Work-Based Learning in Nigeria's Higher Education: What now?

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Academic work-based learning (WBL) has an over a century-long history in Nigeria. The current WBL programs are the Students' Industrial Work Experience Scheme (SIWES) and the Graduate Internship (GI). They are sponsored by the federal government with the aim to improve employment outcomes. However, there is still a gross mismatch between the skills of graduates and the demands of employers. This study analyzes why the WBL programs in Nigeria have yet to be successful and suggests alternatives. The analysis reveals a dysfunctional job placement process as a primary barrier and suggests consolidating the SIWES and GI into one school-to-work program, based upon the Graduate Employability Skill Development (GESD) model, along with strategies to improve the development, management, and quality assurance of placement. The article concludes by underscoring the integration and effective management of WBL at all levels of education, including continuing education as an important and realistic approach that Nigeria should strive for to attain appreciable development.

Key words: Work-based learning, Nigeria, vocational/technical training, high education, internship.

Introduction and historical background

Higher education (HE) – a.k.a., tertiary education – has been receiving extraordinary attention since the beginning of the 21st century. Much of the global attention is because the growth and development of nations are hinged on the level of education and knowledge of its citizens (Boud et al, 2020; Costley & Boud, 2020). With knowledge production, dissemination, and consumption at the core of economic transformation, HE institutions are envisioned as strategic players in developing human resources (Sall, Lebeau, & Kassimir, 2003). Likewise, work-based learning (WBL) has become a vital element of the educational system around the globe with the recognition of the importance for facilitating economic development (Boud & Solomon, 2001). Countries with HE systems that integrate WBL are better poised to make the transition to a

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knowledge economy.

Today, what is known as WBL in Nigeria began as vocational and technical training. Vocational education (VocEd) or Technical education (TechEd) is the educational process that focuses on individuals' preparation for entrance and progress in occupations or careers. It can take place at the secondary school or higher education (Uwaifo, 2010). Strikingly, VocEd/TechEd in Nigeria dates to 1885 when the colonial Hope Waddell Institute was established in Calabar. However, the real planning of the system was in 1946 when it was given a place in the Ten-Year Plan for Development and Welfare. Before this date, the colonial government's attitude was that the provision of technical education for Nigerians (beyond very limited artisan training for governmental departments) was not important. Up until the early 1940s, technocrats were unable to recommend the establishment of a single training institution. They believed that big trade school or a technical college was wasteful. They reasoned that such school would be expensive to build and equip and require many European and African staff (Osuala, 1976). But eventually, it took root in 1947 when the first indigenous HE institution and Polytechnic, the Yaba Technical Institute (now Yaba College of Technology) was founded. Later on, Nigerian trade schools and polytechnics started developing an array of skill sets that were responsible for some portion of the workforce up to a point. For a while, the Nigerian workforce was viewed as a promising lot comparable to its counterparts in Asia and elsewhere. But with time, employers observed that graduates were lacking practical skills and resolved that the education being received in the institutions was not responsive to the needs for employment (Uvah, 2004). The dependence of industry on technical competencies for operation and maintenance of its resources required a cadre of workers who possessed knowledge of the new technologies that were prevalent at the time in the workplace.

Hence, WBL was formally introduced in the Yaba Technical Institute in 1969 when it attained autonomous status to upgrade the VocEd/TechEd provided to the students. The reference for WBL as integrated into the curriculum in the Yaba College of Technology was industrial training. The students participated in the scheme at the end of the academic year periods and were

sponsored by employers. However, this form of industrial training involving automatic sponsorship by employers was discontinued with the rapid expansion of the HE institutions (Uvah, 2004). Fast-forward to current WBL programs which are sponsored by the federal government as prerequisites for employment. They are the Students' Industrial Work Experience Scheme (SIWES) and the Graduate Internship (GI). The placement of students or graduates of HE for vocational and technical training in work settings is an opportunity to participate in activities relevant to various disciplines and to reflect on the experiences (Obiete, Nwazor, & Vin-Mbah, 2015).

Nigeria's Industrial Training Fund (ITF) set up SIWES to develop employability skills of students (Industrial Training Fund [ITF], 1973). Employability skills are knowledge, skills, and attitudes students need to attain and maintain jobs (Pitan, 2016). On the other hand, the GI is offered as part of control of professional practice in the health fields and administered by two professional bodies. The professional council for the field of medicine is the Medical and Dental Council of Nigeria (MDCN) established in 1963, while that for pharmacy is the Pharmaceutical Council of Nigeria (PCN), established in 1992 (Medical and Dental Council of Nigeria [MDCN], n.d.; Pharmaceutical Council of Nigeria [PCN], n.d.)1.

Studies have demonstrated the academic relevance of the WBL programs and have credited them with improving skills (Adebakin, 2015; ITF & University of Jos, 2011; Oyeniyi, 2012; Ugwueze, 2011). But questions remain why Nigeria's development continues to spin on its wheels despite over a century of investment in this area. Preliminary analysis indicates that despite the long history of integration of WBL in HE institutions in Nigeria, the goals are still far off. There is still a gross mismatch between the skills graduates come out with and the demands of the business world. Specifically, HE curricula have not matched pace with modern skill sets. Consequently, most graduates of Nigerian tertiary institutions are plagued by the inability to get jobs or become self-employed (Obiete et al., 2015).

The purpose of this article is to conduct a fine-grained analysis to illuminate the barriers to progress and strategies to integrate WBL to achieve economic development in Nigeria.

