REPOSITIONING VOCATIONAL AND TECHNICAL EDUCATION AT NCE LEVEL TO INTEGRATE APPRENTICESHIP SCHEME TOWARDS SELF-EMPLOYMENT FOR ITS GRADUATES

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Abstract

This paper examined how to reposition Vocational and Technical Education Programme at NCE level to integrate apprenticeship scheme towards realization of self-employment by NCE graduates. The paper looked at the failure of the current VTE programme in turning out employment and wealth creators as against seekers of white color job graduates. It also ex-rayed the alarming rate of unemployment among the youths and graduates in the country as failure of these academic programmes. The VTE alongside Science and Technology was envisioned in the National Policy on Education (2004) as a leeway out of the economic quagmire, but the implementation appears to have failed woefully hence the unabated rise in unemployment. This paper, therefore, is of the view that we integrate apprenticeship scheme in the NCE VTE programme through its curriculum reform, drawing from priorities placed on apprenticeship scheme by advanced countries who saw this scheme as bedrock of industrial and economic revolution far back some centuries ago. To this end, this paper recommended six points that can lead to curriculum and VTE programme reforms among which is that NCE VTE curriculum should provide for one full year apprenticeship scheme within the 3 year NCE, while first and third years be devoted for academic studies, and total courses reduced to half for very essential courses only, including Teaching practice.

Keywords: Apprenticeship Scheme, Vocational and Technical Education, Unemployment, economy, curriculum, self-employment.

Introduction

Nigeria of today is, no doubt, passing through a veritably difficult time of her history. One of the overwhelming economic factors that have kept driving our economy to the state of topsy-turvy for many years now is the rising rate of unemployment. An economy with unabated increasing rate of unemployment is certainly moving towards a suicidal end. Loss of jobs due to closure of industries is very high. In fact, our economy is so bad that various constituent governments have been considering mass retrenchment and dawn-sizing of their work-force as an option, but for the resistance of labour unionists, and perhaps too, the possible adverse effect it may have on the political fortune of the politicians who, invariably, are the managers of our economy. Lately, some of them have resorted to obnoxious slashing of salaries by way of paying salaries in percentage. One of the eloquent and cardinal threats to the economy and the nation state is increasing rate of unemployment. As at 2014, Nigeria's unemployment rate stood at 23% of the population, that is about 38 million (Omoh, 2014). She is only second to South Africa in the entire Africa. We are aware of the consequences of this to a convulsing economy like ours (Onyekonwe, 2015). It is obvious that education and educational policies are veritable means by which endemic problems of a society are addressed. In the light of this fact, National Policy on Education (2004) tried to refocus emphasis on Science Technology and Vocational and Technical Education as a means of rescuing Nigeria from socio-economic quagmire. While the step and roadmap for Science and Technology are distinctly clear, understood, and right

attitude and emphasis placed on it since then, the same cannot be said of vocational and technical Education. According to Okonkwo & Okoh (2014), the Federal government is either yet to come to terms with the contribution of vocational and technical education to national transformation, or is it that they lack the political will to admit that it is a tool to combat unemployment and poverty in our society?

Apart from low enrolment into designated Technical and Vocational Colleges, most graduates and products of the vocational and technical schools, are undoubtedly, in the streets in search of non-existent white colour jobs. The same applies to graduates of VTE of tertiary institutions. Nigeria has reached the time when an academic programme will be justified and defined by its contribution and impact on employment, self-employment and self-reliance of its products. After all, education is not end itself, but a means to an end. This end in the present Nigeria involves self-employment and productive skills in Science and Technology. Hence, VTE was envisioned to hold the ace and key to industrial revolution and wealth creation.

Unemployment Saga

The rising unemployment rate, especially among the youths calls for an urgent solution. Youth unemployment rate in the country rose to 25% in 2016 from 17.5% in 2014. The statistics show a quarterly rise in the unemployed youths between 2015-2016. In 2015, between January-July, it rose from 11.7% to 14.9%, while between January – December 2016, it increased from 19.0% (Akinabode, 2016). Most of the identified unemployed youths are graduates of one discipline or the other. If the unskilled is unemployed, it is understood, but when the so-called skilled graduates, by virtue of their certification become unemployed also, a lot of questions needs to be asked. Is it that the jobs are not there for them at all? Is it that their certification is devoid of skills? Is it just that the graduates are not interested in using their skills? Do they need further training to enable them use their skills? Etc. Most startling of it all is the fact that graduates of VTE are not left out in the army of the unemployed, when they ought to take the lead in self-employment as to even create employment.

