# UNIVERSITY-INDUSTRY COLLABORATION: A PANACEA TO GRADUATE UNEMPLOYMENT IN NIGERIA

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### **Abstract**

One of the major problems facing Nigeria is graduate unemployment. Nigeria parades well over hundred universities owned by the Federal, State and private individuals, which have been churning out graduates every year without prospect for employment. One of the major factors contributing to this scenario is the mismatched between the school curricula and the needs of the industrial sector of the economy. With heavy reliance on empirical and secondary data, the study advocates for university-industry collaboration as one of the measures to mitigate graduate unemployment in Nigeria. The study finds that mismatched between university curricular and industrial needs renders most Nigerian graduates unemployable. The study therefore, suggests among others the need to bring in seasoned industrialists to participate in drawing curricula and also teach some practical courses on part time basis in Nigerian Universities. Efforts in this direction will equip Nigerian graduates with skills needed in the industrial sector of the economy with implications for their employability status.

Keywords: University, Industry, Collaboration, Graduate Unemployment, Nigeria.

### Introduction

One of the major problems confronting Nigeria as a country is graduate unemployment. The country parades over one hundred universities. Some are owned by the Federal Government, some state governments and of recent private individuals and religious bodies have equally been licensed to join in the establishment of universities. This has resulted in churning out graduates every year without hope of employment. According to the National Bureau of Statistics (2012), Joshua, (2014) Nigeria's overall employment enters two digits since 2002. Although there have been fluctuations but it has been marginal. Unemployment entered crescendo as it amounted to 23.9% of the total labour force as at March, 2011, 21.1% in 2010, 19.7% in 2009, 14.9% in 2008, 12.7% in 2007 to mention just a few. Quite a number of factors have been highlighted in the literature as responsible for graduate unemployment in Nigeria. For instance, Fajana (2000) identified the following factors as the major causes of unemployment in Nigeria: - the long period of initial unemployment among university graduates in Nigeria, faulty manpower planning and expansion of educational facilities that have unduly raised the expectations of Nigerian youths, economic recession, continued proportionality of expatriates in employment, the institution of NYSC, the collective bargaining process, graduate attitude to some type of jobs, attitude to jobs in other location as well as search behaviour of employers and job seekers, use of capital intensive technology, wide rural- urban migration, formal-informal sectors differentials.

Other factors according to some scholars responsible for unemployment also include the fact that some Nigerian graduates are "quarter" baked which made them unemployable; which is why most employers prefer graduates with foreign certificates to Nigerian graduates. Frequent strikes, admission overload, poor funding among others combined to frustrate quality education most especially at university level with implication for rising figure of unemployed graduates (Adawo, et al. 2012). It has also been observed that some of the courses available in Nigerian higher institutions nowadays are far removed from the needs of the society and this is partly responsible for the mass unemployment of Nigerian graduates (Okojie, 2013). This is in line with the trend of thought of Fnae et.al (2008) that Nigeria is

bedeviled with severe problem of graduate unemployment brought about by mismatch between graduate training and the world of work. Little surprise that thousands of graduates that are turned out every year end up roaming the streets for years for jobs that are not just there after sacrificing a year to serve their father land. Some developed countries have been able to overcome the problem of graduate unemployment through careful planning and university-industry collaboration. For instance, Microsoft, Cisco and Intel are in collaboration with the University of Melbourne; AALTO University is in collaboration with the industrial sector; Technical University of Munich (TUM) is in partnership with Audi motor company; University of California is also in partnership with the industrial sector of the economy to mention just a few (Belfield, 2012). The essence of this collaboration among other things is to identify the higher order of skill needed by the students for success in school and in the work place after graduation so as to inculcate same in the students.

This study examines University-Industry collaboration and its implication in curbing graduate unemployment with a particular focus on Nigeria. This discussion is segmented in this order; following the above introduction is the literature review and conceptual framework; the next section focuses on a historical overview of university education in Nigeria which is followed by university-industry collaboration, industrial needs and graduate unemployment in Nigeria. The last section is on recommendations and conclusion.

