Promoting Apprenticeship as Panacea for Sustainable Skill Acquisition and Industries in Nigeria

by

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Abstract
The paper discussed apprenticeship training system as a means of bridging the gap between education/training institutions and the labour market as well as breaks the dichotomy between knowledge and skills acquired in school and those required in the workplace. The paper considered the concept and rationale for apprenticeship training, the challenges facing apprenticeship training in Nigeria, and approaches that could be adopted to promote apprenticeship training in Nigeria, among others. It was concluded that apprenticeship training in Nigeria has no policy framework guiding its operations, and therefore it is uncoordinated and unregulated. It was recommended among others that policies should be formulated to guide operations of the apprenticeship system and foster closer collaboration between education/training institutions and the industry/workplace in order to anticipate available opportunities in the labour market and prepare students to meet the challenges of such opportunities.

Keywords: apprenticeship training, skills acquisition, school – industry collaboration

Introduction
The Nigerian economy is characterized by slow and declining economic growth, low wages, unemployment and underemployment which can be traced to poor educational system. Various levels of the school system such as the secondary school, colleges, polytechnics, universities and other tertiary institutions admit and turn out large number of graduates annually, who have continued to add to the escalating unemployment situation. According to the Nigeria Bureau of Statistics (NBS) (2016), unemployment rate in Nigeria increased from 10.4 percent in the last quarter of 2015 to 12.1 percent in the first quarter of 2016, translating to 24.50 million persons in the labour market that were either unemployed or underemployed. The youth (15 – 35 years) registered the highest unemployment rate of 16.39 percent in the first quarter of 2016. According to NBS (2018), the unemployment rate increased from 18.8% in Q3 2017 to 23.1% in Q3, 2018.

The unemployment challenge in Nigeria has been attributed to a number of factors. Evoh and Agu (2016) identified education and training as the major factors that influence unemployment and the dynamics in the labour market. Majority of the unemployed lack the basic skills required to take up available positions in the labour market. Formal education institutions continue to place premium on theoretical knowledge and deliver contents that are most often unrelated to the trends and production processes in the labour market and industries, thus leading to importation of critical skilled manpower (OECD, 2018). This situation is due to a number of factors including the lack of or weak linkages that exist between education/training institutions on one hand and the industries – the world of work on the other. Bridging the gap between the education institutions and the world of work could provide opportunity for the youths to have hands-on experiences in industries and relevant agencies/establishments.

According to OECD (2018), the unemployment rates among young people in countries with a dual education system is considerably lower, which leads to the conclusion that apprenticeship training in line with the labor market, facilitates employment, especially among young people. This has been proven in a cross-country econometric analysis: a “one percentage point increase in the apprenticeship coverage rate is associated with
an increase in the youth employment rate of 0.95 percentage points and a reduction in the youth unemployment rate of 0.8 percentage points” (Lodovici, Comi, Origo, Patrizio, Torchio, Speckesser, Montalt, 2013). The paper therefore focused on ways of promoting formal apprenticeship training to enhance their contributions to sustainable skill acquisition and guarantee sustainable supply of skilled labour to the industrial sector in Nigeria. The paper will consider the concept and rationale for apprenticeship training, the challenges facing apprenticeship training in Nigeria, and approaches that could be adopted to promote apprenticeship training in Nigeria, among others.

Conceptualizing Apprenticeship training system

Apprenticeship has been solely responsible for the transmission of values and skills from generation to generation. The definition of the concept has evolved over the years and now used to represent various forms of skills acquisition, ranging from the traditional craftsperson – apprentice training to modern day designs that integrate education/training institutions and work place training. It is now globally regarded as a training system (International Labour Organization (ILO), 2012) because training agreements between master crafts persons and apprentices are embedded in a framework of rules and regulations that are commonly shared. Apprenticeship training system is here conceived under three typologies in line with ILO (2012). These include traditional, informal and formal apprenticeship training systems. Traditional apprenticeship between a master craftsperson and an apprentice are a common and principal medium for skills development. According to ILO (2012), traditional apprenticeship represents the system of skills transmission from a father or mother to a child, including close family members. Informal apprenticeship appears to be more open than traditional apprenticeship and apprentices come from outside the family or kinship group. However, a master craftsman training informal apprentices might also train their own child as traditional apprentices. Adekola (2013) defined informal apprenticeship as a process of learning/skill acquisition through enlistment with a master craftsman. It is a principal form of education for entry into any occupation or profession whereby a young person is apprenticed to a master craftsman who taught him the skills of a vocation and after many years of learning, he was allowed to start his own workshop or business.

