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RESHAPING HIGHER EDUCATION FOR EMPLOYABILITY: A COMPARATIVE ANALYSIS OF CHINA AND NIGERIA'S STRATEGIES

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Abstract: The education sector plays a pivotal role in the economic growth and development of nations by enhancing human capital, fostering entrepreneurship, and driving technological advancements. To support the evolving education landscape, governments globally allocate substantial budgets for educational development. Approximately USD 4.7 trillion is expended annually by governments and households on education, underlining its paramount significance (UNESCO, 2018). Despite efforts to expand educational systems and implement reforms, several nations face a critical challenge of skills mismatch, particularly among university graduates. This disconnect between skills supply and demand has far-reaching implications for policy makers and educational institutions (Muhammad, 2020; Patin Olayomi & Adedeji, 2012; Nasharsh, 2015).

In response to the escalating issue of skills mismatch and the subsequent rise in graduate unemployment, interest has surged in vocational education systems. Advocates argue that these systems, offering distinct educational focuses from traditional universities, are better poised to address employers' skill requirements. This concept is exemplified by China's distinctive policy reform, which prioritized vocational education to align the labor force with the evolving demands of its economy (Jiqiu, 2016).

This article undertakes a conceptual analysis of higher education in Nigeria and China, with a particular focus on discerning lessons Nigeria could draw from the Chinese education system. Nigeria currently emphasizes the expansion of university infrastructure across the nation. Given the mounting challenge of skills mismatch impeding graduate employability, this pursuit merits a comprehensive examination. The paper delves into the state of higher education in both countries, considering strategies and policies that have been deployed. It scrutinizes China's innovative approach to vocational education and how it contributes to addressing skills mismatch and graduate employability. Through this comparative analysis, the article aims to offer insights into potential improvements for Nigeria's higher education landscape, taking into account the Chinese experience.

Keywords: education sector, economic growth, skills mismatch, vocational education, higher education

Introduction

The education sector has always been a vital component of economies worldwide, contributing significantly to the economic growth and development by boosting human capital, and promoting entrepreneurship and

technology developments and advances. Due to its importance, governments around the world are pouring in large budgets for the education sector, to support the sector‟s development and needs to better cater to the education needs and demands of the global population. As a fact, it is estimated that global spending on education on an annual basis by governments and households stand at around USD 4.7 trillion (UNESCO, 2018). Many countries, despite their moves in expanding their education system and implementing education reforms, are facing serious problems associated with the prevalence and degree of incongruity between the supply of and demand for skills especially for those university graduates. Several studies indeed highlighted the issue of skills mismatch that could have significant policy and practical implications for universities and the government to take consideration of (Muhammad 2020; Patin Olayomi & Adedeji, 2012; Nasharsh, 2015). Due to the prevalent issue of skills mismatch and increased unemployment among university graduates, there has been a growing interest in the role of vocational education systems, with proponents suggesting that such system with different educational focus than university education could allow for better meeting the demand of skills needed by employers. China, for example, implemented a unique policy reform to prioritize vocational education to better equip its labor force in meeting the present and future demands of the Chinese economy (Jiqiu, 2016).

In light with this, the purpose of this article is to conduct a conceptual analysis on the states of higher education in Nigeria and China, with focus on what Nigeria could learn from the Chinese education system. Currently, the main focus of the Nigerian government is to build or introduce new universities across the country. Given the growing issue of skills mismatch affecting employability of university graduates, the Nigerian pursuit of increasing the number of universities, therefore, merits some discussion.

Development of university education in Nigeria

Higher education or university education in Nigeria had played significant role in supporting the growth and development of its economy, especially in building the country following colonial independence in 1960 (Salihu 2020). Before its independence, The University College Ibadan was the country‟s first university established in the 1948, which was an affiliate of the University of London. In 1960, the country saw its second university, the University of Nigeria in Nsukka, which was established by the Eastern Region government. After the declaration of its independence as a British colony, the Federal Government of Nigeria put forward plans on developing new universities across the country, following findings of the Ashby Commission auditing the higher education needs of the country. University of Ife (now known as Obafemi Awolowo University), the Ahmadu Bello University in Zaria and the University of Lagos were established in 1962, with the latter established by the Federal Government. In the same year, University College Ibadan gained its university status and became a full-pledged university. These universities are said to be the first generation universities in the country (Otonko, 2012).

