

IMPROVING THE SYNERGY BETWEEN INFORMAL AND FORMAL EDUCATION TO MEET THE CHALLENGES OF THE 21ST CENTURY NIGERIA

SAMUEL B. KALAGBOR, Ph.D

*Department Of Public Administration,
Captain Elechi Amadi Polytechnic, Rumuola, Port Harcourt, Rivers State,
Nigeria*

And

VICTORIA OSARUCHI SAM-KALAGBOR, Ph.D

*Department of Educational Management,
Rivers State University,
Nkpolu-Oroworukwo, Port Harcourt, Rivers State, Nigeria*

Abstract

This paper adopted the Functional Theory as the theoretical framework and examined how improving the synergistic relationship between informal and formal education could be employed with efficacy to tackle the multifaceted and hydra-headed challenges of the 21st century Nigeria, simply summarised and described as “the challenges of development”. The researchers strongly argued and concluded that this could be achieved by a visionary, competent and transformational political leadership; construction of a knowledge economy; development and effective application of productive skills of Nigerians, especially the dynamic and active youth population; and the promotion of entrepreneurship education and culture of entrepreneurship in the country.

Keywords: Synergy, Education, Informal Education, Formal Education, Challenges, Development

Introduction

The importance of education in sustainable national development and as a tool for effectively addressing the challenges of individuals, families, communities, groups, organizations, institutions and states cannot be denied. Education is not only the most important weapon which can be used to change or transform the world, as enunciated by Nelson Mandela; it stands out as one of the surest means of evolving and sharpening critical thinking and better problem solving skills, empowerment of the people, poverty reduction, employment generation as well as enhancing individual and national productivity. In fact, the transformative dimensions of education ensure creativity, innovation, adaptability, independence of progressive thoughts and enable man to realize his full potentials which are critical in addressing global challenges and guaranteeing the all-inclusive development of the society.

Nigeria is presently faced with multifarious and multidimensional challenges: political, social, economic, religious, cultural, educational, and security, among others. While education remains the most potent and viable instrument to effectively address these challenges, Nigeria's education system, informal or formal, is also fraught with various challenges. This appears to be a paradox that needs to be resolved. Unarguably, these challenges can best be describes as the "challenges of development". Consequently, the fundamental question that comes to the fore is: how can improving the synergy between informal and formal education be used to address the challenges of development of the 21st Century Nigeria? The focus of this paper is to provide answers to this compelling question.

Theoretical Framework

Educationists and sociologists believe that education, among others, plays vital and pivotal roles or performs certain functions in the development of man and his environment or society. This makes the Functional Theory or Functionalism the appropriate theoretical tool of analysis for this paper. The theme of this conference, which is also the subject matter of this paper is "Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria". To this end, the cardinal focus of this paper is to explore and examine how the synergy between informal and formal education can be improved upon or strengthened to squarely address the challenges of Nigeria in the 21st century.

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

The major thrust of the Functional Theory is that institutions, structures, agencies or units in every system, political, socio-economic, religious, and educational, etc., have inherent statutory or implied functions they are required to perform or fulfil, aimed at achieving certain objectives and needs in society. Some of the functions may be manifest or latent. These functions provide indispensable support for the continuous survival, stability and development of the whole system (Mahajan, 1988; Igwe, 2007; Darity, 2008). Some notable functional theorists include Emile Durkheim, August Comte, Robert Merton, Herbert Spencer, Talcott Parson and Gabriel Almond.

Conceptualisation of Education

Education is a life-long treasure, power, social process and activity. Education is essential to man and civil society and constitutes the highest form of investment in human development. It is indispensable for social change and engineering, effectually harnessing and optimally maximising the creative potential, talents, skills, ideas, and values of individuals to ensure sustainable progress, stability and prosperity of individuals and civil societies. No wonder Aristotle, several years ago, remarked that “The root of education is bitter, but the fruit is sweet”. A former Secretary-General of the United Nations, Kofi Annan, was also reported to have stated that education is the premise of progress in every society and family.

In view of the overriding importance and place of education in the promotion of the welfare and wellbeing of individuals, Article 26 of the Universal Declaration of Human Rights (UDHR), adopted in 1948 by the United Nations, recognised education as a basic or fundamental human right which is necessary for individuals to exercise other rights. To this end, it follows that for individuals to effectively exercise the right to education, education must be available, passable, accessible, and affordable by all. In Nigeria, the Universal Basic Education (UBE) Act, 2004, affirms the right of every Nigerian child to free, compulsory and universal basic education and the duty of government to make it available to every child of primary and junior secondary school (JSS) age (that is from 6-15 years of age).