The remaining segments of the paper are four-fold. The first serves as a brief contextualizing appraisal of the tertiary education system. The second section provides a comparative analysis of the two forms of WBL (SIWES and GI). The third suggests a way to implement WBL in tertiary education relative to the needs for increasing employment outcomes and economic development in Nigeria. The conclusion discusses prospects of extending WBL to elementary, secondary, and continuing education in Nigeria.

Appraising the Nigerian tertiary education system

Given the precarious state of many economies in the developing world and a concern that they are likely to "miss the boat" and not benefit from the knowledge economy, HE in Nigeria has been scrutinized like never before (Sall et al., 2003). These efforts are indicative of the place of HE in a nation's life and how it is shaped by global forces. This appraisal aims to shed light on the *status quo* as they relate to national governance in Nigeria and global economic dynamics.

Country Context

It is trite to recount the abundance of Nigeria's resources, both human and natural. For instance, one in every six Africans is a Nigerian, making it Africa's most populous country – the seventh most populous country in the world, and recently, Africa's largest economy. Nigeria's population more than quadrupled from an estimated 42.5 million people at independence in 1960 to an estimated 140 million people in 2016 (Nigerian Embassy website). Among the notable demographics is a significant 'youth bulge' -- more than 60 percent of the country's population is under the age of 24 (WES, Staff, 2017).

The country is also endowed with many natural resources, most prominently the

crude oil, which has been the single largest source of export and growth of the economy since 1970, accounting for more than 90% of exports and 70% of the government revenues (Adedipe, 2004; World Education Services [WES], 2017). The economy has enjoyed some growth based on crude oil production and has achieved some key milestones. For instance, in April of 2014, the country's Gross Domestic Product (GDP) was rebased after 24 years from about US$ 270 billion to US$ 510 billion. Because of this, Nigeria in 2015 surpassed South Africa as Africa's largest economy. This emergence and the projection to be in the top 20 of the world's economies come 2050, are beyond mere symbolisms (Vanguard, 2016). But while GDP is a measure of economic growth, it does not necessarily translate to economic development. Nigeria is the largest African economy, but it ranks low in economic development (Human Development Report Office, 2014). Economic analysts have characterized the coexistence of resources and extreme poverty in Nigeria as a resource curse (Oni, 2013). It does not take much to realize the reason for this. The history of Nigeria's oil wealth is associated with a long list of social vices, such as corruption among government officials, which led to the collapse of basic infrastructure and social services since the early 1980's and has since then hindered investment in all sectors of the economy. The World Bank estimated that 80% of energy revenues in the country benefited only around 1% of the population (Odularu, 2008). Harbison's (1971) analyses of human resource problems in African nations still capture the *status quo* in Nigeria, 46 years after as the educational system, especially HE, is still poorly geared to match development needs.

The educational system in Nigeria comprises the primary, secondary, and tertiary levels. The tertiary level is made up of university and non-university institutions. The university system offers degrees in academic, vocational, and technical areas. The non-university system is composed of polytechnics and colleges of education, which provide technical/vocational and teaching skills, respectively. The federal government bodies tasked with managing the tertiary institutions are the National Board for Technical Education (NBTE) for polytechnics; the National Commission for Colleges of Education (NCCE) for colleges; and the National University

Commission (NUC), for the universities.

University education in Nigeria dates to 1948, when the University College of Ibadan was established as a residential and tutorial college affiliated to the University of London (Okojie, 2008). However, the bragging rights for the first indigenous federal university belongs to the University of Nigeria, Nsukka, which was established at independence, in 1960 (Okojie, 2008). Post-independence, in 1962, the University College of Ibadan attained an autonomous status as a degree awarding institution and following that the number of federal universities had risen to five with the addition of University of Ife, Ahmadu Bello University Zaria, and University of Lagos. Subsequently, the first state universities emerged in 1979 led by the Rivers State University of Science and Technology.

Military Rule and Structural Adjustment

"By 1980, Nigeria had established a well-regarded tertiary education system offering instruction at an international standard in a number of disciplinary areas. The universities of Ibadan and Ahmadu Bello, for example, earned global recognition for their research in tropical health and agriculture, respectively" (Saint, Hartnett, & Strassner, 2004). The University of Nigeria Nsukka excelled in arts, education, and the biomedical sciences. However, this reputation steadily diminished with the fiscal irresponsibility of the government and the IMF-imposed structural adjustment program (SAP) to curb budget deficits.

The institutions were grossly underfunded and mismanaged by the successive military governments during the 1980s and 1990s. In response to social and political pressures, access to tertiary education expanded rapidly despite cuts in the budget. Between 1990 and 1997, the enrollments grew by 79% – even as real value of government allocations for tertiary education declined by 27% (Saint et al., 2004). Attributing the declining quality of education to underfunding and unplanned expansion, a World Bank report on the state of education in Nigeria stated that the last well-trained graduates left the system in the mid-1980s.

Similarly, the SAP had a devastating effect on the educational systems in many other African economies. Numerous scholarly works, including that of the World Bank, provide evidence that the pattern of declining resource allocation to education was a direct result of World Bank/IMF austerity programs. UNESCO's World Education Report analysis of 26 African countries showed an overall decline of 33 percent in public spending per pupil, in the period 1980-1988. In Nigeria, the expenditure on education was as low as 2.7 percent (Geo-Jaja & Magnum, 2003). Also, the SAP had a considerable impact on the civil service—once the main employer of graduates (Sall et al., 2003). The concomitant effect of these policies was the decline in the quality of tertiary education and in the employability of graduates.