Between 1975 and early 1990, the country saw major expansion in its higher education system, with the establishment of seven second generation universities between 1975 and 1980 e.g. Universities of Calabar, Ilorin, Jos, Sokoto, Maiduguri, Port Harcourt and Ado Bayero University, Kano. There were also five third generation universities between 1980 and early 1990s like the Federal Universities of Technology in Owerri, Makurdi, Yola, Akure and Bauchi (Otonko, 2012). In the 1990s, the Federal Government acknowledged the need to have better ways to provide equal access to higher education, and that they could need additional help to carry the load of delivering higher education to its growing population. This resulted to the development and introduction of private universities in the country. The first two private universities established in the country was the Igbinedon University Okada and Madonna University in Okija. Due to the liberalization of the ownership of the university system in Nigeria, more and more private universities emerged since then (Ejiogu & Sule, 2012). As of 2019,

there are 79 private universities, 43 federal universities, and 52 State universities in Nigeria (Muhammad 2021; NUC 2019).

The emergence of new universities in Nigeria

For the past decades, Nigeria has seen significant changes in its higher education system, with the Federal and State governments continuously pursuing the sector‟s expansion, alongside the liberalization of the ownership of university system in the country allowing for the creation and growth in numbers of private universities (Ejiogu & Sule, 2012; Suleiman, Hanafi, & Taslikhan, 2017). Currently, there are two broad classifications of universities in Nigeria based on ownership – (1) public universities being owned and operated by the Federal and the State Governments, and (2) private universities owned by various religious bodies, individuals and organizations (e.g. Christian Faith based, Islamic Faith Based, individually-owned, company-owned and community-owned private universities) (Mogaji, 2019).

Although the country‟s plethora of universities had allowed for better accessibility to higher education for the Nigerian population, the higher education system is still facing major challenges and problems. Some reports indicated that universities in the country are under-funded, with aired issues like not enough investment in infrastructure and human resource and capital governing and administering such institutions (Mba, 2019). Nyewusira (2014) suggested that the political motives and interest of the government of creating more universities in the country had created a gap between the

actual needs in the university education and the politically-motivated pursuit of creating universities. However, Okonofua (2017) emphasized that, despite the huge number of universities in the country, Nigeria has not been able better its national developmental challenges, and that the existing universities yet to have a sustainable solutions to such challenges. This pointed to his rationale supporting continued development or creation of new universities, highlighting the continued searching for new universities that could find solutions in contributing to reach the country‟s developmental levels (Okonofua, 2017).

While the country already had large number of universities operating across the country, both public and private universities, the Federal Government still has plans to introduce and establish more universities. As a fact, the Nigerian Federal Executive Council approved the creation of four new private universities in the country, which include: (1) Greenfield University, Kaduna, (2) Dominion University, Ibadan Oyo State, (3) Trinity University, Ogun State, and (4) Westland University in Iwo, Osun State (Tukur, 2019). As of August 2019, the total number of private universities in the country is 79, with Ogun State having the highest number of private universities. On the other hand, there are 43 Federal Universities in the country, with Kaduna State having the most number of federal universities in comparison with other States. More so, there are 52 State Universities in the country, with Imo State having the highest number of State Universities housing a total of six universities (Muhamamd 2021; Mogaji 2019).