Additionally, Section 18 of the 1999 Constitution of the Federal Republic of Nigeria (as Amended) with Fourth Alteration, under the Fundamental Objectives and Directive Principles of State Policy provides that Government shall direct its policy towards ensuring that there are equal and adequate educational opportunities at all levels; promote science and technology; strive to eradicate illiteracy and, as and when practicable, provide free, compulsory and

universal primary education; free secondary education; free university education and free adult literacy programme.

Education does not have a monolithic definition. It can be defined from many perspectives. It has been given different meanings and interpretations by different scholars at different times and spaces. The United Nations Educational, Scientific, and Cultural Organisation (UNESCO), which is entrusted with the responsibility to lead and drive the Global Education 2030 Agenda through Sustainable Development Goal 4 (SDG4) (Quality Education) and the only UN agency with the mandate to cover all aspects of education, defines education as “the process of facilitating learning or the acquisition of knowledge, skills, values, and habits”. The four (4) pillars of education, according to UNESCO, are learning to know, learning to do, learning to live together, and learning to be. Adopting a sociological approach, Nigeria’s foremost educationist, scholar and first Professor of Education, who is referred to as the Father of Education in Nigeria, Fafunwa (1974) defined education as “what each generation gives to its younger ones, which makes them to develop attitudes, abilities, skills, and other behaviours which are of positive value to the society in which they live”.

Fagbamigbe (1980), referring to Obafemi Awolowo, stated that education is “the process of physical and mental culture whereby a man’s personality is developed to the fullest”, that is, the development of the three constituents of his entity: the body, brain and mind. Similarly, Mahatma Gandhi, in his thought on education as a liberating force had asseverated that “true education is that which draws out and stimulates the spiritual, intellectual, and physical faculties of children” (Singh, 2019). It should aim at the balanced and harmonious development of the body, mind, and soul of the individual; inculcate democratic values (civic sense) of truth, non-violence, character building, non-stealing, worship, prayer, fasting and service to humanity. It must also include handicraft (craft education) (Mahakul, 2020). This view has been supported by Okoye, Okaro, Egbunike and Obodo (2021) thus:

Education can be seen as a social process which deals with the harmonious development of all the abilities and faculties of man – physically, mentally, morally, emotionally, spiritually, and socially. It imbues the individual with those skills, abilities and competencies that will enhance his own welfare and welfare of the society in general. It can also be variously described as a process, a product, and a discipline; and it is universally recognised as the most essential ingredient for human development. Education is a sure tool for empowerment. It makes possible the transfer of skills, knowledge, techniques and competencies needed to perform in the society and nation at large (p. 1339)

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

In providing justifications for education, sociologists contend that education (school), as a principal agent of socialization, helps in the transmission of society's norms and values from generation to generation (shared values and social solidarity); a mechanism for role allocation to individuals based on acquired skills, a means of reproduction of labour power, a means of social integration, and a key to economic growth and development. Others are increase in the market, employability and productive capacities of individuals as a basis for social stratification, placement and provision of equal and competitive opportunities (Halborn& Haralambos, 2007). Education is a long-term process and a life-long activity. It begins from cradle and ends at death.

Classification of Education

Generally, education can be classified into pre-primary, primary, secondary and tertiary; traditional, liberal or progressive and transformative; private or public and special needs education. The National Policy on Education (NPE), 2014, provides that the Nigerian Education System is structured into:

- Early Child Care and Development (0-4 years)
- Basic Education (5-15 years) – Pre-primary, 1 year; 6 years of Primary Education and 3 years of Junior Secondary Education;
- Post-Basic Education – 3 years in Senior Secondary School and Technical Colleges; and
- Tertiary Education (Colleges of Education, Monotechnics, Polytechnics, and Universities)

However, the most popular consensus among educationists and educational administrators is that there are three main forms of education, namely: Formal Education, Informal Education, and Non-Formal Education.