Post Structural Adjustment and Democratic Rule

A democratically elected government reemerged in 1999 after 15 years of hiatus. With it came the political will to tackle the nation's tertiary education difficulties (Saint et al., 2004). The government relinquished absolute control over tertiary education (Sall et al., 2003). After an earlier failed attempt, private universities eventually became a reality in 1999 when the first three private universities Babcock, Igbinedion, and Madonna universities were licensed to operate (Akpotu & Akpochafo, 2009).

Since then, Nigeria has continued to see an exponential growth of the tertiary institutions. As the demand for education mounted, private proprietors were quick to respond with a characteristic but peculiar attitude of private sector solution to social needs. Proprietors of these institutions have continued to adopt the private option response, turning it into one of the most profitable sectors of the Nigerian economy (Saint et al., 2004). At the last count, the NBTE recognizes 107 polytechnics and 220 colleges in various specific disciplines. The number of recognized universities has grown to 152, consisting of 40 federal universities, 44 state universities, and 68 private universities as accredited degree-granting institutions (WES, 2017). Thus, Nigeria has not been lacking in establishing institutions; her Achilles' heel has mostly been in the management and ensuring commitment to follow through with quality services.

One fundamental management issue of the institutions is underfunding. Saint et al. (2004) note that Nigeria's budget allocation for education significantly falls short of both regional and international norms. In 2009, what the top three African nations measured in their proportion of gross national product (GNP) spent on education were South Africa (7.9%); Kenya (6.5%); and Malawi (5.4%). But Nigeria was spending 0.76% of her GNP on education (Akpotu & Akpochafu, 2009). While her spending has fluctuated over the years, the levels decreased well below 10% following the oil price-induced fiscal crisis in 2015 (WES, 2017). Even at 10%, the expenditure on education is less than half of the 26% recommended by the UNESCO for economic development (Adeoti, 2015). Due to funding constraints, the institutions lack other resources, including staff, physical facilities, and equipment for quality service delivery (WES, 2017).

The second major issue relates to quality assurance which involves the establishment of standards for licensing and accrediting programs (Okojie, 2008). It is the responsibility of the regulatory agencies, the NUC, NBTE, and NCCE to license and accredit the activities and programs of the institutions. In October of 2017, the Association of Vice Chancellors of Nigerian Universities decried the continuing expansion of the institutions regardless of academic standards and relevance to sustainable development (*This Day*, 2017). The Nigerian National Bureau of Statistics (NBS) estimated that 33 million (23.10%) of Nigerians were unemployed in 2028. The 2017 WES figures showed a 47% unemployment rate among graduates of tertiary institutions with the warning that the situation would get worse and it has gotten worse with the rapid nosedive in crude oil prices. Already, Nigeria's GDP suffered a sharp decline when it dropped from 6.2% in late 2014 to 2.8% in late 2015 (Ikedi & Adewole, 2016). Further slashing of the funding for education was reported including scaling back of 40% of the funding from oil and gas revenues. Not to mention government-induced ever-present strike actions by members of the Academic Staff Union of Universities, derisively referred by some as an "annual festival." The unabated increase in unemployment, particularly of graduates of tertiary institutions, even with the integration of WBL warrants the analysis that follows.

Work-Based Learning Programs in Nigeria

As noted earlier, current WBL programs in Nigerian tertiary institutions are designated as SIWES and GI. The notion of internship is a one-time, short-term job placement and a mutually beneficial relationship between students and employers, in which students acquire skills in exchange for services for an organization (Anderson, 2017). The SIWES is considered an in-school, while GI is an after-school program. Hence, the use of GI highlights the timing of the internship program. The discussion that follows provides some background and a comparative analysis of the programs.

The SIWES is a skills training program. It was initiated in 1973 by the Industrial Training Fund to address the mismatch between the tertiary institution curriculum and the practical skills required for employment in the real world. The objectives of the Scheme include bridging the gap between theory and practice; enhancing contacts for job placement; and improving the involvement of employers in the educational process (ITF, 1973). It started officially with 784 students across 11 universities and polytechnics and participation was limited to engineering and technology specialties. Since then, the number of participants galloped. The program now forms part of the requirement for students enrolled in the fields of engineering, technical, business, applied sciences and arts. The peak of participation in the Scheme was in 2008, when 204 institutions and 210, 390 students participated (Mafe, 2010). The number dipped to 136 institutions and 79,852 students participating in 2017 (Sundiata Post, 2017).

On the other hand, GI is a clinical training for recent graduates in the health fields. It is offered by professional councils as part of the control of practice. Medicine and pharmacy are examples of fields whose graduates participate to obtain full license to practice. The professional council for medicine and dentistry is the Medical and Dental Council of Nigeria (MDCN). The internship for medical doctors is called housemanship, and the medical interns are house officers. The professional council for pharmacy is the Pharmaceutical Council of Nigeria (PCN). The MDCN and PCN are statutory agencies under the Federal Ministry of Health. They are charged with developing the standards and maintenance of registers of persons and premises eligible

to practice (MDCN, n.d.; PCN, n.d.). The councils also issue relevant publications in support of these functions. Funding support for the councils are from internally generated revenue and grants from the federal government.

Organizational Structure

The organizational structure for SIWES consists of four hierarchical levels and multiple stakeholders as follows: (1) federal government and ITF; (2) regulatory agencies of tertiary institutions (i.e., NUC, NBTE, NCCE) and Chief Executives Forum; (3) ITF area offices, employers/industries, and tertiary institutions; and (4) students (Mafe, 2010). The ITF is an agency of the Federal Ministry of Commerce and Industry with the subsidiary mandate for the central management of SIWES. The NUC, NBTE, and NCCE are the regulatory agencies of the tertiary institutions and belong to the Federal Ministry of Education. The Chief Executives Forum comprises of the ITF, NUC, NBTE, NCCE, and the industry leaders. The tertiary institutions and employers/industries are responsible for the operation of SIWES. The institutions are required to establish fully staffed and equipped coordinating units; appoint full-time coordinators; and operate an account for SIWES.