Vocational and Technical non-university institutions (polytechnics, monotechnics, specialized institutes & IEIs)

Besides universities, Nigeria also have several vocational and technical non-university institutions. For example, polytechnics are those technical institutions that provide post-secondary technical education programs that results to awarding of diplomas or certifications. Currently, there are 29 approved federal polytechnics, 48 State polytechnics, and 57 accredited private polytechnics (National Board for Techncial Education, 2020). Monotechnic colleges offer education and learning for a single technical subject; hence, being a very specialized institutions which also requires difference higher educational leadership framework hence looking at their difference typologies (Salihu 2019a; Salihu 2019b). As of 2020, there are a total 83 monotechnics in Nigeria, in

which 33 of them are accredited colleges of agriculture, 43 being public colleges of health science and technology, and 7 are private colleges of health science and technology. Another group of non-university institutions in Nigeria are specialized institutes, which generally carry out scientific research and offers course of training in one of key areas of science and other disciplines. As of 2020, there are a total of 31 specialized institutes in Nigeria, with majority of them owned and operated by the Federal government. On the other hand, there are over 150 innovation enterprise institutions (IEIs) in Nigeria (National Board for Techncial Education, 2020). These are education institutions that design programmes that reflect industry needs, technological trends and global best practice. They offer a range of programmes focusing on practical training (Nigeria's Enterprise Institutions & Education, 2019). Majority of IEIs in Nigeria are owned and operated by private organizations. More so, there are a total of 78 accredited vocational enterprise institutions (VEIs) in the country (National Board for Techncial Education, 2020). However, debate remains if institutional differentiation truly exist in
Nigerian higher education system in practical terms (Muftahu, 2020)

Large number of university graduates without job- and no skills

Nigeria has an excessive number of universities operating across the country, with state, federal and private universities totalling to 174 universities as of 2019. Despite the plethora of universities, the country‟s higher education system still faces many challenges, from under-funding of universities to the gap between university curriculum and demand of the economy. Putting emphasis on the latter issue, many countries, not just Nigeria, is experiencing issues concerning skills mismatch among university students, with further negative implications at individual and macro-levels (Biney, 2015; Hanapi & Nordin, 2014). Even developed nations like the US are experiencing skills mismatch, with more and more US employers are having difficulty in finding workers, including those university graduates, who fit in the needed position (Buckley & Majumbar, 2019). China, for instance, also experienced mismatch between the demand of skills required by the fast-paced development of the industrial economy and the higher education structure derived from the „massification‟ of the Chinese higher education (Gao, 2018).

In Nigeria, the study by Aloysius, Ismail and Arshad (2018) highlighted the core issue of skills mismatch that further cause graduate unemployment in the country. Their findings indicated that the skills learned in universities were found to be inapplicable in the labour market. Teaching in universities in Nigeria was based on theory instead of practical, which could have direct influence on the knowledge transfer from education to labour market. The education-job mismatch was also highlighted in a similar study by Aminu (2019), in which such mismatch has caused increasing graduate unemployment in the country. The study‟s findings indicated that unemployment rates were at 30.8 per cent for post-secondary graduates.

Based on findings from a more comprehensive skills gap assessment conducted by the Industrial Training Fund and the UN Industrial Development Organization (2017), one of the main skills supply issue in Nigeria is the inefficiencies in higher education institutions in the country. Diagnostic evaluations indicated that technical colleges in the country are facing a series of serious problems, with the institutions unable to respond to the changing labour market requirements due to its existing supply-driven orientation. The evaluations further indicated that the curricula, instructional equipment, as well as evaluation techniques are often outdated, which results to unsuitable low internal and external inefficiencies. The assessment also indicated that polytechnics make use of content-driven approach with majority of the examinations for students provide little attention to practical application of acquired knowledge. As a result, there is a „deep gap between the competencies of the graduates and the needs and opportunities of the labour market‟ (UNIDO, 2017).