## Review of Literature and Conceptual Framework

University and industry collaboration is normal in developed countries but yet to take root in developing countries for several reasons. For instance, poor government funding, lack of world class research universities that have discovery- driven culture that go beyond conventional research among others. The essence of this collaboration is to enhance competence in order to tackle social and economic problems such as creating more jobs and reducing unemployment. There is high degree of unemployment among students on graduation, most of them settle for low paying jobs not commensurate with their qualifications, leading to high incidence of unemployment and underemployment. It is also important to note as stated before that most of these graduates are not employable because of gaps in industrial skills.

The linkage between university and industry is very weak in Africa including Nigeria and do not produce the skill assets needed for industrial productivity leading to low absorption level by the available industries. Hence there is a mismatch between industry needs and university output. Adejimola and Olufunmilayo (2009) reported that about 80% of the graduates find it difficult to get employment every year. And at the same time much has not been done in trying to bring collaboration between the entrepreneurs and the institutions. Collaboration resulted in good knowledge transfer activities between industry and institute (Salimaki, 2011), opens the door to the teaching, learning and employability opportunities with Industry and faculties understood the expectations of industry in workforce development (Abhijeet et al., 2014). Adeyemo (2011) revealed that the problem of graduate unemployment is traceable to the disequilibrium between labor market requirements and lack of essential employable skills on the part of Nigerian graduates.

The high rate of unemployment among the youths in Nigeria has contributed to the high rate of poverty and insecurity in the country these days. The chequered history of unemployment in Nigeria is that of unabated growing trend. So, ironically, unemployment in Nigeria presently stands at about 20% (Tende, 2011) with over 63.1% of her citizens living below the poverty line of one (1) dollar per day (world bank, 2010). The national Universities Commission (NUC) (2004) reiterates that there is massive unemployment of Nigerian University graduates in the country. This problem is said to be traceable to the disequilibrium between labour market requirements and lack of essential employable skills by the graduates (Diejonah and Orimolade, 1991; Dabalen, Oni and Adekola, 2000).

Another survey of employers shows that only a handful of the 1400 engineering schools in India are recognized as providing world-class education with graduates worthy of consideration for employment (Globalization of Engineering Services, 2006, cited in Padmini 2012).

Despite criticisms of the poor state of university-industry linkages in Africa, African universities are taking steps to initiate and accelerate measures to strengthen institutional capacity to support linkages with industry and the broader productive sector (Ginies and Mazurelle,

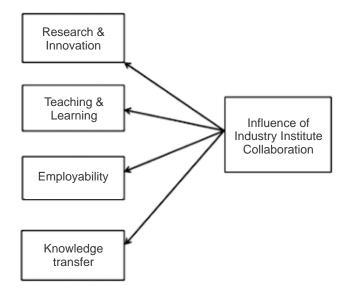
2010; Tiyambe, 2004). Creating opportunities for student attachments and corporate placements in the productive sector is another common way in which universities link up with industry (Homma and Attalage, 2008; Munyoki et al, 2011). Industries may also play a role in defining student research projects that focus on issues and problems of direct interest to industry (Boersmaa and Gibbons, 2008).

## **Conceptual Framework**

Conceptual Framework of Abhijeet, et al (2014) was used. The industry – university (institute) collaboration has significant influence on factors such as research & innovation, teaching & learning, employability and knowledge transfer in academic institutes. The industry also benefit as it gets the right human capital it required. Conceptual Model that represents the influence of Industry-Institute Collaboration Abhijeet, et al (2014).

The next section takes a historical excursion into the origin of university system in Nigeria.

# Nigerian Universities: A Historical Overview



The history of higher education in Nigeria dates back to the 19th century. Babarinde (2012:10) posits that the colonial government began to intervene in the Nigerian educational system through a number of legal instruments. In 1887, the Nigerian education ordinance was enacted while in 1920, the colonial government set up the Phelps-Stoke Commission to re-evaluate the need for native education instead of western education. Between 1943 and 1945 the Elliot Commission on Higher Education in West Africa was set up. Between

1959 and 1960, the colonial administration set up the Ashby commission to investigate Nigeria's need for post secondary school certificate and higher education. The Ajayi Commission of 1963 was also established by the government of Western Region and between 1958-1962, the Dike Commission was set up to review the educational system from the primary to the technical colleges in the Eastern region.