In contrast, the structure of GI is comprised of two hierarchical levels and fewer stakeholders as follows: (1) federal government, professional councils, and NUC, NBTE, and NCCE; and (2) employers/industries and the tertiary institutions. While the coordinating units mediate the relationship between the regulatory agencies of institutions (i.e., NUC, NBTE, and NCCE) and the employers/industries in the operation of the SIWES; the regulatory agencies for practice (i.e., professional councils) work directly with the employers/industries in the operation of GI.

The organizational structure for SIWES apparently is more bureaucratic. Thus, the structure has witnessed lack of quality control, administrative bottlenecks, and unnecessary overhead costs (Mafe, 2010). A leaner organizational structure, in the case of GI seems a logical solution to these operational dysfunctions. Also, there has not been a stable operation of SIWES under

central management by the ITF. The ITF had facilitated the establishment of the Scheme in 1973 and managed it up till 1979; it was fraught with management issues necessitating a takeover by the NUC, NBTE, and NCCE from then on till 1985. But similar concerns continued with this transfer. Hence, the management was reverted to ITF (Mafe, 2010). Despite all the policy reversals, the problem continues. Likewise, the absence of central management for GI led to instability in the operation. Prospective Interns/House Officers Association of Nigeria (PIHAN), an association comprising all graduates of human health sciences had called for the restructuring of the GI training program, and for the creation of an organ of the Federal Ministry of Health solely committed to its smooth functioning (Ekeh, 2016). In an apparent response, the Federal Ministry of Health consummated a plan for the MDCN to centrally manage housemanship as from 2018 (Ogunberu, 2017, as cited in Talbot, 2019). The plan to have the MDCN manage housemanship as a primary role seemed apt to address the operational dysfunctions of GI.

Organizational Functions

The functions of the WBL programs are here broken into placement, orientation, training and supervision, assessment, funding and payment of allowances, and quality assurance and research. Under each of these functions, responsibilities and challenges of stakeholders are discussed. Noted also are consequences of improper implementation of the functions and recommendations.

Placement: Eligible persons for SIWES are students in their penultimate year. The establishments for placement include government agencies and private enterprises. Notably, the coordinating units work with employers to develop job specifications and descriptions to support the placement operations. The SIWES coordinating units in the institutions use the employers list by ITF to place students based on match between the knowledge and skill requirements of their field and the job specifications, and send the master and placement lists to the ITF through the NUC, NBTE, and NCCE for vetting. Students can also initiate placement with employers in their fields of study and in locations they can find living accommodation (ITF, 2016).

Eligible persons for placement in an internship are graduates of human health sciences within two years of award of the degree, and those provisionally registered to practice. The training centers for doctors and pharmacists includes hospitals. The hospitals are approved by the professional councils through a rigorous accreditation process leading to the award of a certificate of registration (MDCN, 2006; PCN, 2009). In terms of the opportunity they afford the interns to observe clinical cases and try out treatment procedures, they are classified as tertiary or secondary. Tertiary level hospitals encompass all teaching hospitals while secondary level hospitals include Federal Medical Centers.

The professional councils provide a list of approved training centers to the graduates or prospective interns during the induction ceremony who then choose places of interest to apply. Thus, it is the responsibility of a graduate seeking an internship position to ensure that the training centers of interest are recognized by the council, and to find out application date, apply, and follow up with the selection procedures (MDCN, 2006; PCN, 2009). Training centers recruit interns by advertising positions; and screening involves reviewing applications, shortlisting of applicants, and administering a written exam and/or interview (Ajemigbitse, Omole, Ezike, & Erhun, 2014; Oshiko, Senbanjo, & Amole, 2009). They also make available suitable accommodation for interns within or near the place of work or provide commensurate allowance where not available (PCN, 2009; MDCN, 2006).

Thus, living accommodation is guaranteed for GI, but not for SIWES. Although placement is facilitated for SIWES participants using less stringent standard for eligibility determination, however, the process offers less autonomy (Mafe, 2010). Okoli (2016) has noted that the timing and duration of placement as mitigating the quality of SIWES. He cited cases where students were promised by their host employers they will be hired, but this offer did not materialize because of the long wait time to become employable. Regarding the duration of placement, he highlighted constraints in the building of skills due to the short time for the training. In terms of ensuring the quality of placement, the process for GI seems more proactive and appropriate

because the professional councils pre-approve the training centers. For SIWES, the process by NUC, NTBE, and NCCE in vetting the actual placement of students is retroactive.

The scarcity of places of attachment has been a great challenge for both programs. The SIWES coordinating units have been unable to offer places of attachment to all eligible students and rely on the students to seek for their own placements. The reasons include lack of comprehensive list of employers willing to accept students for training. This is attributed to the failure of the federal government to enforce the mandates (Amadi, 2013; Anderson, 2017; Atakpa, 2017; Mafe, 2010; Oladimeji et al., 2017). As a result, most students did their SIWES in places that were not germane to their field of study. Recommendations have been made for government to invoke penalties to enforce the mandates (e.g., Mafe, 2010; Tambuwal, 2012). Others, such as Agboh (2016) recommend offering incentives, such as tax rebates to employers. The latter seems like a better option to motivate employers to participate in human development.