Apprenticeship to the Rescue

Apprenticeship dated far back to pre-colonial and industrial era. In Africa, each society had her specialized arts and crafts. Some of their products are still relevant today. For instance, the famous Oyo carving, the Benin bronze smelting, the Nok sculpturing, etc are good examples of the art works of the traditional societies (Pelemo, 2007). According to Fafunwa, (2004), "the various skills taught as part of the education of the Nigerian child, include weaving, sculpturing, black smiting, carving, farming, fishing, cattle-rearing, hair-plaiting, dress-making, lead working, catering, dyeing, tinkering, etc" Each child is apprenticed to a master craftsman. In fact, some skills are found to be peculiar to certain families and are, therefore, transferred to their offspring. Such include traditional medicine orthopedics surgery and blacksmithing. (Pelemo, 2007).

In the Western world, apprenticeship dated as far back as Middle age. A master craftsman was entitled to employ young people as an inexpensive labour. Most apprentices were male but female apprentices were found in crafts such as seamstress, tailoring, bakery, and confectionery. Apprentices then usually began at ten to fifteen years of age and would live with the master craftsman's household. Most apprentices aspire to become master

craftsman themselves on completion of their contract. (Wikipedia, 2017).

From the foregoing, it is clear that apprenticeship has been a global phenomenon. It served as ladder to the present day technology and technological transformation globally. Most countries of Europe and beyond took keen interest in development of apprenticeship scheme early enough, hence their rapid industrialization and technological advancement. Most of the governments came up with policies and regulations on the operation of the scheme. This, Nigerian successive governments have failed to do, hence our stunted socio-economic growth leading to monstrous alarming unemployment rise. Let us take a cursory look at the approach of apprenticeship schemes in selected countries of Europe and beyond.

n Australia: Apprenticeships cover virtually all industrial sectors. They combine working hours and formal education which can either be part time or full time school-based. State or Regional governments provide public funding in support for the training. In fact, Group Training Organizations (GTO), equivalent of (ITF) in Nigeria undertake the visits and supervision of the programme.

In Austa: Their apprenticeship is organized in a dual education system. In fact, company-based apprenticeship training is complemented by compulsory attendance of a part-time vocational school for the apprentices.

In Czech Republic: The apprenticeship programme in this country looks very interesting. Actually, apprentices spend about 30-60% of their time in companies and the rest in formal education. They may work for two or three days a week in the company and spend two or three days at a vocational school per week.

In Switzerland: Here, Apprenticeships are based on dual education system, just as we have it in Austria and Germany.

In France: As from 2005, the government enunciated a law allowing children of 14 years and above, quilting a choice of quaffing compulsory school system for a vocational training. That shows the extent the government encourages the vocational training including apprenticeship.

In Germany: Germany practiced dual system of education which made it possible to be learning work and attending school at the same time. Infact, it is almost impossible to obtain an employment without completing an apprenticeship. In 2004, the government signed a pledge with industrial unions that all companies, except the small ones must take on apprentices. All school leavers up to 15 years are made to start on apprenticeship in their chosen professions until about 19 years old. They spend 50-70% of the time in companies, and 30% in formal education.

In Pakistan: Apprenticeship Training by law is regulated both in industries and TVET for theoretical instructions. It is mandatory for companies with up to 50 workers to take apprentices at its own cost. Recently, government in its reforms, has brought apprenticeship into National Vocational Qualification framework certification after assessment are done jointly by Industry, Chamber of Commerce and Industry, and government through apprenticeship Management committee.

In Turkey, this country practiced apprenticeship with commitment. Theirs has three levels. The first is the apprenticeship

proper (Qrak). Second is pre-master stage (Kaifa), and the third, master and the highest level (Usta). They train the Qrak.

Britain: Apprenticeship system is heart of training in industries. Such training includes combination of academics and practice to forestall skill shortages in traditionally skilled occupations and higher technician and engineering professions. From 1960s and 70s, apprentices are allowed to enroll for 'A' level, certificates and diploma courses and exams. Recently, government funded apprenticeship that is off-the-job training. They structured the programme into 4 levels: Intermediate, Advanced, Higher, and Degree Apprenticeships.

United States: New policy on Apprenticeship allow apprentices to work between 32-40 hours per week at the trade under a journeyman, and spend additional 8 hours every other week in classroom academic training.