Traditional and informal apprenticeship training possess features which distinguish them from any other forms of education/training. According to Sonnenberg (2012), the system is self – regulating and self – financing, with no established curriculum or formal procedure for the acquisition of skills, with the apprentice learning predominantly on – the – job through observation, imitation and trial, and error method. It is characterized by long duration, low pay, and lacks certification, with its success or failure depending largely on the level of skills and knowledge of the master craftsperson (ILO, 2012). These characteristic features gave birth to a third typology of apprenticeship – the formal apprenticeship training system.

Formal apprenticeship is a structured education/training which deliberately integrates and alternates learning in the work place with learning in an education/training institution. According to ILO (2012), formal apprenticeship encompasses a system by which the learner acquires the skills for trade or craft in an enterprise, learning and working side by side with an experienced craftsperson, and complemented by classroom – based instruction. According to Fazio, Fernandez – Cato, and Ripani (2016); Mieschbuehler and Hooky (2016), formal apprenticeship programmes can last from one year to three years, and take place at the secondary or post secondary level or as an alternative to senior secondary education, thus giving students the opportunity to engage in industry supervised workplace practices. While the formal apprenticeship training system teaches the theory behind the skills, and integrates soft skills, the traditional and informal apprenticeship emphasizes practical skill training without recourse to the why of the skills.
Alessandra (2015) enumerated the characteristic features of formal apprenticeships to include: contractual agreement between the apprentice and the training company and the training school, fixed duration, regulated by law or the training contract; the largest share of the training takes place in the company; and the apprentice is entitled to regular complementary school-based training following an overall training programme coordinated with the training companies; upon successful completion, apprentices receive a nationally valid and officially recognized certificate; and the company-based training follows a structured training programme. Formal apprenticeships are further characterized by features such as social dialogue and a clear set of roles and responsibilities between the social partners and government authorities at the macro level and the companies, training schools and apprentices at the micro level (ILO, 2012).

Formal apprenticeships provide some general education for students. When formal apprenticeships are designed to target secondary students, special attention is required to ensure that apprentices have foundational skills, as well as occupation-specific skills to avoid overly narrow specialization. Formal apprenticeships, according to Cumsille (2016); Smith and Kemmis (2013) offers structured training, a professional trainer to oversee apprentices, a written contract that stipulates training arrangements and an assessment to verify acquired skills; and establishes a strong partnership between the education system and industry in order to integrate firm resources among others. The demonstrated efficacy of apprenticeship training in most developed economies has thus brought to fore the need for promoting apprenticeship training in Nigeria and other African countries to address the lingering skills mismatches which has been a bane on the development of industries in the subregion.

Rationale for Apprenticeship Training System for Skills Acquisition

Apprenticeship, especially formal apprenticeship training prepare young people to master occupational skills and achieve career success by undergoing productive work for their trainers, earn a salary; receive training primarily through supervised, work-based learning; take academic instruction that is related to the apprenticeship occupation; and receive a certificate of completion which is recognized according to the National Qualification Standard (Safford, Cooper, Wolfenden, & Chitsulo, 2013). Studies conducted in the USA, Canada, Germany, Switzerland, Brazil, and Malawi (HollenBeck, 2018; Lerman 2013, 2014; Corseuil, Foguel, & Gonzaga, 2014; Safford, Cooper, Wolfenden, & Chitsulo, 2013) show that graduates who participated in formal apprenticeship programmes are more likely to find permanent, higher paying jobs with larger gains and community status.

Engagement is an ingredient that helps weaker students to enhance their chances of timely graduation, while its absence may cause stronger students to fall behind. According to Pitman (2014) and Lerman and Packer (2015), in most developed countries including the United States, apprenticeships have been identified as a veritable approach that can stimulate increased student engagement, learning, and the development and retention of skills valued in the labour market.

Apprenticeship provides unique experience which young people can acquire in no other way, as they work in disciplines that are interesting and new. The business of skill acquisition and school learning is not all about developing the ability to read and write, or perform a task; it is aimed at developing the totality of the individual, thus developing the academic intelligence, emotional intelligence and the acquisition of soft skills which every youth require for success in an occupation. The link between classroom learning and workplace schedules as in formal apprenticeships can be better appreciated by apprentices when they learn on the job, thus breaking the traditional dichotomy between school learning and industry processes.