Yaba Higher College was the first higher institution of learning in Nigeria after the amalgamation of the northern and southern protectorate. The Second World War had adverse effect on the existence of the school as lecturers became fewer due to the military government's cut in funding. Other challenges of the college were the high rate of drop outs and the substandard level of education (Omuta, 2010). The Elliot commission was set up to investigate the challenges of the school and after investigations recommended the need for an establishment of a university college. The 104 students of Yaba Higher College became the foundation students of the University College, Ibadan that officially opened on 2 February 1948. It was a college of the metropolitan University of London. In 1962, it became independent of the University on London. Thus, the origin of University education in Nigeria historically dates back to 1948. By 1960, the University College of Ibadan became a fullfledged university. It however remained the only university in Nigeria till 1960. Following the report of the Ashby Commission of 1960, between 1960 and 1962 four more universities were created namely; University of Nigeria, Nsukka, the University of Ife now Obafemi Awolowo University, Ife, Ahmadu Bello University, Zaria and the University of Lagos, Lagos. In 1970, the Mid-West state which later became Bendel state established the Mid-West Institute of Technology (MIT). The institute was converted to the University of Benin in 1972 and handed over to the federal government in 1975 (Ogunu, n.d.).

Polytechnics and monotechnics were established in Nigeria during the colonial era even before the emergence of universities. Their main essence was for the advancement of technical manpower in various technical and professional disciplines. In the early 1950s, the Nigerian college of arts, science and technology was established and absorbed into the first generation universities - Ife, Zaria and Nsukka. Early independence

witnessed the establishment of colleges of technology in Lagos, Ibadan (Western Region), Enugu – Eastern region and Kaduna (Northern Region). With the creation of more state, state owned polytechnics were also established. The federal government also established federal polytechnics in various parts of the country (Okemakinde, 2014).

The third development plan between 1975 and 1980 provided for the creation of seven other universities in states that did not have universities before that time. The universities were established in Jos, Calabar, Kano, Maiduguri, Ilorin, Port Harcourt and Sokoto. These seven universities were the second generation university (Ajayi & Ekundayo, 2008:212-224).

Between 1979 and the early 1990s, the third generation of universities was established. This period saw the continuation of the creation of federal universities, the emergence of specialised universities like the Federal Universities of Technology Owerri (1980), Akure (1981), Minna (1982) and Yola (1982). Also, specialised federal universities of agriculture were established in Makurdi (1988), Abeokuta (1988) and Micheal Okpara University of Agriculture Umudike (1992). Moreover, states began having their own universities. Between the 1980s and early 1990s state universities were founded in Imo, Ondo, Bendel, Lagos, Akwa Ibom, Oyo and Cross River States (Omuta, 2010:3; Ajayi & Ekundayo, 2008:212-224).

The fourth generation universities were established between 1991 till date. They are made up of mostly state universities, private universities and also federal universities which are the National Open University of Nigeria, the University of Petroleum Resources, Effurun and the nine universities established by the Jonathan's administration in 2011. According to fafunwa (1975), the possibilities of private individuals establishing private institutions was recommended by the Phelps-Stockes commission in 1920. However, substantial actions were not taken then. The quest for the involvement of private individuals was dropped as a result of projected challenges private universities might face. Dr Basil Nnanna Ukaegbu was one of the few that unsuccessfully attempted to establish private universities in Nigeria (Omuta, 2010:6). Between 1979 and 1983, which was a brief period of democratic rule, 26 private universities were established. Unfortunately, the decree No 19 of

June 1984 promulgated by General Buhari forcefully shut them down (Ajadi, 2010:15-24). By 1991, as a result of the unbearable admission pressure on public universities, appeals were pushed forward to the president for the establishment of private universities. The Longe Commission was set up to investigate the necessity for private universities. Based on the recommendations of the Commission, government promulgated Act No 9 of 1993 which overrode the abolition of private universities in Nigeria and prohibited the Act of 1984. The Act No 9 of 1993 allowed individual, corporations, corporate bodies and local governments to establish private universities (Omuta, 2010:8). The oldest private universities were established in 1999. They are Igbinedion University, Babcock University and Madonna University, the records of National Universities Commission (2012) shows that Nigeria had 38 federal universities, 37 state universities, 50 private universities 50 making a total of 125 (Akpanuko, 2012:91).