Formal Education

Formal education, which is also known as formal learning, is education which occurs in an established educational institution or environment such as a school, college, polytechnic, monotechnic or university (school-based learning). Some of the major features of formal education will include a clearly defined curriculum, hierarchical structure, full-time or part-time studies or programmes and it is subject-oriented. Other features are that it operates under defined rules and regulations, and any infraction attracts appropriate sanctions; regular examinations, residential facilities, certification, chronological grading system,

time-table and scheduled payment of fees either termly or sessionally, which may be expensive.

Informal Education

Informal education is the direct opposite of formal education. Darity (2008) is of the view that “Informal education refers to the intentional educational encounters occurring beyond the classroom”. It can take place in any setting. Many learning experiences may be acquired by individuals by chance or accident. Informal education largely promotes experiential learning, imparts skills and uses more of the methodology of conversation and dialogue in the learning process. It thrives on the principles of voluntarism of both the teacher and the learner, unlike the formal variant, which makes class attendance and participation in all learning processes and stages compulsory.

In most cases, informal education does not have clearly defined curriculum and does not adopt or follow any definite learning method. It rather resorts to diversity in methods and contents; relies on local resources, learners’ participation and real-life examples and experiences of learning. Sources of informal education include, among others, the family, age grades, peer groups, church, mosque, media, internet, personal studies and self-discoveries. It may also be derived or driven by self-interest, self-motivation, curiosity, exploration, fantasy, social interaction, creative or critical thinking (National Science Foundation, 1997). Typical examples of informal education include teaching a child to cook, dance, or communicate in the language or dialect of his/her parents; and skilled-based learning. Life experiences play significant roles in informal education and have been described as the most significant and excellent teacher of informal education. Some major advantages of informal education include the fact that it is mostly cost-free, not timebound, and devoid of examination stress and time pressure.

Non-Formal Education

Non-Formal Education (NFE) or learning is provided for in Section 4 of the National Policy on Education (2014). It is diverse and refers to any organised and or structured educational activity that occurs outside the regular school or college mainstream. The activities may be supplementary or alternative to the mainstream. Non-Formal Education provides opportunities for individuals to learn outside the restricted school environment, develop practical knowledge, productive skills and critical thinking. It is short-term, flexible, learner-centred, inclusive, participatory, and more interactive. It is also complementary to formal

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

education, need-based and related to recurrent and life-long learning. Examples of NFE are swimming classes, Boys Scout and Girl Guides activities, fitness training, continuous professional development training programmes. Others are community-based education programmes, debating activities, sports clubs events, amateur choir and orchestra events, skills acquisition and apprenticeship programmes, etc

The National Commission for Mass Literacy, Adult and Non-Formal Education has identified four components of NFE, to wit, Basic Literacy, Post Literacy, Continuing Education and Vocational Education. In terms of typology, four types (4Ps) of NFE will include the pararnormal education, popular education, personal development activities and professional trainings.

Dominant Challenges of the 21st Century Nigeria: An Overview

The challenges of the 21st century Nigeria are obviously humongous, and daunting. For ease of identification, generic classification and objective analysis, the dominant or principal challenges can conveniently be categorized into Educational, Political, Economic, Security and Socio-religious, Health, Environmental, Power and Energy Infrastructure challenges.

The Present State of Education

Unarguably, the present state of Nigeria's education system at all levels, namely, the primary, secondary and tertiary levels calls for concern, closer attention and urgent intervention by government, international agencies and other stakeholders in the collective interests of the country and future generations.

Many scholars, commentators and observers strongly believe that the standard of education is fast on the decline. The quest for secondary and tertiary education by many Nigerians outside Nigeria, especially in Europe and United States of America gives credence to lack of confidence of many Nigerians in our education system.

The parlous state of the education sector has been attributed to a number of factors such as many years of military dictatorship and authoritarianism resulting in poor planning and neglect of the education system; poor remuneration and condition of service; incessant strike actions by teaching and non-teaching staff, leading to closure of schools, especially at the tertiary levels; distortion of academic calendars of most institutions. Others are paucity of quality teachers, examination fraud; weak, poor or non-existent infrastructure such as conducive classrooms, lecture theatres, laboratories, libraries, workshops and related instructional materials and resources. Poor funding of educational

institutions, leadership deficit and corruption seem to have exacerbated the woes of the institutions. Similarly, lack of continuous training and retraining of staff pose serious dangers to the system. This is further amplified by the poor ranking of Nigerian universities globally and in Africa. For instance, the 2023 global ranking of universities by Times Higher Education shows that only three universities (the University of Ibadan, University of Lagos and Covenant University) were ranked among the top 1000 list of global universities. The University of Port Harcourt is ranked as the 19th best university in Africa and the best in Nigeria following the UniRank selection criteria in the 2023 African University ranking of 200 tertiary institutions. This is obviously worrisome for Nigeria. According to a report by the United Nations International Children's Emergency Fund (UNICEF), it was estimated that in 2022, approximately twenty (20) million Nigerian children in various States were out of school and did not have access to basic primary education, while Nigeria illiteracy rate is put at over 38%, 76 million Nigerians out of the current population of over 200 million based on the 2021 Report of the Federal Ministry of Education (Nigerian Tribune, September 7, 2021).