Expansion of Higher education in China

For the past few decades, China has been pursuing an audacious move towards mass higher education in alignment with the fast-paced modernization and industrialization of the Chinese economy (Chen, 2004). The high education in the currently is in its massification phase, characterized by the significant increases in the enrolment numbers and the increase in the number of universities and colleges; similar to the current state of the Nigerian higher education system. Two decades prior, China has seen increased student enrolment, with a gross enrolment ratio higher that the targeted 15 per cent. In 2010, the ratio further increased, reaching to around 26.5 per cent. Estimates based on the National Mid-long-term Educational Reform and Development from 2010 to 2020 indicated that the country will experience a gross enrolment ratio of higher education of around 40 per cent by the end of 2020 (Gao, 2018). Historically, higher education learning in China dated back between 770 BCE and 403 BCE, where ancient institutions like the Jixia Academy were developed as a way to explore advanced knowledge. It was in the mid-17th century that China begun its higher education modernization, in which the western knowledge was introduced through establishing higher education institutions like the School of Combined Learning, the Ziqiang Institute and the earliest modern universities such as Wuhan University and Peiyang University (Wu & Zha, 2018). As of 2019, China has over 300 private universities and over 1,500 public universities (Chiwest, 2019).

China's Converting colleges and universities in to vocational schools

Although the massification of the higher education in China had allowed for greater accessibility to education to its growing population, the current system was reported to have resulted in skills shortage and had been a factor that inhibited innovation (Mercator Institute for China Studies, 2015). For the past decades, vocational education and training (VET) has been a major component to the country‟s education system, considering that it contributed significantly in meeting the needs of a rapid paced growth of the country‟s economy and society. Typically, the country‟s VET model encompasses provision of VET in post-junior secondary and post-senior secondary school level, as shown in Figure 1 below. Higher vocational education are provided by higher professional training schools as well as technical and vocational colleges and general universities.

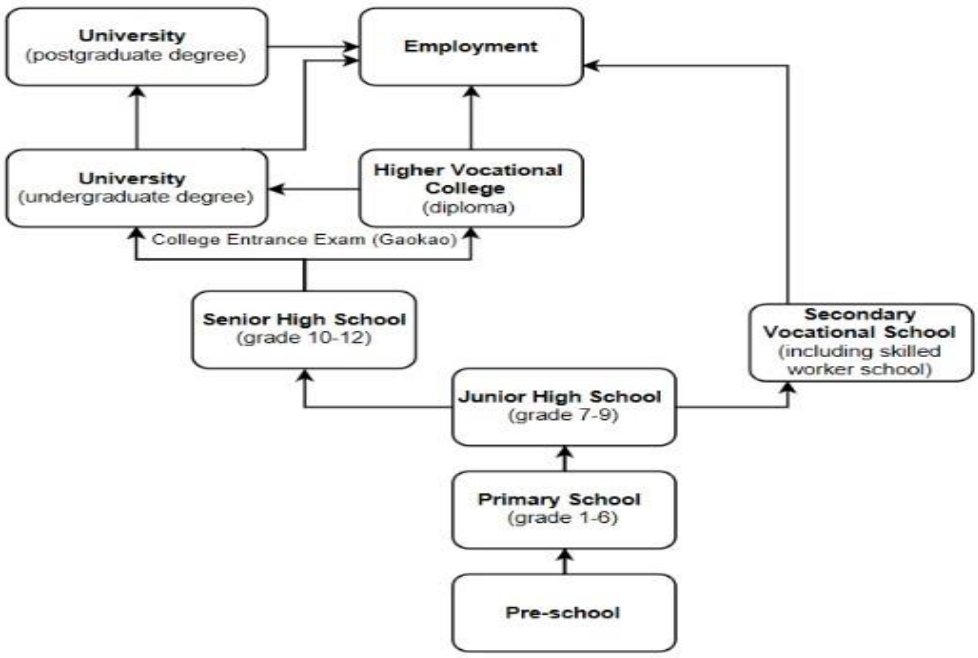

Figure 1: Vocational education pathway in China (adapted form (Australian Department of Education, 2019).