The justifications of private participation in university education include inadequate funding of public universities, dilapidated infrastructure, erosion of autonomy and interference of the government in the day to day running of the institutions. For instance, there were occasions of the government's appointment and removal of academic staff and vice chancellors without recourse to due process. Other challenges include need to control the standard of degrees awarded, the problem of cultism, how to accommodate the increasing social demand for university education and emphasis on and need for skilled labour force (Ajayi & Ekundayo, 2008; Omuta, 2010: 12; Ajadi, 2010:15-24). Researches on private universities in Nigeria show that they expanded the supply of admission places to seekers and increased the number of students admitted into university, addressed the funding problems of higher education, improved the infrastructure and facilities for teaching and learning, restored the autonomy of universities, curbed the challenge of secret cults, and how to respond to the skills demand of the labour market through the development of curriculum that it thought would build skills demanded in the labour market and also address social needs. It is worthy of note to mention that some private universities offer courses that are to prepare graduates to be self independent and owners of businesses like the Entrepreneurial Development Studies offered in covenant university which has been adopted by some universities. However, the impact of this appears to be infinitesimally small.

It is likewise imperative to mention that the sole importance of university education is to inculcate into individuals values and the development of the intellectual capacities needed for the survival of the society (Idogho, 2011; Idumange & Major, 2006; Okemakinde, 2014:1556). Hence, quality education is also important in producing a higher quality workforce that is for development of high level manpower (Onyamaechi, 2013: 94). But in Nigeria context, this has remained a tall order as a result of the factors mentioned before that conspired against the production of graduates of high quality. The next section examines universities curricular, industrial needs and graduate unemployment in Nigeria.

# Universities Curricular, Industrial needs and Graduate Unemployment in Nigeria

It is believed that Nigerian graduates do not possess the requisite skills needed by the industrial sector of the economy which is why they find it difficult to get jobs. Fnae et al. (2008) argue that as a result of many years of neglect, higher institutions in Nigeria lack the tools needed to inculcate in the students the skills needed by employers and this is applicable to all disciplines. In the same vein, Dabalen et al. (2000) submit that most curricular of Nigerian universities have little or no practical relevance to Nigerian economy. This is because teaching in Nigerian universities is theory-oriented with little or no practical training. The revolution in information technology is a good case in point which has revealed the mismatch between the skills needed by employers compare to the skills possessed by the Nigerian graduates. It has been observed that many graduates employed in the industrial sector are incapable of technical solutions expected of individuals having their levels of training (Anyanwu and Iloeje, 1998; Ugwuonah and Omeje, 1998). As a result of this development, Dabalen et al (2000) contend that employers of labour have to put their recruits through intensive training after employing them before they can discharge the responsibilities they are employed for. This is taking toll on the profitability of the industries concerned. Idu (2014) in his own view emphasizes the need to change the curricular of Nigerian universities completely by making them national development oriented. He stated that many universities are still operating with the curricular they started with.

Ssebuwufu et al (2012) postulate that African universities have been tagged as ivory towers noted for churning out graduates and research out puts that are not relevant to the needs of employers as well as socioeconomic and technical challenges facing African economies. They argue further that knowledge and skills acquired by students at African universities do not meet industrial requirements and the wider economy. This mismatch, in addition with inadequate training in critical skill areas like problem-solving, analytical thinking and communication combined to exacerbate the unemployment status of graduates of African universities. Similarly, the authors observed that employers see graduates problem solving and creative thinking skills not to be adequate to perform the tasks required on the job. Suffice to say that employers perceive graduates of African Universities to be more academically oriented while deficient as far as awareness on latest developments and skills applicability is concerned.

Little wonder that Vidanapathirana (2001) contends that people are unemployed because of unemployment mismatch. Some of the factors the author harped on as responsible for graduate unemployment include the fact that graduates lack the required competencies, knowledge, skills and experience caused by inflexible curricular and teaching methods among others. Uche and Kpee (2007) also observe a disconnect between university dons, academic and industry and conclude that dons produce white elephant collar curriculum usable only for white elephant collar jobs. This situation reinforces Akano (2009) statistics that 7 out of 10 Nigerian graduates are unemployed.

