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Multi-Dimensional National Policies' Effects on the Nigeria Polytechnic System

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Abstract

The polytechnics were established to produce a high-level technical skilled workforce for the nation's industrial development. But over the years, the polytechnic system in Nigeria has suffered neglect from funding to different forms of institutional assault because of national policies from various agencies of the Government. This research work considered some of these policies and their effects on the Polytechnic system in Nigeria, particularly on the students and general enrolment. Data was gotten from regulatory agencies and questionnaires were administered randomly to past and present students of the polytechnics. Statistical analysis was also employed to check the trend, and it was found that the damaging effect of these policies on the polytechnic system has led to a reduction in enrolment, discrimination against the system and her products and a large significant drop in high-level technical skill manpower for the nation. A model is also proposed to create a seamless transition in learning that makes progression meaningful and stops the trend and promotes competition among our scholars.

Keywords: Education, Policy, Polytechnic, University

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Introduction

Education transcends the four walls of schools. It can be formal, informal or non-formal. (Fafunwa, 2018). Education is the process of training a man to fulfil his aim by exercising all faculties to the fullest extent as a member of society (Aristotle, 384-322 BCE). Socrates sees education as a means of bringing out the ideas of universal validity which are latent in the mind of man (Shahanaz, 2019)

Tertiary education is the pinnacle of academic learning in any society. In some climes, it is the only non-compulsory level in the educational system. It forms the problem-solving engine room of the nation. Challenges and problems in society are brought to higher institutions for solutions. Over the years, tertiary institutions had risen to the challenge and given far-reaching solutions which had impacted our lives. In Nigeria, three arms of tertiary Education are the universities, polytechnics, and colleges of Education (Taiwo 1980). Each has a definite mandate and all with one goal, to educate the Nigerian child. The conventional universities provide general education with more emphasis on theories and policy formulations while the polytechnics and colleges of education provide specialised education in TVET and education respectively.

Technical and Vocational Education and Training (TVET) was very popular in Nigeria in the pre-independence era with the founding of Yaba Higher College, Yaba (now known as Yaba College of Technology, Yaba) in 1947, which became the first tertiary institution in Nigeria. TVET became a platform for skill acquisitions to meet the expectation of industries springing up within the country and to mitigate in tackling the issue of unemployment (Fafunwa, 2018). The core objective of TVET is the advancement of TVET, technology transfer, skills acquisition, and development to enhance the socio-economic progress of the country (FME, 1977, Saint, *et. al*., 2003, Odukoya, *et. al*., 2018). Polytechnic Education, being the peak of TVET, plays a critical role in the human resource and capacity development of any country by creating a skilled workforce, enhancing industrial productivity, and improving the quality of life (Stephen, 2015, Ciroma, 2016, Mohamedbhai, 2017, Agu, *et. al*., 2017). The acceptance of TVET continued till the late 70s when the World Bank raised some concerns for Africa, that their studies on the rate of returns on education came up with higher returns on general Education and lower returns on TVET for Africans. The purported study was done for Africa only. Within the next decade, the World Bank reduced lending for TVET development and enhancement in Africa by up to 40% compared to the rest of the world (Bennell & Segerstrom, 1998).

This singular action of the World Bank made policymakers in Nigeria focus significantly on general (university) education at the tertiary level to the detriment of other arms of higher education (Aluede, et. al., 2012). The TVET was the worst hit, with the campaign of calumny against TVET, under-funding, and open and closed attacks on the Polytechnic system and her products (Jen, 2004; Idiata, *et. al*., 2008). Over the years, various policies were released that led to the state of education in Nigeria today. Five of such recent policies are examined and given a critical assessment to see their impact on the polytechnic system, and TVET in general in Nigeria. The first of these policies is from the National Universities Commission (NUC) which stipulates a minimum period of three (3) years to obtain a first degree irrespective of your past formal learning and training. The second, also from NUC, is that anyone with an HND background without a BSc cannot lecture in a Nigerian university even with a PhD. The third policy is from COREN that states that from 2021, HND holders would be required to have MSc before registration as an Engineer. The fourth policy, though unwritten but verified, is the refusal from all universities within the country to accept papers published in conferences and journals domiciled in Nigerian Polytechnics by their academics. And lastly, the conversion of polytechnics into universities.

