

AN INNOVATIVE APPROACH TO CRISIS IN THE NIGERIA'S TERTARY EDUCATION SECTOR

By

OBINI ONUCHUKWU, fnipr
Federal Polytechnic, Oko
Anambra State

Abstract

The crisis in the Nigeria's tertiary education sector has shown no sign of subsiding. With this perennial industrial actions, Nigeria may continue to miss out in her development agenda. This paper sought to find alternative means to mitigate the crisis in that sector. Using documentary sources, the paper canvassed for creative innovations to address the crisis in the tertiary education in Nigeria by first exploring the role of tertiary education in national development agenda, and situating the bane of tertiary education in Nigeria to include underfunding and the lacuna in institution and industry relationship as found in most advanced countries of the world. Based on these, the paper suggested among others, that there should be a long-term national development plan and a comprehensive tertiary education policy situated within the long-term developmental objectives of the country which will provide direction for institution-industry linkage; and there is the need to compose all tertiary education regulatory agencies into a single agency to be known as National Council for Tertiary Education for adequate regulation of tertiary institutions in line with the new institution-industry linkage.

Key Words: Tertiary Education, Innovation, Industry, National Development

Introduction

The Nigeria's tertiary education sector has remained in crisis and the end is not yet in sight. A whole session is already lost to industrial action and the Unions represented mainly by the Academic Staff Union of Nigerian Universities (ASUU) and the Federal Government have been in endless engagements most of which ended in a logjam. Akintade (2022, p.39) captured the ugly phenomenon of industrial actions involving the Nigerian universities from August 17 to September 18 2017 (1 month), November 4 2018 to February 7, 2019 (3 months), March 23 to December 23 2020 (9 months) and February 14, 2022 to date (8) months. Like the proverbial fight between two elephants, the hundreds of thousands of students who have been out of school as it lasts have been at the receiving end. While the Unions flaunt litany of demands that must be met to assuage their feeling of Government's ineptitude, Government on its part sees these demands as too utopian and unsustainable. The battle continues.

Tertiary education is an important sub-set of the education sector that should not be taken for granted if the much needed national development must be attained. The widespread recognition of tertiary education as a major driver of economic competitiveness has made tertiary education more important than ever in both industrial and developing countries of the world. The importance of a knowledge based economy for sustainable development premised on higher education has been recognised (Organization for Economic Co-operation and Development (OECD) 2018, p.28). Tertiary education therefore has become central to this development agenda.

The perennial crisis in the tertiary education sector occasioned by underfunding and unconducive teaching and learning environment, however, is antithetical to this development that a search for an innovative solution to the crisis in the sector in Nigeria has become imperative. This paper canvasses for creative innovations to address the crisis in the tertiary

education in Nigeria by first exploring the role of tertiary education in national development agenda, situating the bane of tertiary education in Nigeria, determining some creative innovations to address the challenges and making suggestions for a way forward.

Role of Tertiary Education in National Development Agenda

The National Policy on Education (Federal Republic of Nigeria, 2013, p.27) defines the tertiary education as education given after post-basic education in institutions such as universities and inter-university centres. The goals of tertiary education as provided in the policy document are to:

- a. Contribute to national development through high level manpower training;
- b. Provide accessible and affordable quality learning opportunities in formal and informal education in response to the needs and interests of all Nigerians;
- c. Provide high quality career counselling and lifelong learning programmes that prepare students with the knowledge and skills for self-reliance in the world of work;
- d. Reduce skill shortages through the production of skilled manpower relevant to the needs of the labour market;
- e. Promote and encourage scholarship, entrepreneurship and community service;
- f. Forge and cement national unity; and
- g. Promote national and international understanding and interaction.

These goals tilt towards the achievement of the much needed national development. In other words, the ultimate purpose of tertiary education is to engender socio-economic development through training in knowledge, technical know-how and skills and positive orientation of the individuals. The policy also provides that the tertiary institutions should pursue these goals through:

- a. Quality students' intake;
- b. Quality teaching and learning;
- c. Research and development;
- d. High standards in the quality of facilities, services and resources;
- e. Staff welfare and development programmes;
- f. Provision of a more practical based curriculum relevant to the needs of the labour market;
- g. Generation and dissemination of knowledge, skills and competencies that contribute to national and local economic goals which enable students to succeed in a knowledge based economy;
- h. A variety of flexible learning modes including full-time, part-time, block release, day release and sandwich programmes;
- i. Access to training funds such as those provided by the Industrial Training Fund (ITF), Tertiary Education Trust Fund (TETFund);
- j. Students Industrial Work Experience Scheme (SIWES) that is well structured, coordinated and supervised;
- k. Maintenance of minimum educational standards through appropriate regulatory agencies;
- l. An all-inclusive credible admissions policy for national unity;
- m. Supporting affordable, equitable access to tertiary education through scholarships and students' loans;
- n. Inter-institutional co-operation and linkages; and
- o. Dedicated services to the community through extra-mural and extension services.