Several authors report ordeals of prospective interns seeking placement in accredited training facilities, such as limited vacancies and biased selection processes (China, 2016; Ekeh, 2016; Makinde, 2016). As a result, some doctors opt for a supernumerary position, which means they would work without being paid to fulfill the internship obligation required to gain permanent registration (China, 2016). To address these challenges, the Federal Ministry of Health later mandated the MDCN to take full responsibility of placing medical doctors as from 2018 (Ogunberu, 2017, as cited in Talbot, 2019).

Orientation: The coordinating unit in the institutions organizes the SIWES orientation program to familiarize students with the code of conduct and ethics at work (Mafe, 2010; Oladimeji et al., 2017). The supervisor in the training centers organizes the orientation for interns (PCN, 2009; MDCN, 2004). The orientation for pharmacists spans two weeks (PCN, 2009). While information was not accessed about the quality of the operation of the orientation for internship, that on SIWES indicates inadequate orientation due to the large number of

participating students and limited time for the program (Mafe, 2010). Consequently, many students lack work ethics and proper conduct (Oladimeji, 2017; Tambuwal, 2012). To address these issues, some stakeholders recommend providing alternative resources such as, manuals on SIWES to augment orientation (Mafe, 2010).

Training and Supervision: The curriculum for SIWES consists of job descriptions based on stated learning and career objectives in different fields of study. That of GI consists of diagnosis and management of clinical cases (MDCN, 2006; PCN, 2009). The delivery methods for both feature the opportunity to observe and participate in job rotations in the different departmental or specialist lines while keeping records of training activities and assignments in logbooks.

The design of the curriculum and delivery methods with SIWES is integrated. Specifically, the design is sequential with GI because it is after the award of academic degree and for one year before observing the National Youth Service (NYSC) scheme. Also, it is integrated with SIWES because it is a requirement for academic degree and built into the penultimate year study. Meanwhile, students in universities embark on six months of SIWES training, and those in the polytechnics and colleges of education go on four months of training (Akerejola, 2004). Thus, the course load is six and four credit units for universities and polytechnics/colleges of education, respectively (Mafe, 2010). The integrated design with SIWES is evidence-based for facilitating the acquisition and transfer of knowledge and skills to jobs. But, it has been observed that the sequential design with GI is better suited for facilitating employment (Okoli, 2006). So, it behooves experts to strike a balance between the two approaches based on the relative overlap in the delivery of academic and vocational content in tertiary education. Because this issue borders on the main intent of this discourse, it will be discussed later in this analysis.

Meanwhile, participants in SIWES are supposed to be jointly supervised by an ITF area officer, employer, and institution coordinating unit supervisor (Atakpa, 2017; Mafe, 2010). The ITF area office staff is expected to visit the students at least once to vet logbooks while the institution

coordinating unit supervisor monitors student activities during three rounds of visits (Mafe, 2010; Oladimeji et al., 2017). An employer-based supervisor monitors the daily performance of jobs, assesses the students' progress on a weekly basis, and makes appropriate comments in their logbooks (ITF, 2016). Similarly, the supervision of interns involves an experienced and fully registered professional in the training center who is responsible for signing the weekly records of interns in logbooks and the Certificate of Experience (COE) issued at the end of training to certify that participants satisfactorily performed all duties and assignments under their supervision. The supervision of GI also involves the State Directors of the Ministry of Health and professional councils. The State Directors of Ministry of Health inspect and endorse the logbook during the monitoring visits while a representative of the professional councils inspects the logbook at a reasonable interval during the training (MDCN, 2006; PCN, 2009).

Notably, the supervision of GI rightly involves the professional councils as quality assurance agencies for practice. Conversely, the supervision of SIWES does not involve the quality assurance agencies of tertiary institutions. The lack of engagement of the quality assurance agencies in the supervision of SIWES leaves room for lapses in the operations as reports show that ITF often fail to supervise the students in training. Consequently, students take their logbooks to the area offices for endorsement (Mafe, 2010; Agboh, 2016). Also, the institution supervisors visit students only once due to lack of transportation and funding while industry-based supervisors do not take supervision with any level of seriousness (Atakpa, 2017; Mafe, 2010; Oladimeji, 2017). This lack of adequate supervision is particularly problematic because it impinges on the integrity of the grades students get at end of training.

Assessment: The assessment of students' for SIWES is based on the review and grading of the logbook, end-of-training report, oral presentation of the end-of-training report, ITF Form 84, and Interim Report of Supervisors on a scale of 0-100% (Mafe, 2010). The ITF Form 8, logbook and Interim Report of Supervisors are meant to capture both supervisor and student evaluations of the experience, while end-of-training report and oral presentation capture only the student perspective about their experience. Guidelines are provided to standardize the

reports, which the students present to a panel consisting of a representative of the SIWES unit of the university and the members of their department (ITF, 2016; Tambuwal, 2012). Students submit logbook, ITF Form 8, and Interim Report of Supervisors to their institutions at the end of the training, and for final grades which are assessed by Cumulative Grade Point Averages (CGPA) as well as a pass or fail evaluation. Failure to obtain a pass grade in the SIWES course may lead to repeat participation.

The assessment of interns involves the review and grading of logbooks, and the approved skill acquisition record on a scale of 0-100% as well as a pass or fail evaluation. The passing score for house officers is an average of 60% (MDCN, n.d.). The assessment also involves a pre-registration exam for pharmacists (PEP) post-internship. The pass mark is 50% (PCN, 2016). The grades for the interns are submitted to the Ministry of Health in the State of the training for vetting and to the professional council as part of the supporting documents for an application for full registration. The Registrar of the professional council issues interns who meet the criteria of good character and sound mind a Full Registration certificate. The consequence of failing to meet the passing scores for internship is equally a repeat.