Material and Methods

Material

Questionnaires were drawn on each of the policies and distributed randomly among over 500 people (100 parents, 400 polytechnic graduates and 22 lecturers from universities) which including present and past students, parents, and employers. Each of these national written or unwritten policies was examined to determine their impact on TVET in general and the Polytechnic system in particular.

Policy 1: A minimum period of three (3) years to obtain the first degree

In the Minimum Academic Standard issued by the NUC to all universities in Nigeria in April 2007, on the admission requirements for undergraduates and signed by the then Executive Secretary, Prof Julius Okojie, it stipulated three (3) years for direct admission (NUC 2007). No provision was made for the holder of a Higher National Diploma (HND). It was observed that prior to this time some universities would admit HND holders into Part 3 (300 level) and Part 4 (400 level) for four- and five-year programmes respectively.

This policy has affected polytechnic education which has resulted in a reduction in enrolment compared to the university. Table 1 shows

Table 1: Students' Preference for Higher Education

Year	Polytechnics	Universities	Total
2007/08	167,836 (15.5%)	911,679 (84.5%)	1,079,515
2008/09	310,022 (20.6%)	1,192,050 (79.4%)	1,502,072
2009/10	342,908 (22.4%)	1,184,651 (77.6%)	1,527,559
2010/11	45,140 (3.28%)	1,330,531 (96.2%)	1,375,671

Adapted from Shu'ara (2010)

The impact of the policy came to bear after three years when those who were admitted to polytechnics were unable to have a seamless transition into the universities like before and that caused a serious dip in the number of applicants seeking polytechnic education (Table 1). The preference for polytechnic education dropped from 22.4% in the 2009/10 academic session to 3.28% in the 2010/11 academic session.

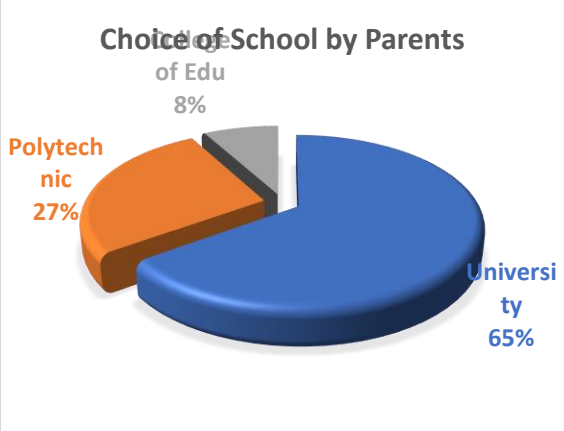

Figure 1: Choice of School by Parents

Presently, the preference for university education has been on the rise. 65% of the parent respondents said they would prefer a university education for their children while 27% preferred a polytechnic for theirs. 64% of the 27% of parents want it to be a stepping stone for their wards before proceeding to the university. Most of the remaining 36% are not lettered, so they don't bother about which school their wards attend.

Policy 2: PhD holders with an HND background without a BSc cannot lecture at the University

The second policy from the NUC clearly shows that anyone without a BSc cannot teach as a lecturer in Nigerian Universities. While the NUC advocates higher degrees as mandatory for teaching, those

without a BSc are not welcomed and those who have been in employment at any university before the advent of the policy were asked to go for the first degree or leave the services of such university. This has made PhD holders seek a first degree to be employed or retain their employment in the Nigerian university system. This policy is another direct attack on the Nigerian Polytechnic system. It raises the question of why go for the PGD programme after HND if it will not be accepted.

This also contributed to the drift from the polytechnic sector to the university sector as prospective students with an aspiration to work in the university sector see it as a waste of time coming to the polytechnic before going to the university.