Global Statistics on Apprenticeship

England: In 2016, 509, 400 apprentices were in training. Those of 25 and above accounted for 44%, ages 19-24, 30% and under 19 years, 26%. In fact, 71% of this figure are involved in sectors as Law, Health, Retail and Commercial Enterprises. Over 60% were in intermediate level of Apprenticeships. Female, 53%, while male was 47% of this lot which was spread across 30 occupations. (Wikipedia 2017)

USA: A total of 505, 371 were involved in apprenticeship. This, the US government intends to grow to 750, 000 in 2019. This, covers all sectors including business law, health, technical and technological sectors.

Australia: In 2012, 470,000 were involved in apprenticeship. In Austria, above 40% of all teenagers enter apprenticeship training upon completion of compulsory education (at age of 15).

In Germany, two-thirds of all young people under 22 years go into apprenticeship in 345 recognized trades. In Pakistan, small as it is, 30,000 trained as apprentices in 2015 in 276 trades across the country.

Nigeria: In Nigeria, attempt to promote apprenticeship as a veritable way towards self-employment came through setting up, in 1986, the National Directorate of Employment (NDE). To this effect, NDE went deeper into TVET with the following training models and strategies

(a) To promote cognitive apprenticeship and skills acquisition training models.
(b) To promote on the job training model for the under- employed graduates
(c) To promote the involvement of industry training model to help train the graduates in specific occupational work area.
(d) To promote off the job training model for distance training course programmes. (Okoye, 2014).

According to Mohammed (2012), the NDE, in effort to justify their set objectives, threw all its efforts on National Open Apprenticeship Training Scheme; School on Wheels Training scheme, Rural Handicraft Training Scheme, Rural Agriculture Development Training Scheme, Advanced National Open Apprenticeship Scheme, Professional Pupilage Scheme, and Graduate Attachment Programme.

The extent of successful achievement of the NDE on this seven core mandate is open to guess. If the schemes and programmes have been successfully executed and implemented, how come the rising unemployment rate over the years. For instance, the unemployment steadily rose from 7.9 million in 2007 to 18.2 million in 2011 (National Bureau of

statistics). It is an open secret that neighter the existence of NDE, nor its activities are visible in the convulsing economy of the country.

Vocational and Technical Education in Colleges of Education

The VTE in the Colleges of Education presently, has a programme that enables the students to be exposed to practical industrial experience. This programme is Students Industrial Work Experience Scheme (SIWES) majorly funded by the Industrial Training Fund (ITF) with the school and the industry as the immediate supervisors. The aim is to, among others; expose these VTE students to, industrial practical experience of what they academically learn in the school. Talking about the success of this programme since its inception, certainly it succeeded in improving the academic value of the certificate, but as for equipping the recipients with relevant skills and motivation for self-employment, no. The reason is clear. The SIWES is laddened with myriad of challenges such as:

(a) Many industries hardly accept students for the programme for reasons best known to them.

(b) And when they accept them, many do not give such students free hand or access to sophisticated machines and equipment.

(c) Moral support and incentive such as provision of accommodation are denied the students. (Tibi, 2012).

Primarily, the VTE has five cardinal objectives which include "To give training and impact the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who will be enterprising and self-reliant." (NPE, 2004). The VTE at NCE level could, at best, boast of fulfilling this lofty objective by certification, but far from impacting practical skills in the graduates, due to number of factors. This is why many graduates of VTE are in the streets in search of white-color jobs. (Okoye, 2014). This shows the failure of the VTE programme at that level. After all, it is highly expected that products of VTE programme should be able to employ self, especially in the absence of paid employment, having acquired the basic and relevant skills in his/her field.

Curriculum Issue

This current economic quagmire of this country calls for a drastic curriculum reform towards tackling some critical sectors educationally. It is obvious that NCE programmes have production of teachers as their core mandate. It is equally obvious that thousands, if not millions, of their yearly graduates have no schools to teach, thereby swelling the unemployed population. Observation has shown also that the enrolment figure into NCE programmes nationwide is drastically on the decline. One of the main reasons for this decline, even when population is swelling annually in other sectors, is that NCE graduates no long have jobs once teaching opening is blocked. If other programmes in the NCE level suffer this fate, the products of VTE ought not be. It then follows that the VTE, through its curriculum, should be reformed to reverse the trend currently, an average VTE student is made to offer a minimum of 73 courses, excluding SIWES and teaching Practice (field work). However, experience has shown that not more than 20 of such courses are relevant, in practice, to an averagely intelligent student, after school. Yet this work overload prevents them from properly preparing for self-employment and self-economic management after school. A curriculum emphasizing apprenticeship and practical industrial skills of, at least, one year within the 3-year programme, will, no doubt, enable graduate of

VTE to integrate into the chosen trade, job, career and occupation, and think less of white color job.