The potential benefits of formal apprenticeship include: (a) the cognitive and motivational effects of integrating theory and practice in skill learning; (b) a closer correspondence between the content of skills and the requirements of actual production systems; and (c) increased youth employment
rates, and better school-to-work transitions in general. According to Lerman and Packer (2015), school-based and work-based apprenticeship afford young people the opportunity to interface and interact with constructive adults more than simply classroom teachers, who serve as mentors, on-the-job supervisors, and teachers.

Apprenticeship contribute to reduced cost of training/education as employers are bound to pay wages for the work of apprentices as well as the costs of work-based training, which they are bound to recoup through the productivity of the apprentice. According to the European Commission (2013), apprenticeship provides accommodation for difference in learning styles and smoothen the transition from school to work as well as contain youth unemployment. It afford students who are bored with school or doubt the value of education increased confidence that their efforts and investments in skill acquisition will pay off through the adoption of learning models based on learning-by-doing. According to Lerman (2018), a wide body of evidence indicates that apprenticeships are far more cost effective in teaching skills, especially employability and occupational skills than pure schooling. In Switzerland, which is described as the leading apprenticeship country, about 95 percent of 25-year-olds have either a BA level degree or recognized occupational certificate mainly through apprenticeship.

On the potential of apprenticeship in reducing unemployment, the European Commission (2013) reported that countries that engage youths in work and school-based learning programs have reduced unemployment rates under 9 percent for 15 – 24 year olds as compared to 16 percent in U. S. and other OECD countries as a whole and over 36 percent in most Asian and African countries. Hollenbeck (2018) notes that the financial gain to apprenticeship is high on the supply side, as participants do not have to sacrifice earnings during their education and training. On the employer side, Lerman (2014) notes that employers feel comfortable upgrading their jobs, knowing that their apprenticeship programmes will ensure supply of well trained workers.

Apprenticeship enhances innovation and innovativeness among workers. Being conversant with company procedures, workers who participate in apprenticeship programmes are more likely to understand and appreciate the complexities of firm’s productivity processes, and be in a better position to identify and implement technological improvements, especially incremental innovations to improve existing products and processes (CEDEFOP, 2011). UNESCO/UNEVOC (2015) provides a synopsis of the role apprenticeship programmes can play to include:

- Smoothing school-to-work transition by providing relevant work experience in a real labour market environment while learning
- Equipping youths with the skills needed by companies
- Provides effective training methodology for transferring complex skill sets, including for high technology occupations
- Combining work and training opportunities linked with a salary or allowance
- Enabling companies to better carter for immediate and future staff needs
- Making TVET systems more responsive to skills shortages and skills mismatches, among others.

Inspite of the enormous benefits associated with apprenticeship training system, its popularity in Nigeria is fast waning with no conscious efforts made for integrating it into the formal skill acquisition process.

Hindrances to effective skill acquisition in apprenticeship training system

Some of the problems and shortfalls of the apprenticeship system that tend to hinder its effective in skill acquisition are discussed below.

- Limited learning content and poor integration of theory: According to Krueger and Kumar (2004a, b), evidence does not uniformly favor apprenticeship as traditional and unregulated apprenticeship often shows limited learning content and a poor integration of theory—where present in
the first place—with practice; and does not invariably induce superior labor market outcomes for participants.

- Non – availability/shortage of capable teachers: According to Azmanirah, Nurfirdawati, Marina, and Jamil(2014), the non-availability, and in most cases, shortage of capable teachers who have industry qualifications or up - to - date pedagogical expertise, especially when it comes to teaching using a competency based skills approach makes it difficult to experiment any form of work – based and classroom – based integration.

- Low quality work and exploitation of young people: The problem of low quality work and learning conditions has been highlighted by UNESCO/UNEVOC (2015). UNESCO/UNEVOC (2015) observed that the apprenticeship system creates room for the exploitation of young people as “cheap labour” and/or when the work environment is unsafe and inadequate for a young person with little work experience. Also, the problem of narrow skills when apprentices are not properly trained or when they are provided only firm – specific skills that are relevant for one particular company, but do not provide the apprentice with skills to find employment with other companies upon graduation.

- Poor public conception of the apprenticeship system: The traditional misconception of the apprenticeship training has remained indelible in the minds of Nigerians – both the literate and non-literate. It is generally believed that the apprenticeship system is meant for those who cannot cope with formal education, either due to their mental deficiencies or their parents’ inability to afford the cost of formal education.