Policy 3: Papers published by university academics in conferences and journals domiciled in the polytechnics are not counted for such academics

In the context of publish or perish in the Nigerian ivory towers, the quest to publish for career advancement becomes germane among academia. Not only publishing but the emphasis is now on reputable journal outfits and institutions. Within this context, conferences and journals domiciled in the polytechnics were counted as part of predatory or sub-standard publishers. This unwritten but verified law transcends virtually most universities, particularly federal universities. Any paper published by their academics in any Nigerian polytechnic is not accepted for promotion or career advancement. The resultant effect of this is that universities dons hardly publish in the journals domiciled in the polytechnics.

Policy 4: COREN Registration for HND holders

The Council for the Regulation of Engineering in Nigeria (COREN) as an organ of the government, is saddled with the responsibility of regulating the practice of Engineering in Nigeria. One of its functions is to register qualified personnel as Engineers, Technologists, Technicians and Craftsmen. This they have been doing since inception. At first, HND holders were registered directly as Engineers and this was followed by requesting an additional qualification, the Post-Graduate Diploma (PGD). In 2019, they came up with another proposal, that from 2021, HND holders must possess a Master's before registration as an Engineer while BSc holders would be registered directly without additional qualification.

Policy 5: Conversion of Polytechnics into Universities

There is a rush to convert the polytechnics into universities with presentations made at National Assembly by various interest groups within and majorly outside the polytechnic system. In a single sweep, the Delta State Government converted four institutions into universities. These actions are a detriment to the existence of the Polytechnic sector. The Federal Polytechnic Act 2019 as amended, raised the mandate of the federal polytechnics from "training of middle-level manpower" to "training of middle and high-level manpower".

The amended Act should have been explored to mount degree programmes in the polytechnic sector. Interestingly, the Academic Staff Union of Polytechnics (ASUP), a major stakeholder in the sector chooses to look the other way. They choose to pursue appointments stipulated in the Act and forget the first amendment, which is the mandate of the polytechnic.

Policy 5: HND Holders cannot Exceed Level 14 in Federal Civil Service

In response to the letter from the National Commission for Mass Literacy, Adult and Non-formal Education on the "use of only academic qualifications for entry into the civil/public service of the federation", the Head of Civil Service of the Federation stated emphatically in a letter with Reference number HCSF/SPSO/ODD/T&WT/6481116/47 paragraph 2 that, "Accordingly, a holder of Higher National Diploma (HND) in Accounting and Professional Certificate of Association of National Accountancy of Nigeria (ANAN) without a Post Graduate Diploma (PDG) plus a Master's Degree or a degree in Accounting from a recognised university cannot be promoted into the Directorate level in the Public Service as stipulated in the extant schemes of service. This memo followed the pattern of COREN, thus equating HND + PDG + MSc=BSc.

Policy 6: Polytechnics in Nigeria should not award degrees

The Federal Government in a memo with reference number TEB/PRO/E/12/Vol.11/132 and dated December 1, 2022, released by the National Board for Technical Education, directed that polytechnics, monotechnics and other allied institutions should stop awarding degrees. This is in contravention of the Federal Polytechnic Acts of 2019 as amended, which empowers the Polytechnics to train Middle and High-Level manpower.

The consequence of this memo is that the Government is going against its law. Worldwide, Polytechnics award degrees and higher degrees. The following are some of them: Ecole Polytechnique, France, Lyon Polytechnic Institute, France, Saskatchewan Polytechnic, Canada, Rwanda Polytechnic, Kigali,

Methods

Two policies of the NUC and one from COREN were given a critical assessment to see their impact on the polytechnic system in Nigeria. Questionnaires were drawn on each of the policies and distributed among 150 people who had an HND background and attained higher degrees and another 250 with HND only. Out of the 150 with higher degrees, 85 went through PGD and 35 through BSc. 14 of those with PGD had PhD, 43 MSc and the rest PGD. Of the 35 with BSc, 5 had PhD and the remaining 30 with MSc.

