

The Effects of the Discrimination between Polytechnic Education and University Education on the Overall Technological Development of Nigeria

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Abstract

Education is the bedrock of every nation and no aspect as well as level of it ought to be neglected so as to engender all round national development. Polytechnic Education in Nigeria today offers about 70% of technological programmes which are great veritable tools for nation building and overall development of our country Nigeria. On the contrary Polytechnic Education over the years had suffered serious neglect and great discrimination against its graduates as well as certificate, Higher National Diploma (HND) in favour of its counterpart, the University graduates and certificate, Bachelor of Science (B.Sc) or Bachelor of Engineering (B.Eng). This paper therefore seek to eliminate the discrimination between Polytechnic Education and University Education in Nigeria as well as the effects of discrimination on the nation's economic/technological life so as to guarantee a bright future for it technologically through appropriate recommendations.

Keywords: Polytechnic, University, Education, Discrimination, Degree, Diploma, Development, Technology

1. Introduction

Polytechnics and Universities are regarded as the highest levels of tertiary institutions in Nigeria. The Polytechnics award Higher National Diploma (HND) while the Universities awards Bachelors of the appropriate field of study such as science, arts, engineering etc. Both Polytechnics and Universities by way of curriculum are designed to focus on different levels of manpower training and development. This delineation of duties and purpose had created a systemic deficiency in the overall life of the Polytechnic education and its products as well as certificates, (HND). While the Polytechnics graduates are seen as mere Diploma holders. The University graduates are honourably seen and called degree holders. Until recently entry qualification requirements for Polytechnic were made to be lower than those of the universities, making the Polytechnic to appear lower than the Universities. Polytechnics are designed majorly for technical education. Technical Education is defined as that aspect of education, which leads to the acquisition of practical and applied skills as well as basic and scientific knowledge, Obimah (2007). UNESCO (1978), as cited by Ekpenyong (2001), defines Technical Education as "Education designed at upper secondary and lower tertiary levels to prepare middle level personnel technicians, middle management etc and at university level to prepare engineers and technologists for higher management positions". This again highlights the disparity between Polytechnic education and University education. The general public regards technical education as somewhat inferior to other types of education due to the fact that course structure and contents in some of our technical institutions rely mainly on a model based on foreign technical environments, (Obimah, (2007).

According to Toby (2000) as cited by Imonigie and omozuawo (2007), technical education is important to the Nation as a whole because it contributes to our national economic welfare, social mobility and national security. It is therefore imperative to urgently highlight areas of discrimination against Polytechnic education in favour of University education with a view to addressing them seriously in order to engender overall national growth and development of our country Nigeria in the nearest future.

2. Areas Of Disparity Between Polytechnic And University Education And Their Effects.

2.1 Education Policy Goal.

The Polytechnic education had been wrongfully designed to train middle level management manpower as it highest manpower level or category that is technicians and technologist, while the universities train manpower for higher management positions. This is evident in the fact that Polytechnics graduates cannot proceeds directly on a master's degree programme whether of distinction grade or not. He / She had to be subjected to a minimum of another one year of post graduate diploma course before proceeding for a master's degree programme, as against the university B.Sc./B.Eng. holder proceeding directly to master's degree programme. One of the effects of this discrimination is emotional trauma on the part of the Polytechnic graduate as well as loss of self confidence/pride that is fundamental for creativity and innovations. According to Atomatofa (2007), the relevance of curriculum and courses taught in technical school need to be checked and reviewed from time to time to meet the present technological needs and realities of our nation. On the contrary the policy makers who

happen to be products of the University for sake of ungodly pride they enjoy in the Polytechnic and University education disparity had failed to review the Polytechnic policy trust and curricula in all their perceived areas of deficiencies as well as enacting enabling laws to ensure that all the Polytechnics both state and federal are properly funded and equipped to enable them metamorphose to the university status across the country and not just a few of them as it is today for the overall technological development and growth of our country Nigeria.

2.2 Deplorable Attitude Of Employee And The General Public Towards Polytechnic Graduates.

Polytechnic graduates are treated by employers as second fiddle to the University graduates. According to Imonigie and Omozuawo (2007), employers and the general public tend to relegate Polytechnic graduates in favour of University graduates to the extent that, it had began to affect our technological development/advancement with respect to the roles of the various cadres of technical personnel in our technological growth. The employers believe Polytechnic education is for those who are not intelligent enough to do academic work. Moreover, lower salaries are paid to technical staff of Polytechnic background as against higher salaries for University graduates.