- Lack of established curriculum: Lack of established curriculum according to Sonnenberg (2012) is a characteristic feature in almost all forms of apprenticeship training. There seems to be no curriculum as the apprentice learns from the available job in the work place.

- Master crafts persons lack pedagogical skills: Master crafts persons are not trained in the practice of teaching, and may not have the experience to pass on the skills they possess to the apprentice. Most often, they are uncooperative, and cannot sustain the interest of apprentices, thus leading to high dropout rates.

- Poor funding: The problem of funding is not only apprenticeship training system, but the education system in general, has been a perennial one. It is however more obvious and pronounced in apprenticeship because of the peculiar socio economic demographics of the people involved. Both parents and the master craftsperson are poor, making it difficult for the parents to meet training conditions demanded by the trainers.

- Poor training equipment: closely tied to funding problem is the lack of necessary equipment and facilities which often leads to production of half-baked graduates with deficiencies in essential skills.

- Lack of necessary policy framework: Apprenticeship system in Nigeria and most African countries lack necessary policy framework to regulate the activities of stakeholders (Adekola, 2013). The system is mainly handled by private individuals who determine the admission procedure, the training contents, and the certification and placement of graduates upon completion of their training programmes (Tshuma & Jari, 2013; Achugo & Chigbo, 2014).

Approaches for Enhancing Apprenticeship Training Programmes in Nigeria

- Strengthening the capacity of master craft persons: UNESCO (2012) Education For All Global monitoring report recommends that governments enhance the legitimacy of traditional apprenticeships by strengthening training of master craftspeople, improving working conditions for apprentices and ensuring
that skills be certified through national qualification framework and make conscious efforts to link classroom learning with the workplace.

**Strengthening collaboration and linkage between the formal and informal education/training sectors:** The Nigerian employment policy recommendation (Evoh and Agu, 2016) to link on – the – job experiential training and classroom education emphasizes the need for formal collaboration and linkage between the formal and informal education/training sectors. According to Conway and Giloth (2014); King (2014); NGA, (2013), partnership between education/training institutions and industry – specific expertise, and employers in an industry to anticipate job openings, design programme content, and maximize potential placement is essential for fruitful results.

**Identification and engagement of capable teachers with industry expertise:** The need to identify and engage capable teachers with industry expertise that tailor training to meet the job requirement have been expressed by Axmann, Rhoades, Nudstrum (2015); Biavaschi, Werner, Corrado, Kendzia, Alexander, Janneke, Núria Rodríguez-Planas, et al.(2012); Maclen and Lai (2011).

4. Providing quality career education: Quality career information is one factor that can make or mar the efforts of the trainer. A wrong choice by a trainee or student is capable of rendering the best quality staff ineffective and significantly hinders the outcome of the training programme. Successful career programmes should have clear objectives and outcomes measurement to track programme performance; and provide diverse pathways for participants from different backgrounds.

Other prerequisites for a robust and functional apprenticeship system have been summarized by Lerman (2018) to include the following;
1. Effective branding and broad marketing
2. Incentives for selling and organizing apprenticeships to private, public employers
3. Programmes to develop credible occupational standards with continuing research
4. End point assessment of apprentices and programmes
5. Certification bodies to issue credentials
6. Making apprenticeships easy for employers to create and track progress
7. Funding for off job classes
8. Counseling, screening prospective apprentices to ensure they are well prepared
9. Training the trainers for apprenticeship
10. Research, evaluation and dissemination among others

**Conclusion**
From the review, it is concluded that the high unemployment rate among youths in Nigeria is due to their lack of the necessary skills required for successful engagement in the labour market. The apprenticeship training which is the sole medium for preparing people to participate in the informal sector is not receiving the attention it deserves in the skills training process as there is no policy framework that guide operations in the sector. The paper therefore advocates for policy framework that will provide guidelines for formalization of the operations of the apprenticeship system and close the gap between work place training and classroom based learning.

**Recommendations**
1. Policies should be formulated by the local, state and federal government to guide operations of the apprenticeship system.
2. The ministry of education and other stakeholders should foster closer collaboration between education/training institutions and the industry/workplace.
3. Curriculum planners and employers’ associations should design youth apprenticeship programmes to provide opportunities for students to experience hands – on learning through a combination of classroom – based and work – based learning.

**References**