The means for the pursuance of the goals of tertiary education for national development have been summarized in a four-point agenda by the Organisation for Economic Co-operation and

Development (OECD) (2018, p.51). According to the developmental institution, four major means by which tertiary education contributes to social and economic development are:

- a. The formation of human capital (primarily through teaching);
- b. The building of knowledge bases (primarily through research and knowledge development);
- c. The dissemination and use of knowledge (through interaction with knowledge users);
- d. The maintenance of knowledge (primarily through inter-generational storage and transmission of knowledge).

The tertiary institutions first and foremost trains human capital for development. This human capital forms the crop of human resources that man the various sectors of the economy. Secondly, through research, the institutions broaden the body of knowledge. Thirdly, the knowledge developed is not for the consumption of the institutions alone. It is meant to be disseminated to end-users. Fourthly, such knowledge should be able to transcend generations for sustainability.

The work by Payea and Baum (2015, p.87) on the benefits of tertiary education concluded that higher education benefits not only the individual, but society as a whole. Bloom, Canning and Chan (2005, p.123) developed a conceptual model that shows that tertiary education can lead to economic growth through both private and public channels. The private benefits identified include better employment prospects, higher salaries, and a greater ability to save and invest. On the other hand, the public benefits include increase in tax revenue for government for social development, governance, safety and research and development (Bloom *et al*, 2005, p.124). There is the need therefore to reposition the tertiary education sector for accelerated socio-economic development of the country.

The Bane of Tertiary Education in Nigeria

The tertiary institutions in Nigeria have enormous human resources to pilot research and development as evidenced in the exploits of Nigerian academics outside the country. The environment in which the ones at home operate has remained a cog in the wheel of development. One of the banes of tertiary institutions in Nigeria is the poor linkage with the industry. Despite the numerous research results being churned out from these institutions on regular basis, they remain mere academic exercise as there is no commensurate translation of these research results into products. A strong institution-industry linkage as found in most developed countries of the world could have provided a strong financial base for these institutions as well as reduce the incessant industrial action that has characterized that sector to the barest minimum. Japan realized similar challenge shortly after the World War II. According to Honda (2019, p.18), two major challenges were discovered:

1. A lack of domestically developed technology. This weakness was partly attributable to the myopic attitude of Japanese industrialists, who would foresee short-term returns and who preferred to import technology rather than to invest in costly Research and Development (R&D) activities.
2. Difficulty in translating the research results accumulated within academia into industrial products. This weakness was attributable to the lack of applied R&D.

Honda (2019, p.18) asserted that no real industrial development could be attained without basic research in major scientific fields. A Japanese Professor Yagi claimed that only the pursuit of new and creative research would allow Japan to achieve technological parity with the West (Honda, 2019, p.18). Consequently, a synergy was formed between the tertiary institutions and industry that crystalized to a technologically advanced Japan within few years.

Nigeria faces similar experience where industries would rather import technology rather than develop it locally. Similarly, due to weak institution-industry bond, industries have no interest in working with the institutions to translate research into products for national

development. Ethel-Echedo (2022, p.52) observed that the school-industry bond is weak in Nigeria because the Students Industrial Work Experience Scheme (SIWES) which primarily is meant to expose students to skills relevant to their areas of specialization is not adequate in terms of quality and duration. In addition, the SIWES is not a programme that is meant to cement school-industry bond in the manner found in most advanced countries of the world.