Others believe that the problem of graduate unemployment should not be heaped on curriculum as universities are expected to review their curricular every five years (Bashir, 2014). Authors like Idu (2014) argues further that even though some universities do review their curricular every five years but stated that many of them are not really doing it well.

It is important to add that although change of curricular to make them applicable to current situation is necessary,

but then application of the curricular in terms of engaging the students in such a manner that will help them to be able to apply the knowledge got to practical situation is more important.

Ssebuwufu et al (2012) believe that universities have three overlapping mandates; teaching, research and outreach. The third aspect which involves connecting university activities to the society and the economy is not vigorously and comprehensively pursued by most African universities. This necessitates the need for university-industry linkages which is geared towards promoting the relevance of universities contributions to socio-economic development of their environment. This collaboration may involve different levels of engagement. It could be in form of research and development (industries funding research that are relevant in their production lines), training (training could be that the industries train students some practical skills that will make them employable or the universities training staff of the industries in particular professional skills that are lacking). University-industry collaboration may also take the form of curriculum development (this will warrant experts in industries to participate in drawing curricular by ingesting some practical courses that will enhance the employability of university graduates). Such collaboration will make graduates of such institutions ready to take up jobs in industries their universities have collaboration with. Such industrial training could be done through creating opportunities for student attachments and coplacements. This will help students not only to develop skills but also practical experience.

Weligamage (2009:118) has documented the areas that should be focused on in training students to make them employable after graduation. They are:

- 1. Knowledge skills: (a) Have a body of knowledge in the field(s) studied; (b) Be able to apply theory to practice in familiar and unfamiliar situations; (c) Be able to identify, access, organize and communicate knowledge in both written and oral English; (d) Have an appreciation of the requirements and characteristics of scholarship and research; and (e) Have the ability to use appropriate technologies in furthering all of the above.
- 2. Thinking skills: (a) Be able to exercise critical judgment; (b) Be capable of rigorous and independent thinking; (c) Be able to account for their decisions; (d) Be

- realistic self evaluators; (e) Adopt a problem solving approach; and (f) Be creative and imaginative thinkers
- 3. Personal skills: (a) The capacity for and a commitment to life-long learning; (b) The ability to plan and achieve goals in both personal and the professional spheres; (c) The ability to work with others.
- 4. Personal attributes: (a) Strive for tolerance and integrity; and (b) Acknowledge their personal responsibility for: their own value judgments; and (c) Their ethical behaviour towards others.
- 5. Practical skills: (a) Be able to use information technology for professional and personal development. Be it as it may, if universities intend to make their graduates employable, it is necessary for them to identify areas of need in the industries and strengthen their graduate skills in those areas through collaboration with the industrial sector.

#### Recommendations

The study therefore, suggests among others the need to bring in seasoned industrialists to participate in drawing curricula and also teach some practical courses on part time basis in Nigerian Universities. Efforts in this direction will equip Nigerian graduates with skills needed in the industrial sector of the economy with implications for their employability status.

Universities can as well boost the employability profile of their graduates through work related training via solid industrial attachment which could be done during specific period perhaps when the school is on break while students are undergoing their degree programmes. This will make them to be familiar with real work environment and the pattern of organizational operation.

University lecturers should engage the approach in their teachings that will help students to translate theoretical knowledge to practical solution. That is translating theoretical knowledge in proffering practical solution to problems. This can be brought about through problem-based leaning technique.

Universities should embark on aggressive drive in partnering with industries in a way that will make such industries to fund research in their production lines. Universities that are able to drive this successfully may even have centers for such were graduates of the institutions can even be employed in such endeavour thereby reducing unemployment.

The government should drive a policy that no industries in Nigeria is allowed to bring in foreign expatriates in skill areas where there are qualified and competent Nigerians.

## Conclusion

This study examines university-industry collaboration and graduate unemployment with a particular focus on Nigeria. The study finds that mismatch between universities curricular and industrial needs is a major factor responsible for graduate unemployment in Nigeria. It therefore, concludes that there is need for university-industry collaboration. This will help universities to identify areas of needs in the industries and then train their students in those areas so as to make them marketable in the labour market after graduation.

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