Repositioning of Polytechnics Educational System: A Stratagem For Economy Sustainability

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ABSTRACT

This paper reports the investigative research towards the need to repositioning polytechnic educational system for economy sustainability. We gathered data about the status of polytechnic education system using record inspection, and observation methods among stakeholders in polytechnic education in Nigeria. We discovered that Nigeria relies mostly on made in abroad products and services, because of shortage in supply of made in Nigeria good and services compare to demands across the nation; also several Nigeria graduates are job seekers rather than job creators, these people are competing for few available vacancies within government and private organizations. If polytechnic education system is repositioned the problem of Nigeria as regards to unemployment’s that resulted to several other problems threatening Nigeria existence will be a bygone issue, and the country will be less dependent on made in abroad good and services.

Keywords: Nigeria Economy, Made In Nigeria, Polytechnics Education, Job Seekers

1. INTRODUCTION

In recent times, Nigeria has been facing problems referred to as “economy recession”. Economic recession is a period of general economic decline and is typically accompanied by a drop in the stock market, an increase in unemployment, and a decline in the housing market. Generally, a recession is less severe than a depression. The blame for a recession generally falls on the federal leadership, often either the president himself, the head of the Federal Reserve, or the entire administration. This problem is not far fetch from the fact that majority of Nigerians depends on foreign goods and services to survive. Some of the courses of recessions are: High-interest rates; a stock market crash; Falling housing prices and sales. A slowdown in manufacturing orders; Massive swindles etc., (Paul Mckinney (n.d) & Kimberly Amadeo (2016)).
The role and importance of Polytechnic education in Nigeria cannot be overemphasized and should serve as a panacea to some economic problems. The administration of current government aims at reducing unemployment through entrepreneurial development will be realized soon if Polytechnic education is given the priority it deserves. In other for Nigeria to be out of the so called recession, there is every reason for us to be self-dependent through entrepreneurial development that will aid job creation and made in Nigeria good and services. In our own holistic approach to these problems, re-engineering polytechnic education is the solution.

The concept of education in the Nigerian context has become somewhat ambiguous as the stakeholders have deviated from main reason for establishments of particular educational system. This accounts for many woes hampering the development of the Nigeria as a nation. Educationists have a dispassionate overview of what a particular educational system is all about.

University education, according to educationists, is a process of learning designed to produce graduates with theoretical understanding and competence in various disciplines, while polytechnic education places considerable emphasis on practical training and technological know-how. In the light of this polytechnic education was, in the main, geared towards delivering sound technical skills acquisition, and its courses designed to be more practical than the theory-oriented courses offered in universities. Polytechnics play a vital role in the educational, scientific and technological progress of Nigeria. They are established to train and produce the technical manpower necessary for the execution of the Nation’s development plans, goals and strategies. Polytechnics offer highly technical, scientific as well as research-oriented education to students. It is disheartening to observe today that these citadels of learning which were once cynosure of all eyes in developed economies of the world, has been relegated to the background in Nigeria (Dibu Ojerinde (2015); Ruth Adekunle (2016)).

The bedrock for technical emancipation for Nigeria is centered on Polytechnics education, polytechnics should be enabled to start offering highly technical, scientific as well as research-oriented education to students, as this will enhance job creation and entrepreneurship. The focus of this work is to investigate the level of polytechnic educations commitment towards meeting it mandates which includes; provides full or part-time courses of instruction and training in engineering, other technologies, applied sciences, business management, leading to the production of trained manpower; provide technical knowledge and skills necessary for agricultural, industrial, commercial and economic development of Nigeria; and give training and impart the necessary skills for the production of technicians, technologists, and other skilled personnel who shall be enterprising and self-reliant (nbte 2011).

We conducted an investigative research on attitude of stakeholders towards polytechnic education, level of available resources, and proposed recommendations towards the re-engineering of the polytechnics education in Nigeria to meet it mandates rather than comparing it with the university educational system.
2. LITERATURE REVIEW

2.1 Stakeholders in Polytechnic Education in Nigeria

2.1.1 Federal Ministry of Education
The Federal Ministry of Education is a part of the Federal Ministries of Nigeria that directs education in Nigeria. Its functions include: Formulating a national policy on education; Collecting and collating data for purposes of educational planning and financing; Maintaining uniform standards of education throughout the country; Controlling the quality of education in the country through the supervisory role of the Inspectorate Services Department within the Ministry; Harmonizing educational policies and procedures of all the states of the federation through the instrumentality of the National Council on Education; Effecting co-operation in educational matters on an international scale; Developing curricula and syllabuses at the national level in conjunction with other bodies.