Recently, the Chinese government made plans to transform many of its existing universities into vocational institutions and polytechnics. The plans was said to transform around 600 universities into polytechnics (Sharma, 2014). Specifically, the Chinese State Council-published "Implementation plan on National Vocational Education Reform" provided planned initiatives that focused overall on strengthening the vocational education in the country as a way to better equip its labor force in meeting the needs and demands of its current and future economy. Based on the said plan, seven core objectives were set to be implemented:

1. Improving the National Vocational Education System through improvements in the national framework, promotion of high quality higher vocational education and improvements in training systems.
2. Creating national standards for vocational education, encompassing improving the teaching standards, creating certification system, and creation of a national credit bank to support vocational education
3. Integrating vocational schools with the industry through combining knowledge and practice, work and study, strengthening cooperation between vocational colleges and industry and constructing high-level vocational education training.
4. Establishing a vocational education system supported by industries and evaluation organizations.
5. Improving policies to ensure the benefits of skilled professionals through improving wages and funding mechanisms for vocational education
6. Strengthening the level of quality of supervision and evaluation of vocational education
7. Effectively implementing the reform through strengthening overall leadership (Australian Department of Education, 2019)

The lesson for Nigeria

It can be assumed that the current state of higher education in Nigeria is plagued with issues and problems, including under-funding and particularly issues associated with the mismatch between the demand of the economy and the higher education curriculum and structure. Nigeria‟s development and growth of its higher education was driven by the political interest that endorsed a chaotic expansion of the university education in the country. The government has somewhat failed to strike a right equilibrium between the massification of its higher education and the „actual need or desirability‟ for the increased number of universities in the country (Nyewusira, 2014). The major education reform in China that focused on strengthening the vocational education and training (VET) can provide major takeaways and lessons for Nigeria to consider. One of which is the shifting the higher education from a quantity focused to a quality focused approach (Asiyai, 2015). The massification of China‟s higher education has led to some problems in education-job or skills mismatches, and that having a more quality-focused higher education through expansion of VET system would help alleviate the issue (Gao, 2018). In short, it is not the quantity that matters, it‟s the quality and relevance of the universities and how it could contribute in meeting the demands of the rapidly growing and developing economy. Given the findings from studies such as Aloysius, Ismail, and Arshad (2018) and Aminu (2019) concerning graduate unemployment and skills mismatch among Nigerians, the Nigerian Federal and State Governments should learn from the Chinese‟ demand-driven technical and vocational education and training system. Skills development at higher education should be a core element in curriculum, in which teaching the necessary skills and competencies to students should be aligned with the needs and requirements in the labour market. Chinese‟ current modernization and reform process of its higher education highlighted the close coordination and cooperation between the

government, the higher education institutions and the industry to have better outlook for the supply and demand of skills and labour.

Conclusion

Both China and Nigeria pursued massification of their higher education, and such process had increased the accessibility of higher education to their respective growing population. Despite this, both countries had faced significant issues concerning education-job and skills mismatch and graduate unemployment as a result of mass higher education. Skills gap assessment by UNIDO (2017), in specific, shed some light on the issues in the skills supply, where higher education institutions like polytechnics and technical colleges failed to respond to the changing labour market requirements due to its existing supply-driven orientation, further resulting to the „deep gap between the competencies of the graduates and the needs and opportunities of the labour market" (p.4). At the moment, what is needed in Nigeria is not an increase of university graduate numbers in academic fields, but rather, more skilled technical graduates with various entrepreneurship skills. Moving into a quality-focused and relevant higher education from a quantity-focused system could open doors of opportunities for Nigeria to capitalize on, as what China had employed. China"s demand-driven technical and vocational education and training system provide important takeaways for Nigeria, as it focused more on aligning the market demand with the skills supply through high-quality vocational education and training (Australian Department of Education, 2019). In a nutshell, Nigeria should focus more on the pursuing a rapid expansion of its higher education not just in terms of the number of higher education institutions (e.g. universities and vocational and technical non-university institutions) established but on the worth and relevance of these institutions in terms of bridging the gap between the skills supply and demand.

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