Overall, the assessment of participants depends mostly on subjective judgments of professionals and non-standardized procedures (except for the PEP). These assessment approaches are based on “holism,” a paradigm widely adopted in college admissions and implicitly held by employers who rely exclusively on interviews to make hiring decisions. The principles are the following: assessment of future success requires considering the whole person; standardized test scores or measurement ratings are very limited snapshots, and expert judgment is the only way to fully understand how attributes interact to create a complex whole (Highhouse & Kostek, 2013).

Mafe (2010) further noted the non-uniform criteria and systematic assessment approach across all institutions necessary to standardize the scores earned by students. Besides, the assessments of students for SIWES focus on engagement in jobs to award CGPAs while the

assessment of interns is based on more comprehensive criteria, including engagement in jobs, performance on duties, and moral conduct to award a Certificate of Experience (COE) and full registration for practice. Because it is a requirement for graduation, there is need for use of multiple criteria and for more direct performance assessment of SIWES participants.

Funding and Payment of Allowances: The federal government funds both SIWES and GI. The funding for SIWES is through the ITF which in turn pays students allowances and supervisory allowances due to institutions (Mafe, 2010). For GI, the government allocates the funding to employers and approves the salary scale for interns. As is, the funding of GI seems satisfactory (Ekeh, 2016). Conversely, the funding of SIWES appears to really be problematic (Okoli, 2006). SIWES has grossly been underfunded over the years.

This underfunding is partly because participating students had increased at a much higher rate. Based on estimates by Mafe (2010), the amount expended at the peak of participation in 2008 represents a 29.2% increase from the dollar amount spent at the inception in 1974 while the growth in student population was 99.6%. This disproportionate increase in the amount expended compared to served population resulted in non-payment of student allowances and in disincentives on the part of students to participate. Overall, the lack of funding has resulted in dwindling human and material resources to support SIWES operations, especially the supervision of participants.

Similarly, the employers only are involved in paying allowances to participants of GI (Ekeh, 2016). Conversely, the payment of allowances to participants of SIWES involves multiple stakeholders, including the Federal Ministry of industries, ITF, employers, and institutions (Oladimeji, et al., 2017). The bureaucratic structure for the payment of allowances for SIWES participants has resulted in administrative delays. The delays are partly because most institutions lack financial autonomy and share a common account for operation (Oladimeji, et al., 2017). These delays have in the past resulted in a backlog of up to five years. Authors link

this delay to the lack of morale and commitment of both staff and students to the training (Oladimeji et al., 2017; Atakpa, 2017; Agboh, 2016; Anderson, 2017). Although online payment was later introduced as a solution, but the website designed for the online payment has had inherent problems which further hindered its implementation.

Quality Assurance and Research: The quality assurance of GI involves developing minimum academic standards, operational guidelines, and accreditation of programs (MDCN, 2006; PCN, 2009). The regulatory agencies of the institutions (i.e., NUC, NBTE, and NCCE) are partly responsible for the quality assurance of SIWES and GI. They work with the institutional coordinating units for SIWES and with the professional councils for GI in developing, monitoring, and reviewing job specifications to guide internship training. While the NUC, NBTE, and NCCE seem to have generally lived up to expectations in monitoring institutions to ensure compliance with the guidelines; not all SIWES-approved programs in the institutions have complied with the guidelines (Tambuwal, 2012). Thus, there is need for better monitoring of SIWES operations by the NUC, NBTE, and NCCE. Specifically, more attention needs to be paid to SIWES in the accreditation of institutions. Conversely, the NUC, NBTE, and NCCE have worked well with the professional councils to accredit internship training centers for placing students and to monitor compliance with guidelines (Oshiko et al., 2009; PCN, 2009).

Meanwhile, the ITF has not kept up with the responsibility of researching and circulating reports on SIWES operations to stakeholders using the comprehensive reports the institution coordinating units submit at the end of each performance cycle (Mafe, 2010). Ideally, quality assurance and research of GI should be part of the mandate for professional councils to control practices. However, it seems the professional councils have not kept up with this responsibility as far more research was accessed on SIWES.

To summarize, SIWES apparently has better placement standards. There has been a tremendous expansion of eligible students and placement is facilitated. However, the operation has been beset by several setbacks. Many authors also identified the lack of quality supervision

and funding. Notably, these problems are logistical due to the bureaucratic organizational structure. However, the leaner organizational structure for GI appears more efficient and effective for motivating and preparing students for the transition from school to the workplace. Besides, it appears that an organization of a network of professionals is useful to improve the operation of training and supervision. Also, the timing of placement for GI seems apt for facilitating employment outcomes. However, GI has similar inefficient placement operations (China, 2016; Ekeh, 2016; Makinde, 2016).

While previous studies focused on either the SIWES or GI, this integrated review suggests strengths and weaknesses as well as similarities and differences of the programs, and the need to build a coherent system. There is need to consolidate SIWES and GI into one school-to-work internship program. This proposal includes extending the central management role of professional councils beyond housemanship to all fields of study. The next segment presents the vision for the operation of the unified program.

The way forward

A Model of Work-Based Learning: The Graduate Employability Skill Development (GESD) model of WBL being proposed here draws from Pitan's (2016) model, which is evidence-based. By inference, the framework of the GESD model is outcome-based education (OBE). It is centered on addressing contemporary curriculum mismatches and making education relevant to the national and local needs (Geo-Jaja & Magnum, 2003). Accordingly, WBL is composed of opportunities for developing employability skills. The components are career education, real-world activities, work experience, and reflection and evaluation. The SIWES and GI incorporate work experiences and reflection and evaluation.