Table 2: HND holders with Higher Degrees

Questions	Yes	No	ND
1. Were you discriminated	130	20	
2. against in your place of work because of HND? Would you have preferred first degree to HND if given a fresh start?	123	23	4
3. Is higher qualification required in your workplace?	110	35	5
4 Are you happy with the policy of 3years to get a BSc after HND	11	130	9
5 Will you want your child to go through the polytechnic system under the present arrangement?	10	133	7
6 If Polytechnics were to award degrees, will you encourage your child to attend?	144	3	3
7 Will you support scrapping HND and replacing it with BTech for three (3) years after ND	145	-	5
8 Did you regret ever taking the HND route?	130	14	6

Table 2 shows the responses of HND holders with higher qualifications. 133 (88.7%) of the respondents will not allow their children to attend polytechnic under the present arrangement. If this is juxtaposed with the responses of parents in Figure 1, it could be deduced that the enrolment will continue to drop under the present arrangement in the Polytechnic. 96% of the respondents favours polytechnic education for their children if the polytechnics are allowed to run degree programmes. Intrinsically, 145 respondents favour the cancellation of HND programmes for a replacement with Bachelor of Technology (BTech)

Table 3: HND Holders only

Questions	Yes	No	ND
1. Were you discriminated against in your place of work because of HND?	201	45	4
2. Would you have preferred first degree to HND if given a fresh start?	230	20	
3. Will you encourage anyone to study up to the HND level?	60	182	8
4. Would you like to do PGD and MSc before COREN registration for the Engineers' Cadre?	10	240	-
5. Did you regret ever taking HND	186	55	9

Table 3 shows responses from HND holders without additional qualifications. 80.4% of respondents said they were discriminated against in their workplace because of their HND certificate. 96% of respondents were against the new route outlined by COREN, that they would rather go back for BSc than continue to PGD and MSc before registration with COREN.
Remarkably, the Nigerian National Assembly recently passed a law criminalising the dichotomy between HND and BSc in the country. This is the right step in the right direction, but the implementation should be expedited quickly.

The consequences of Policy 3 have led to the absence of papers from university teachers. This also is partly responsible to teachers in the universities looking down on the

The comparison was also made with some countries, particularly the UK where the university and polytechnic system was copied from. Table 4 showed the number of years required to obtain a BSc after a 3-4year post-secondary education in the same field.

Table 4: Years Required for Top-Up

S/N	Country	Number of Years for Top-up
1	UK	1
2	USA	1 [PhD admissions were given to HND holders in Nigeria and with this, they spend about 6 years for PhD]
3	Ghana	1
4	India	1

5	South Africa	1
6	Australia	1
7	France	Polytechnics are PG schools for professional qualifications
8	Germany	1
9	Malaysia	1 (accept Nigeria HND for MSc program direct)
10	Nigeria (courtesy NUC)	3 years minimum to acquire a first degree irrespective of whatever you studied in the past

In the case of some universities in Malaysia, what was done was the evaluation of what has been taught at Nigeria polytechnics and compared them with their curriculum and the result was that over 95% of their curriculum has been covered. To that effect, HND holders from Nigeria could run MSc programs without a top-up. In the case of the UK, HND is 2 years and BSc 3 years. This makes it clear for the additional year for Top-up to BSc.

Between HND and BTech

All the respondents were asked which would they prefer between HND and BTech. Their responses are represented in Figure 2.

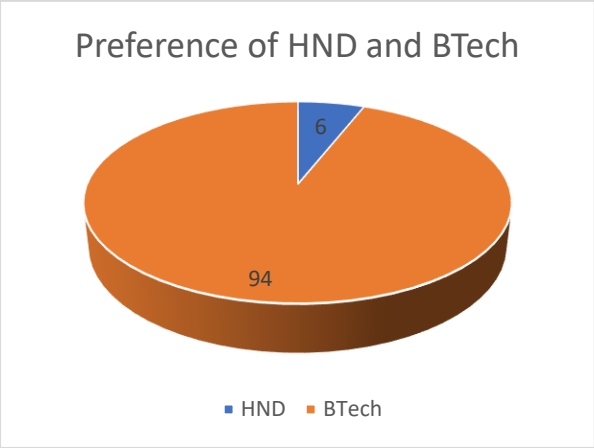

Figure 2: Preference of Respondents between HND and BTech

Ninety-four (94%) of the respondents preferred that the HND programme should be replaced by a Bachelor of Technology (BTech) as represented in Figure 2. This should follow a well-organised and school-involved One-year industrial attachment in the relevant area of training after the National Diploma.