2.1.2 National Board for Technical Education (NBTE), Kaduna
The National Board for Technical Education, otherwise known as NBTE, is a board of education which supervises, regulates and oversees educational programmes offered by technical institutions at secondary, polytechnic and monotechnic levels through an accreditation process. It was established by Act No 9 of 11 July 1977 with the aim of "providing standardized minimum guide curricula for Technical and Vocational Education and Training". (www.nbte.gov)

2.1.3 TETFUND
Tertiary Education Trust Fund (TETFund) was established as an intervention agency under the TETFund ACT - Tertiary Education Trust Fund (Establishment, etc) Act, 2011; charged with the responsibility for managing, disbursing and monitoring the education tax to public tertiary institutions in Nigeria. The mandate of the Fund as provided in Section 7(1)(a) to (e) of the TETFUND ACT, 2011 is to administer and disburse the amount in the Fund to Federal and State tertiary educational institutions, specifically for the provision and maintenance of the following: Essential physical infrastructure for teaching and learning; Instructional material and equipment; Research and publication; Academic staff training and development; Any other need which, in the opinion of the Board of Trustees, is critical and essential for the improvement of quality and maintenance of standards in the higher educational institutions. www.tetfund.gov.ng

2.2 Benefit of Polytechnic Education
The polytechnic education is important because it emphasizes practice-based learning and the acquisition of certain life skills. Polytechnic education equips diplomates with life skills needed to be independent as well as guarantee self-employment and job creation (Adekunle 2016). If policy on technical skills is adopted, the polytechnic education would help in providing manpower to the nation’s industries and firms and consequently reducing dependence on foreign expertise for industrial development, Ojerinde 2015.
3. RESEARCH METHODS AND DESIGN

We gathered data through observation, and record inspection. Data obtained are presented as follows:

Table 1. Accredited Polytechnic in Nigeria

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>25</td>
</tr>
<tr>
<td>State</td>
<td>41</td>
</tr>
<tr>
<td>Private</td>
<td>42</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
</tr>
</tbody>
</table>

Source: www.nbte.gov.ng

![Accredited Polytechnic In NIGERIA](image)

Figure 1. Statistics of Polytechnics in Nigeria

Table 2. Application Statistics by Faculty

<table>
<thead>
<tr>
<th>Year</th>
<th>Technical Related Courses</th>
<th>Social Sciences Courses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>9618</td>
<td>10212</td>
<td>19830</td>
</tr>
<tr>
<td>2012</td>
<td>13180</td>
<td>12892</td>
<td>26072</td>
</tr>
<tr>
<td>2013</td>
<td>19452</td>
<td>19131</td>
<td>38583</td>
</tr>
<tr>
<td>2014</td>
<td>16510</td>
<td>13323</td>
<td>29833</td>
</tr>
<tr>
<td>2015</td>
<td>17495</td>
<td>12854</td>
<td>30349</td>
</tr>
</tbody>
</table>

Source: www.jamb.gov.ng
Figure 2. Application Statistics in Polytechnics

Table 3. Nigeria Budgetary allocation to education 2010-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Budget</th>
<th>Education</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>3,931,265,321,767</td>
<td>2.35E+11</td>
<td>5.9726317</td>
</tr>
<tr>
<td>2011</td>
<td>3,571,815,678,134</td>
<td>3.06E+11</td>
<td>8.5754705</td>
</tr>
<tr>
<td>2012</td>
<td>3,945,036,061,331</td>
<td>4E+11</td>
<td>10.143127</td>
</tr>
<tr>
<td>2013</td>
<td>4,987,220,425,601</td>
<td>4.27E+11</td>
<td>8.5524594</td>
</tr>
<tr>
<td>2014</td>
<td>4,642,960,000,000</td>
<td>4.93E+11</td>
<td>10.618226</td>
</tr>
<tr>
<td>2015</td>
<td>4,493,363,957,158</td>
<td>3.92E+11</td>
<td>8.7284272</td>
</tr>
</tbody>
</table>