Innovation to Address the Challenges of Tertiary Education in Nigeria

Innovation is an important component in development. Halpin, Dickson, Power, Whitty and Gewritz (2014, p.75) state that innovation refers to initiatives that are perceived to be new by those who introduce and experience them. Innovation contains the idea of output, of actually producing or doing something differently, making something happen or implementing something new. Innovation almost always involves hard work; persistence and perseverance are necessary as many good ideas never get followed through and developed. The goal of innovation is to improve results. This presupposes dissatisfaction with the prevailing situation or results. The purpose of innovation is therefore to generate a number of possible solutions that can be tested in reality (Wilberforce, 2019, p. 97). A reliable source of innovation can only be found in conveniently structured, adequately financed and innovation-oriented research and development (Centre for Higher Education Studies, Ministry of Education, Youth and Sports, Czech Republic, 2015, p. 30).

The fact that the tertiary education sector in Nigeria needs some creative innovations to address her mirage of challenges cannot be overemphasized. The gross underfunding of the tertiary education in Nigeria manifests in far less spending on research and development than the average. The share of public funds in total research and development expenditures is marginal, and is allocated especially to basic research, or more precisely to research that does not generate knowledge that could be effectively used in new technologies, products and services (Onyeme, 2020, p.20). Nigeria therefore, needs to borrow from some countries that have stabilized their tertiary education sector through some innovative practices.

In the United Kingdom, Japan and other western countries, institution-industry link has resulted to accelerated development. A number of initiatives have been introduced to support collaborative innovation between universities and industry. One such initiative is the creation of industrial collaboration centers. Yorkshire Forward created 14 centers of industrial collaboration (CICs) between 2002 and 2005 at a cost of £11 million. The CICs are focused on different high-tech sectors (Wright, 2017, p.212). By the end of 2005, 1,000 projects had been completed. Yorkshire Forward claims that these projects had generated £26 million of gross income and created or safeguarded 250 jobs. Given the nature of much high-tech research, a need to develop long-term partnerships between specific universities and firms has been recognized. The U.K. government has provided a sum of £30 million to establish five university innovation centers across the United Kingdom. The intention is for the partnership model of industry and university links to be used to develop sectors of strategic importance to the regions. Apart from generating enough money to finance research and development, the link will also provide financial stimulus to cater for personnel needs. Nigeria's tertiary education sector can establish such collaborative centres with cognate industry which not only will improve funding, but aggregate the needed manpower skills for national development.

Similarly, in the United States, a number of the U.S. universities that established patent-licensing programs during the 1980s and 1990s emphasized patenting and licensing of faculty research results as the most important channel for technology transfer and research collaboration, as well as for revenues (Mowery, 2017, p.54). The Massachusetts Institute of Technology (MIT), Stanford, and UC Berkeley share a number of characteristics. All have engineering colleges ranked among the top five in the United States, as well as strong research capabilities in the physical sciences, and all have long permitted patenting by faculty members.

All also have a history, dating back to the early 20th century, of collaborative relationships with industry that have contributed to the growth of regional information technology, electronics, and biomedical industrial complexes in northern California and eastern Massachusetts (Mowery, 2017, p.132). Such can be replicated in Nigeria given the political will, appropriate legislation and engagements with the tertiary institutions and the industry.

Recommendations

In view of the foregoing, it is recommended as follows:

1. There should be a long-term national development plan and a comprehensive tertiary education policy situated within the long-term developmental objectives of the country. This will provide direction for institution-industry synergy;
2. There is the need to compose all tertiary education regulatory agencies into a single agency to be known as National Council for Tertiary Education for adequate regulation of tertiary institutions in line with the new institution-industry linkage. This body should comprise stakeholders from the government, academia and the industries;
3. There should be both vertical and horizontal integrations among stakeholders in the tertiary education sector;
4. The Federal Government should boost up funding for tertiary education through increase in the percentage of Education tax payable by firms;
5. The national Assembly should promulgate a legal instrument to compel industries to open up for research and development;
6. Government at all levels should create a greater enabling environment for the private sector and industry to thrive; and
7. Governments at all levels should create an integrated platform for dialogue on national provisions for tertiary education and the needs of the Nigerian economy.

Conclusion

The Nigeria's tertiary education sector is at crossroads. The crisis which has led to prolong strikes over working condition and other ancillary matters could be put to a stop through innovative tertiary education-industry collaborations in the area of research and development as practiced in some advanced countries of the world like the United Kingdom and the United States of America. Various arms of government need to muster the political will to enact appropriate legislation and provide machinery for the implementation of this collaboration in order to restore the glory of tertiary education in Nigeria.

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