Interestingly, all world universities' ranking platforms (Times Higher Education, Guardian Higher Education, Webometrics, IC4U and so on) placed most of the post-secondary institutions (Colleges, polytechnics, universities, institutes, academies) on the same level.

Proposed Model

The following are proposals arising from the responses gotten from this research work. One, a model was developed with a time frame in Figure 2 and Table 5. The proposed model is to turn the vision of the Federal Ministry of Education into a reality by providing access to every Nigerian to acquire Education at any level without discrimination or harassment from any group of people or establishments

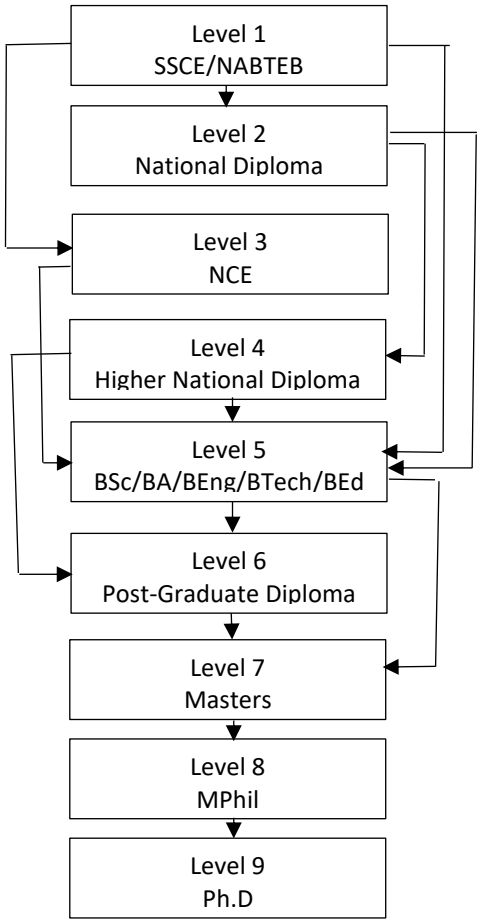

Figure 3: Proposed Model for Education Advancement

Figure 3 is the proposed model where the entry point Level 1 is through the Senior Secondary School Examination (SSCE) or NABTEB. Those who desired a polytechnic or college of education will go to Level 2 or 3 for a two-year National Diploma or three-year National Certificate in Education respectively. Those who desired a university education and have the means can go straight from Level 1 to Level 5 for a 4 or 5-year degree programme. From Level 2 or 3, the candidate

can proceed to Level 5 for a 2–3-year degree programme. The durations are further explained in Table 5.

It should be noted that the idea of HND being replaced with BTech is what was proposed but those who still have HND are to go for a year top-up for a first degree.

Table 5: Proposed Duration from One Level to Another

Level	Duration [Years]	Remarks
1 to 2	2	
1 to 3	3	
1 to 5	4/5/6	
2 to 4	2	After 1-year industrial training (I.T)
2 to 5	3	ND to BTech after 1 Year I.T
3 to 5	2	
4 to 5	1	Top-up
4 to 6	1.5	
5 to 6	1	
5 to 7	2	
6 to 7	1.5	
7 to 8	1.5	
7 to 9	3 + x	
8 to 9	1.5 + x	

For those with HND, the proposed time is one-year top-up programme as obtained globally. Postgraduate studies should be minimum of one year for Masters and one and half years for a PhD (Table 5). For those on the Polytechnic route, the one-year industrial attachment is very essential and should be coordinated the Polytechnics in synergy with the industries.

Conclusion

The inconsistence in National policies is not in the interest of the nation as it is gradually turning the nation into a certificate dependent economy and should not be allowed to continue. Nigerians should have the opportunity to aspire to reach any level without the fear or intimidation. Foreign schools should be allowed to collaborate with any schools of their choice without hindrances from NUC. In all, the interest of Nigeria and Nigerians should be protected and advanced at any point in time.

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