Source: Scachy 2015, nairametric 2016

Figure 3. Budget Allocation to Education 2009-2016
4. FINDINGS

Findings from data gathered shows that:
- Total number of accredited polytechnics in Nigeria is one hundred and eight, sixty-one percent (61%) own by government at state and federal level, and forty-two owned by private.
- Majority of these polytechnics is facing the following problems:
  - Shortage of Academic Staff: There are academic staff shortages in all areas, particularly in the critical areas of science and technology. Over 60% of academic staff in the Nigerian polytechnic system is in the category of lecturer II and below;
  - Inadequate Budgetary Allocations: The educational system suffers from deteriorating quality and insufficient investment to keep pace with the country's need for technical education. The United Nations Educational and Scientific and Cultural Organisation (UNESCO) recommends dedicating at least 26% of a nation’s annual budget to the education sector. Many countries fail to meet this benchmark, including Nigeria. Budget allocation to education over the years deviate greatly from the UNESCO recommendation.
  - Overcrowded: Overcrowded polytechnic educational institutions result in high student-teacher ratios which in turn affect effective teaching and learning towards acquiring technical skills. Overcrowded classrooms have a detrimental effect on the learning potential of students, and wears down both the teaching staff and the educational facilities.
  - The carrying capacity of Nigerian polytechnic is being significantly overstretched, and still the majority of students who apply to study are not granted admission.
  - Enrolment pattern was contrary to the national policy on technical education which stipulates that enrolment into the academic programmes in the polytechnic must be in the ratio of 70:30 in favor of science and technology based programmes.

4.1 Implications of the findings
The implication of these findings is that because of the neglect of polytechnic educational generally and discrimination of polytechnic education in particular: Nigeria will continue to depend on country like India, China, America, and Britain for supply of good and services that we can conveniently produce by ourselves; and unemployment will be at increase, since our youths and their parent prefer sending their children to university to learn social sciences, Arts, and humanities courses. Hence results to shortage in technical knowledge and skill to creation and promote entrepreneurship; also Nigeria will be unable to migrate from a third world nation to meet and compare with advance nations of the world.

4.2 Recommended Solution
We proposed the following recommendation to revive the Nigeria polytechnic education system towards meeting it original mandate and policy for it establishment.
- Expansion of Infrastructure: The existing polytechnics should be expanded with corresponding infrastructure and facilities to suit the teeming population of prospective students.

- Enforce Quality Assurance for Education: A wide range of Quality Assurance bodies and services at all levels must be put in place to provide school monitoring and inspection services, and to maintain Minimum Academic Standards (MAS), and make sure that academic achievements are constantly monitored, tracked and analyzed, in order for the necessary corrective steps to be taken.

- Creation, Adoption, and Strengthen Alternative Method of teaching and learning: To address the issues of lack of learning space, reduce the incidence of overcrowded classrooms and to make polytechnic education more accessible for all, alternative ways of delivering education should be applied. Blended learning approach would be instrumental here, to enable online learning.

- Prioritize Budgetary Allowance for Education: Increasing the amount of money allocated to the polytechnic education sector if properly spend will solve all its current problems. However, high quality education is not achievable without sufficient funding. The government must strive to meet the UNESCO recommendation and increase the annual budgetary allowance to 26% of the total federal budget.

- Make Teaching More Attractive as a Profession in Polytechnic sector: Teaching facilities and materials must be installed, upgraded and updated where necessary. Once the physical infrastructure and the teaching aids are in place, more individuals will naturally see teaching as a desirable profession to pursue. Job satisfaction is an important driving force for any employee, and teachers naturally wish to witness the positive impact of their efforts in their students. In addition, the welfare of the academic and non-academic staff should be improved, by not only increasing salaries, but more importantly, ensuring the timely and consistent disbursement of these salaries. This would eliminate the strike actions by teachers’ unions, such as ASUP (Academic Staff Union of Polytechnics). A strategy must be developed for the effective training and development of polytechnic teachers.

- Curriculum Reconstruction: The teaching curriculum of polytechnics must be realigned to make it more relevant to the needs and status of the Nigerian society. The curriculum should also be evaluated frequently, and updates made, as and when necessary.

- Removing Dichotomy among the staffs and graduate of Polytechnics: Dichotomy issues between university and polytechnic graduate must be totally removed to enhance enrolment in polytechnic across the nation. Also the polytechnic teachers must not be seen as inferior to their counterpart in universities, government must put in place an updated polytechnic act to include new nomenclature for lecturers as their counterpart in the university. The terminal level in the polytechnics academic staff should be professor instead of chief lecturer.

- Enrolment pattern to the national policy on technical education which stipulates that enrolment into the academic programmes in the polytechnic must be in the ratio of 70:30 in favor of science and technology based programmes must be implemented as a matter of urgency.
5. CONCLUSION

There is no doubt that the polytechnics education sector is facing enormous challenges. The effective resolution of these challenges is a pre-condition for our nation's development. Repositioning of Polytechnic education is important if Nigeria must succeed in its quest for economic diversification. The essence of Polytechnic Education is to train students in technical areas where they can graduate and be self-employed, and also create employment for others. Diversification of Polytechnic education is a means to an end out of the present dependent on made in abroad goods and services. Polytechnics education is a tool and strategy for securing employment and emancipation of people through the provision and acquiring of necessary knowledge and skills. There is need for strategic investment towards improving the teaching and learning environment as well as the quality of lecturers in the polytechnics sector.

REFERENCES