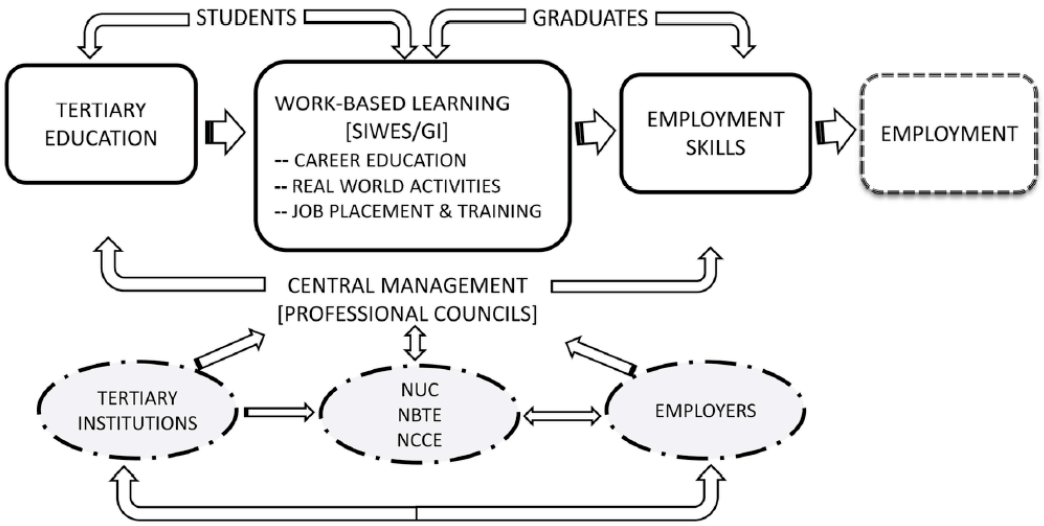

Figure 1: Graduate employability skill development model

Career education and real-world activities are the underemphasized components of the programs. They are all forms of collaboration with employers to prepare students on activities or situations which they are likely to come across in the real world. Pitan's (2016) findings suggest that career education (e.g., career counseling programs) and real-world activities (e.g., field trips to industries) are important for building the employability skills of students. However, most institutions lack or underutilize guidance and counseling units. Therefore, he recommends institutionalized career service units to provide career education at an early stage and continued. Amadi (2013) has recommended a comprehensive model of WBL that includes career education and real-world activities.

Hence, the GESD is a continuum model of WBL which begins with career education and real-world activities in school and extends to the work settings. As stated earlier, SIWES and GI are designed to facilitate career preparation through placement, training, and supervision in work settings. Thus, the GESD model implies a multi-purposing of WBL, covering career awareness, exploration, and preparation (Virginia Department of Education, 2014). The set up and management functions for applying the model are as follows.

Organizational Structure

A way forward with organizational structure for WBL is to maintain the lean management structure of GI while the professional councils should centrally manage the program. As noted already, analysts had advocated for a central management agency with a primary mandate for SIWES. Because the primary mandate of professional councils is the quality assurance of practice, it will help mitigate the demands of central management. As stated previously, the Federal Ministry of Health has similarly consummated a plan to have the MDCN centrally manage the GI program to address the challenges medical doctors experience, beginning from 2018. Extending the management style of GI to other fields of study is appropriate to standardize the functions of WBL and facilitate quality assurance and research. While the health field is well established and already have the professional councils represented at the national level in the Ministry of Health, some fields of study, lack representation at the federal level. Thus, efforts should be made to have an equal representation of all fields at the federal level. In the meantime, fields that lack representation at the federal level can have the respective councils affiliated to the Ministry of Commerce and Industry as is currently the case with SIWES.

Organizational Functions

Job placement and quality assurance functions are the focus because of the observed operational dysfunctions. The idea of job placement was originally formulated for individuals with disabilities in the US Here, we suggest it is an idea that can be adapted for general use in Nigeria. The goal of placement is to intervene in the management function of staffing an organization (Millington, Butterworth, Fesko, & McCarthy, 1998). Staffing is a uniquely human resource management function and involves worker movement into an organization through selection, orientation, and training (Millington, Miller, Asner-Self, & Linkowski, 2003). Job placement as it relates to a system perspective is defined as an intervention to bypass the employee selection process. The employee selection process involves comparing a potential employee with other applicants for selection. The ultimate competency of a placement professional is the ability to effect positive change in the applicant, the employer, or the

process of selection that binds them (Millington, Butterworth, Fesko, & McCarthy, 1998).

The targets for placement are students in their final year, so they can participate in the internship as soon as they complete their final year and before their call to national service (NYSC). An optimal job placement should ultimately facilitate employment and meet the following criteria: match with the educational qualifications and knowledge and skills requirements, located in a preferred area of residence; and remove barriers to employing graduates before they participate in the NYSC (Agboh, 2016; Anderson, 2017; Ekeh, 2016).

A bottom-up management process seems more appropriate to address placement issues. There is need for the coordinating units to serve as the local champions to initiate the development of training centers with the employers and mediate placement. The hiring of career counselors is useful to facilitate these functions. The process to ensure a successful placement entails: reaching out, establishing partnerships and agreement with the employers; consulting with the management of the work organization to build rapport for job analysis and supervision; advising appropriate arms of institutions on the areas for offering preparatory courses; and, counseling of candidates for placement (Atakpa, 2017; Virginia Department of Education, 2014). The MDCN (2006) provides a prophylactic rather than judgmental function of quality assurance. As previously stated, this quality assurance function of GI is proactive. The operation in respect of this framework is one of involvement of councils in the initiation and planning phases of the establishment of a training center to ensure compliance with guidelines of minimum standard. This implies that institution coordinating units and professional councils should collaborate in establishing or turning existing private and public enterprises in different parts of the country to training centers. The standards and guidelines for accrediting training centers should ensure adequacy of the physical facilities for admitting students and must be clearly defined by the councils and widely circulated to institutions. The councils should arrange the accreditation visits to include before, during, and at the end of the training of the first set of students.