What is most important to every citizen of this country now is to put food on the table, then other things can follow. This experience led most advanced countries years ago to resort to uplifting and promoting the Apprenticeships as leeway out of the crossroad. Today countries like Japan, Germany, Switzerland, Pakistan, Britain, etc adopted apprenticeship schemes particularly for vocational and technical education, making their youths and teenagers from 14 years and above to undergo the scheme between 2-7 years depending on the particular trade. We are aware that traditional pre-colonial apprenticeships practice enabled every once apprenticed young man, to establish own trade or business with little or no difficulty.

Repositioning of VTE, via Curriculum Reform

It is time to take a second look at our VTE curricular with a view to integrate apprenticeship therein. At the NCE level, instead of SIWES for just 3 or 4 months, which now amounts to just 1-2 months in practice because students are made to undertake the SIWES side by side with teaching practice. (in some instances, two days for SIWES, and 3 days for T.P in a week for the duration of SIWES). This is a mockery of the scheme. Therefore, students can hardly have a practical grasp of what industrial experience is all about. This practice is just an effort to meet up with the curriculum requirement for the NCE, without due consideration of what happens to the students on graduation. Any attempt to make students to be useful to themselves and the society after school should start with curriculum reform such as:

1. Let NCE Vocational and Technical Education be made to have full Apprenticeship in industries and workshops for one full year (12 months), to enable the trainees fully imbibe the culture, deepened desire and acquisition and internalization of the chosen trade, craft, or technology.
2. The student should be made to have one year of academic studies in the school, one year of Apprenticeship, and the last one year for academic work again towards certification.
3. Teaching practice should be part of the last year.
4. Reduce courses offered by the VTE students to give room for this practically-oriented apprenticeship scheme.
5. Number of courses offered in the NCE VTE programme should not exceed 20 in all. All basics in their field and pedagogy should be given within this number, and spread over two years. The less relevant courses should be stepped down for want of time. The two many courses (theoretical), has induced VTE students to study vocational subjects like liberal arts subjects basically for passing examinations that may channel them towards university education (Tibi, 2012).
6. The proposed curriculum should look thus:

Departmental course	-	12
Education courses	-	5
GSE courses	-	3
Total		**20 course**

Let the course that are fundamentally basic be taken, with few electives outside this.

On a general note, apprenticeship scheme within NCE programme can be realized away

from the traditional method. It could be made attractive and optionally compulsory for all school leavers, and graduates of specified discipline such as Engineering, technology-related discipline, technically-oriented, disciplines, and so on, in line with that of some European countries listed above.

Conclusion

The current trend of rising unemployment rate among graduates and school leavers in the country calls for immediate solutions in other to forestall calamitous situation. One of the envisioned solutions since three decades ago is the VTE hence the enunciation of the National Policy of Education (1981) and revised in 2004 in which premium was placed on VTE as gateway to creation of employment through self-employment by its graduates. Unfortunately, this objective is far from being achieved arising from poor implementation of the policy. Time is now ripe to take a second look at this VTE programme with a view for a drastic reform, hence the suggestion for a paradigm shift from cognitive and theory courses overload to practically-oriented practice and training encapsulated in apprenticeship system. In this direction, curriculum reform should provide for at least, one full year of apprenticeship/industrial attachment with serious tripartite supervision – the school, industry and the government. Then two years of school/academic work should be grossly contrived into optimum number of courses.

Recommendations

In view of the foregoing, the following recommendations are preferred:

1. Government should, by its policies, promote awareness for emphasis on practical and apprenticeship scheme in technically and vocationally – oriented programmes in our tertiary institutions.
2. Government should create enabling environment for apprenticeship and accredit various occupational, technical and vocational centres as it is obtainable in countries such as Germany, Austria, Switzerland and Pakistan.
3. Government should be able to priorities the apprenticeship scheme because of its high tendency to promote self-employment. The promotion of this scheme should strongly and largely involve government-sponsorship as incentives for both the trainer-industries trade centres as well as the trainee/apprentice, not in the fashion of failed NDE.
4. The NCE curriculum for the VTE should be urgently reviewed to provide for two year academic studies including the mandatory teaching practice, and one full year of apprenticeship and practical skill training in the industry.
5. Government should endeavour to provide soft loans for products of such VTE programmes to set up own businesses and workshops upon graduation.
6. A distinct certificate should be made to be issued by each industry where such apprenticeship training is successfully completed as some countries under reference do. This can serve as additional motivation for the trainees.

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