide the technical knowledge and skill necessary for agricultural, industrial, commercial and economic development of Nigeria.
- 3) To give training and impart the necessary skills for the production of technicians, technologists and other skilled personnel who shall be enterprising and self-reliant.
- 4) To train people who can apply scientific knowledge to solve environmental problems for the convenience of man.
- 5) To give exposure on professional studies in the technologies

As at 2002, according to Yakubu (2002) there are 60 polytechnics and 38 monotechnics in the country with student population of about half a million. Polytechnic are expected attain an enrolment of at least 70:30 between Science/Technology and Art/Business programmes (Yakubu, 2002). No polytechnic in Nigeria has achieved this. A survey by the National Board for Technical Education in 2001 shows an enrolment ratio of 65:35 in favour of Art/Business against Science/Technology programme at the ND and HND levels. At the pre-ND level, the situation is even worse. The enrolment ratio was 79:21 in favour of pre-ND Business courses against pre-ND Science programmes. An inference that the polytechnic sub sector has lost its bearing of being centre for the training of the technical man power of the nation is a glaring truth. This made the NBTE to take drastic step at enforcing this ration in 2007.

The NBTE, which is vested with the power to maintain standard in the polytechnics, seems to be loaded with more responsibility. The body equally oversees many technical colleges scattered all over the nation, this no doubt is reducing its effective supervisory role in the polytechnic sub sector.

The conduct of practical for most courses in many polytechnics is pathetic. The NBTE Executive Secretary in his address at the last education submit in Abuja in 2006 revealed that the failure of some polytechnics to sail through the accreditation exercise was largely due to the low level and quality of practical being carried out in some core foundation courses. Some schools have virtually reduced practical hours to negligible proportion.

Furthermore, it is sad and disheartening that government statutory allocation constitutes over 90% of the sources of fund for all polytechnics except privately own institutions. This accounts for financial problems, in the polytechnic sector since government resources are limited. Since most polytechnic are in the rural areas internally generated revenue in next to nothing.

Another major setback the polytechnic sector is facing is the derogatory estimation of polytechnic education by the government and the society at large even within the polytechnic set up. Parents only allow their children to go to polytechnic after such kids had failed to secure admission into university. Some even prefer their wards to study in university courses of little or no benefit in the light of the present economic situation in the nation, rather than undergoing programmes in the polytechnics that will be of immense use to the family and the nation.

The products of polytechnic are being described as middle level manpower and they are made to remain in that middle status in their careers and profession irrespective of their length of service. For instance, while a university degree holder is called a lecturer (in tertiary institution including polytechnic) or engineer and can attain any position in both private and government establishment, his polytechnic counterpart is called instructor or technologist and has a bar placed on him which he cannot cross or post he cannot hold irrespective of his years of services. This accounts for declining interest in polytechnic education among young Nigerians. We hope that the removal of this bar as claimed by the former Minister of Education (Dr. Sam Egwu) will be a reality. Also, government allocation and patronage, accessibility to research grants and internationally sponsored projects are highly tilted in favour of university education. The present proliferation of higher institutions is a welcome development. But the disheartening aspect of it is the imbalance nature of the process; the number of university has risen to about 100 apart from applications on the waiting list. These schools are turning out thousands in many disciplines some of which are not relevant to the productive sector of the economy. However, little or no attention is being paid to the polytechnic system, which has the potential of transforming the nation's economy as well as life of its citizenry.

Another predicament is the high rate of unemployment among the polytechnic graduates. These classes of graduates are being rejected in the labour market notably in the banking industry and even within the polytechnic itself. The major unnoticed reason is that the dynamic nature of the modern day economy as well as the global technological advancement no longer have room for middle level manpower, but rather skilled high level manpower. Why then are we turning out products we do not need?

Structural Polices in the Polytechnic System that Need to be Reviewed

Some policies in the polytechnic system are great stumbling blocks to the growth of polytechnic education. The earlier they are uprooted the better.

Consequently, I hereby propose the following:

1. The polytechnic should be made to produce both middle level and higher-level manpower as it is currently being practiced in USA and Britain. This means that the polytechnics will change to degree awarding institutions.
2. The National Diploma Programme can be converted to 3 years National Technological Diploma (NTD) programme to cater for middle level manpower need while the HND programme be converted to 2 years Bachelor of Technology (B. Tech.) Holders of NTD and who passed at credit level and so wish can proceed to Bachelor of Technology programme or seek for job.
3. Where a polytechnic has adequate staff and infrastructural facilities, it should be allowed to run technological courses at postgraduate level.
4. Entry requirement for admission be raised to 5 credits passes of secondary school certificate examination just like the university requirements.

5. Appointment of chief executive should be made from within senior academic staff in the polytechnics system or those who had passed through the system as the case is with the colleges of education and university system.
6. Academic staff structure and conditions of service be made in line with what is obtained in the university system.
7. The polytechnic be made to draw up a conversion programme for multitude of secondary school leavers who have no science education background so as to enable them study science subjects that will make them eligible to pursue career in science and technology. Many of these students were not properly guided in their secondary schools or their school lack facilities for science subjects.
8. It has become imperative that national polytechnic commission be established for more effective supervision of the polytechnic in Nigeria. NABTEB can supervise the technical colleges.
9. Government should review all discriminatory policies against polytechnic graduates.
10. The policy makers at various levels within the polytechnic or on polytechnic matters ought to be those who had passed through the system, as it is the case for university and colleges of education. It is because this is not so at the moment that is why polytechnic sector is being despised, neglected and downgraded by people who neither appreciate nor know the importance of technological education.

Conclusion

The Law establishing the polytechnic, as it is presently is retrogressive, outdated, a form of neocolonialism as well as repressive to technological innovation. This accounts for reason why the polytechnic continue to witness brain drain and unappealing to both staff and students. The disheartening repercussions of this is that intelligent students as well as competent academic staff who could have been in the polytechnic system where their creative mind could be put to productive use are compelled to migrate to other places where things that will not address the national problems are given pre-eminence.

The tremendous contributions of the university system to the development of this nation are highly commendable. Nevertheless the nation and the generation yet unborn stand to benefit immensely when talented and gifted youths are encouraged to embrace polytechnic education instead of becoming members of secret cults, ethnic militant groups and area boys due to idleness and joblessness. Then inventions and innovations will flow out of our laboratories like living springs.

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