Subsequent visits can be arranged with a training center to ensure the maintenance of standards. Each visitation should involve the completion of specific questionnaires in respect of criteria outlining standards; inspection of the facilities; interviews with the staff and participants; report of findings; and evaluation of the training center. The council should facilitate the research of effects of operation through creating a database for use by the coordinating units and employers in recording the inputs, processes, outputs, and outcomes of programs. Harbison (1971) has identified comprehensive assessment techniques for WBL programs to include, manpower surveys – the study of labor-absorptive capacity of different industries; labor force surveys and enumerations – continuous enumeration of the labor force; tracer studies of graduates – tracing of career patterns of graduates; and cost-benefit studies of returns to education – the calculation of cost-effectiveness of investments in education. From all of the above discussion, there are obvious benefits to appropriate integration of WBL into HE. The conclusion below summarizes the main points of this discourse and recommends the extension of WBL to other levels of education for advancing economic development.

Conclusion

Nigeria has one more chance to uphold the trust of her youths in yet another decade of promise. In 2009, the African Union (AU) launched The African Youth Decade, 2009-2018 Plan of Action, DPoA. It is a framework for multi-sectoral and multi-dimensional engagement of all stakeholders towards the achievement of the goals and objectives of the African Youth Charter towards accelerating youth empowerment and development (AU, 2011). With the DPoA, it is envisioned that by 2025, Africa would be an integrated frontier in the areas of economic, social, cultural, and political development. By share size of her economy, human and natural resources, it could be said that as goes Nigeria, so goes that AU project. Nigeria occupies a quintessential position to lead the continent to the 2025 AU vision.

The rationale for integrating WBL into the HE curriculum in Nigeria was to address employability skills. But what have defied logic is the continuous historically high unemployment rates among Nigerian graduates. Indeed, there has been little evidence of the

expected positive impact on the employability of graduates as well as on economic development, which is why this state of affairs demands that extra efforts be taken to investigate the barriers to effective integration. This analysis indicates that the reason why the Nigeria's HE system in recent decades has failed to provide the needed skills to graduates is because the institutions have been grossly underfunded but yet expanded tremendously regardless of academic standards and relevance to sustainable development. The analysis equally identified inadequate placement as a fundamental barrier of the WBL programs. Hence, the recommendations focus on strategies to improve the development and quality assurance of internship training centers. However, findings from the literature in advanced economies, such as by Solomon et. al (2001), suggest the value of extending WBL to primary, secondary, and continuing education to improve employment outcomes. More recently, Rooney and Boud (2018) have examined informal learning, using a practice theory perspective to show how learning can be understood as a key feature of working and how it is implicated in the normal ebb and flow of work practices.

Fortunately, with the 2014 Universal Basic Education guidelines, the primary and secondary school curriculum now emphasizes vocational training and is intended to increase employability of graduates. Also, the Federal Ministry of Education recently has supported several reform projects to advance vocational and technical education at all levels of education, such as the "vocationalization" of secondary education (WES, 2017). These changes can be viewed as a sign of gravitation towards WBL. The essence of extending WBL to primary and secondary school levels is to serve as an alternative for building the skills of those struggling learners and other individuals who may not be cut out for academic career. It is important to be mindful of individuals in this category, and to be inclusive in formulating fiscal policies in training on crafts and entry-level jobs, so that every citizen can contribute their own quota to national development. This would mean acquisition of subtle mix of know-how, techniques and tolls in the educational process that focuses on individuals' preparation for entrance and progress in occupations. It includes such job skills like carpentry, building, farming, welding, sewing,

knitting, weaving, office administration and farming.

As it stands, there was no integration of WBL in continuing education in Nigeria for professionals. Put otherwise, WBL as a component of tertiary education is simply meant to facilitate employment defined as an event of being hired. This model tends to see training and development as something undertaken only earlier in life rather than a life-time process. However, employability has been changing globally from a static binary event of being hired for a job, to a more dynamic and complex notion of obtaining meaningful jobs throughout an individual's lifetime (Adebakin, 2015). Work-based learning in continuing education is a part time education for those in work. In this type of WBL the traditional approach to the curriculum is abandoned so that the curriculum is determined by the requirements of the workplace and learning is designed around the needs of the individual or organization.

As a component of continuing education, WBL accentuates the essence of viewing learning as a lifelong activity and for generating national wealth and is central to a paradigm shift from an "industrial society" to a "knowledge society" (Solomon et al., 2001). The incorporation of WBL in continuing education is important because real progress in human development involves fostering resilient human development and reducing vulnerabilities to adverse events into the future (Human Development Report Office, 2014). Thus, the essence of extending the model to continuing education is to further facilitate the development and employability of individuals. Hence, the concept of development is a future-oriented type of training focused on bringing the competencies of individuals up to the desired standards for performance in careers into the future (Adebakin, 2015). Because the ITF and professional bodies have a similar mission to control practice, both agencies are central to working out the modalities for WBL as a continuing education scheme. There could be no better time for a scrupulously articulated WBL than now. Ultimately, the integration and effective management of WBL at all levels of education is an important and realistic ideal that Nigeria should strive for.

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