2.3 Headship Of Departments/Unit.

Polytechnic graduates are made to serve or work under University graduates as head of departments or units as the case may be. Polytechnic graduates (HND) holders, even in institutions that turned them out such as the various states and federal government owned Polytechnics cannot head a department where there is an equivalent B.Sc/ B.Eng. holder let alone becoming the Rector of such institutions, except after further studies in a university. This alone leaves a big 'WHY' question to be answered. It means even in their own supposed 'home' they are not still accepted or recognized. This kind of ill treatment given to the Polytechnic graduates (HND) holders can kill their morale for work and in turn pose serious danger for national development and growth.

2.4 Employment Cadre

In civil service, while the University graduate is employed as an Administrator, the polytechnic graduate is employed as a Higher Executive Officer. Also, in the Academia, a university graduate is employed as a lecturer and the polytechnic graduate is employed as an instructor or technologist. These are demeaning ways by which the Polytechnic graduates (HND) holders have been discriminated upon.

2.5 Government Policy On Highest Grade Attainable For Polytechnic Graduates (HND) Holders As Compared With The University (B.Sc./B.Eng.) Counterparts.

The government policy on highest grade level that a Polytechnic graduate can attain before retirement as of today, using the public institutions like Polytechnics as an example, is 13 and 14 respectively for the Polytechnic graduates (HND) holders in non academic and academic department respectively while for the B.Sc. holders, it is 14 and 15 respectively for those in the non academic and academic departments respectively (NBTE 2009). This will definitely affect the psyche of the Polytechnic graduate negatively and in turn will negatively impacts on his / her productivity.

2.6 Nomenclature/Hierarchy Arrangement By Professional Bodies

Polytechnic graduates (HND) holders are often times given profession titles as well as hierarchy arrangement suggestive of inferiority to the University graduates (B.Sc./B.Eng) holders by professional bodies. For example a COREN registered Polytechnic graduate in the Engineering family is referred to as Engineering Technologist while his University counterpart is proudly called Engineer. Also in the hierarchy arrangement the Polytechnic graduate is placed second to the University graduate. Registration procedures in term of stages of examinations taken, also suggest Polytechnic education /certificate (HND) inferiority university education/certificate (B.Sc./B.Eng). These discriminations do not in any way encourage the overall rapid growth of all the members of the various professional families such as Engineering, that is needed to fast track the kind of development that our nation Nigeria needs for technological growth.

2.7 Government Attitude Towards Funding Polytechnic As Compared To University

Government attitude towards polytechnic education is quite discriminatory in favour of university education. This is evident in the kind of pronounced infrastructural development work you see in our Universities as compared to the polytechnics. This will only make the Polytechnics trail from behind at slow pace and in turn drag the nation's technological growth behind at slow pace also. The discriminatory allocation of funds by the Education Trust Fund (ETF), an organ of the Federal government set up to assist in funding tertiary institutions in Nigeria from 1999 to 2010 is clearly in favour of university education as against polytechnic education as can be seen from the table 4 below.

Table 1: Higher Education Institution – Education Trust Fund (ETF) Allocations 1999 – 2010

Year	Universities (₦)	Polytechnics (₦)
1999	2,124,999,960.12	1,087,209,288.00
2000	1,050,000,000.00	450,000,000.00
2001	1,794,128,000.00	967,500,000.00
2002	3,243,500,000.00	1,642,500,000.00
2003	1,440,500,000.00	634,500,000.00
2004	1,515,750,000.00	722,750,000.00
2005	2,025,000,000.00	1,657,500,000.00
2006	2,475,000,000.00	1,302,000,000.00
2007	3,659,000,000.00	1,430,000,000.00
2008	7,112,000,000.00	3,611,520,000.00
2009	6,858,000,000.00	3,472,320,000.00
2010	16,672,700,000.00	9,055,000,000.00
Total	49,970,577,960.12	26,032,799,288.00

(Jamila S. 2010)

3. Students Preference for Universities Education To Polytechnic Education as a Direct Response To The Discrimination Between Polytechnic Education And University Education in Nigeria.

The ill treatment given to Polytechnic graduates by the government, employers of labour and the general public in Nigeria has led to a negative feedback from prospective candidate seeking admission into tertiary institutions in Nigeria. The young secondary school leavers now prefer to seek admission into the universities since the polytechnic are now seen and treated as second fiddle by the government, employers of labour and the general public. The danger here is that since nobody wants to be seen and treated as a second class citizen, a time may come where and when the Polytechnics will be forced into extinction as a result of lack of patronage by candidates or prospective students. God forbid, since the polytechnic are the primary bedrock of technology incubation and development, if they go into extinction it therefore means that, the Country will be set back technologically in a manner that all the perceived merits in the arguments and in the eyes of those who see the disparity as wholesome and appropriate will not be able to justify. A little picture of prospective students preference when choosing which of the category of tertiary institution to enroll for is shown in table 2, table 3 and table 4 below. It could be clearly seen from the tables, the prospective students preference for the Universities as against the Polytechnics.

Table 2: Higher Education Institutions – Summary Of Students Enrolment

Institutions: 2005/2006	Male	Female	Male + Female
Universities	494822	285179	780001
Mono/Polytechnics	198455	143979	332434

(Jamila S. 2010)

Table 3: Higher Education Institutions – Summary Of Students Enrolment

Institutions 2008/2009	Male	Female	Male + Female
Universities			1014337
Mono/Polytechnics	183717	127864	311581

(Jamila S. 2010)

Table 4: Higher Education Institutions Students Preference – Matriculation Examination

Years	UME	MPCE	Total
2007	911679	167836	1079515
2008	1192050	310022	1502072
2009	1184651	342908	1527559
2010	1330531	45140	1375671

(Jamila S. 2010)

UME- Universities Matriculation Examination

MPCE- Monotechnics, Polytechnics & Colleges of Education Matriculation Examination

4. Recommendations To Eliminate The Discrimination Between Polytechnic Education and University Education As Well As Its Effects.

- i Taking urgent pragmatic steps to correcting the disparity between Polytechnic education and University education programmes by way of amending the appropriate sections of the nations Education Policy/Laws to equate Polytechnic education and University education programmes and their products in all ramification.
- ii Emphasizing practical skills rather than eloquence of speech rendered as answers to mere theoretical questions during job interviews that has to do with technological practice.
- iii Emphasizing individual abilities i.e what the individual can do rather than names of certificates/academic institutions.
- iv Adequate funding of Polytechnic education for practical teaching , learning, research and development , training of staff, procurement of state of the art equipment, infrastructures such as workshop and laboratories, classrooms, libraries , roads etc.
- v Encouraging industry specific need sponsored researches rather than ambiguous and abstract researches not tailored to any particular industry need in the Polytechnics and the Universities.
- vi Establishment of technological parks for entrepreneurial studies in all the Polytechnics and Universities across our country, Nigeria.
- vii Addressing squarely the power supply situation of the country, since there is hardly any industry/institution that can operate without adequate power supply.
- viii. Corruption should be tackled headlong in order to allow for judicious and honest use of resources both in our higher institutions as well as in the nation's social/political life for national development and growth.
- ix Matching the right number of students to the right number of teachers/lecturers/instructors as well as the right size of classroom/workshop/laboratory/equipment as stipulated by the relevant sections of the education policy/laws.

5. Conclusion

The ill treatment given to Polytechnic graduates by the government, employers of labour and the general public in Nigeria should be immediately stopped because a dispirited person(s) cannot be adequately focused to give his/her best particularly knowing that he/she is not appreciated by his/her immediate society and this will only continue to negatively impact on our dear nation technologically. An end to the Polytechnic and University disparity will bring about the balancing of students enrolment among all the tiers of the tertiary institutions in the country particularly the Polytechnics and the universities and will help in reducing the unnecessary pressure these influx of students to the universities put on the few infrastructures in the universities. The danger of possible extinction of the polytechnics as a result of lack of patronage by candidates or prospective students will no longer be there but will rather create a stronger educational platform that will complement what the sister institution i.e the universities are doing technologically to make our country Nigeria a better place.

Since education is the key to national growth and development, it is important for all levels and types of it to be encouraged and taken seriously. There shouldn't be any form of dichotomy or discrimination against the Polytechnic education (HND) holders or University education (B.Sc./B.Eng.) holders since they all have their roles and places in nation building. Our country Nigeria will be better for it technologically if the few recommendations given above are taken seriously or followed religiously. This will guarantee a bright technological future for our country Nigeria.

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Reference

- Atomatofa, R.O. (2007): "The Training and Development of Science and Technology Teachers in Nigeria", *A Conference Paper Presented at 1st Annual Conference of the Association for Engineering and Economic Development*.
- Ekpenyong, L.E. (2001): "Foundations of Vocational Education", *New Directions and Approaches*, Benin City; Supreme Ideal Publishers Int. Ltd.
- Imonigie, P.S. and Omozuawo M.B. (2007): "Repositioning Technical Education for the 21st Century Challenges in Nigeria", *Seminar Paper at the 4th Annual National Conference of Association for Encouraging Qualitative Education in Nigeria*.
- Jamila S. (2010): *Higher Education Statistics - Nigeria Experience In Data Collection. Paper Presented At The UNESCO Institute Of Statistics Workshop On Education Statistics In Anglophone Countries, Windhoek 17th – 21st October 2010*

NBTE (2009): Transitional Modalities for the Implementation of CONTESS 15 in Federal Polytechnics.
UNESCO (1978): Practical Guide to International Technologies in the Field of Technical and Vocational Education (Prelim Ed.), Paris: UNESCO.
Toby, T.U. (2000): “Essentials of Management and Leadership in Vocational and Technical Education” Nigerian Association of Technology Teachers (NATT), Jos, 2nd Edition.

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