To corroborate the above gloomy picture, the National Economic Empowerment Development Strategy (NEEDS) Document (2004) graphically captures and summarizes the woes of Nigeria's education system thus:

the delivery of education in Nigeria has suffered from years of neglect, compounded by inadequate attention to policy frameworks within the sector. Funding from an ongoing educational sector analysis confirm the poor state of education in Nigeria. The national literacy level is currently 57 percent. Some 49 percent of the teaching force is unqualified. There are acute shortages of infrastructure and facilities at all levels. Access to basic education is inhibited by gender issues and socio-cultural beliefs and practices, among other factors. Wide disparities persist in educational standards and learning achievements. The system emphasizes theoretical knowledge at the expense of technical, vocational and entrepreneurial education. School curricula need urgent review to make them relevant and practice-oriented.

Unfortunately, between 2004 and 2023, not much improvements have been recorded in the education sector. In acknowledgment of this truism, the current Minister of Education, Professor Tahir Mamman recently noted that the challenges facing tertiary education in particular in Nigeria include inadequate funding, corruption, incessant strikes, brain drain, poor research, weak governance and insecurity. In order, therefore, to address the challenges in the education system and in line with the Renewed Hope mantra of the Federal

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

Government, he declared that the budgetary allocation to education will be reviewed upward to 25% with effect from 2024 in compliance with the UNESCO benchmark of 26% (Daily Post, September, 4, 2023).

Political Challenges

Perhaps at the core of Nigeria's systemic contradictions and failure, the most critical challenge of the Nigerian state since the attainment of political independence in 1960 appears to be lack of credible, competent political leadership and good governance. Many years ago, one of Nigeria's most vocal, prolific and outstanding literary icon, Chinua Achebe, had pointed out that "the trouble with Nigeria is simply and squarely a failure of leadership." Similarly, legal luminary and Senior Advocate of Nigeria (SAN), Afe Babalola, has stated that "no issue calls for more serious and deeper discussion among Africans than the question of leadership. Virtually all the nations' problems have been blamed on poor leadership". Oluabunwa (2013) also submits that "poor political leadership is not only responsible for the dismal performance in all aspects of our national life; it is equally in short supply in all sectors, but most acutely in the political arena." The inability of successful governments, both at the centre and state levels, to deal with other challenges in Nigeria largely hinges on incompetent and weak political leadership. Democracy is yet to take firm roots in the country (i.e democratic consolidation); politicization of ethnicity and ethnicization of politics; politics and existence of political parties without clearly defined ideological and philosophical bases; lack of discipline and internal democracy structures and culture; political corruption, politics of prebendalism and clientellism, monetization of politics and the electoral processes; abuse of public office, cronyism, nepotism (reciprocal and entitlement) and favouritism are common.

Voters are easily influenced with food and handouts in the name of empowerment rather than vision, primarily as a result of poor democratic political culture. Stressing on leadership and democracy as key success factors for sustainable development in Nigeria, Ihonvbere (2023) opined:

we have democracy with no democratization. Actually, we have liberal democracy that cannot lead to democratization. Now, we lack leaders to encourage and mobilize the citizenry to reach the highest points of their productive and creative abilities, leaders that appear either confused, incompetent and just unwilling and lacking the courage to take decisive steps to solve just one problem in our nation since political independence. Can such leaders produce growth? Yes, they can. Can they produce development? Most

unlikely. Can they precipitate situations that will enhance sustainable development, certainly not, so, we are stuck in square one.

Violation of human rights, unlawful detention of persons and use of EFCC and ICPC against political opponents and parties, and lack of respect for due process and rule of law even by governments. During the reign of Muhammadu Buhari as the President, he had remarked, unfortunately, that the rule of law must be subject to the supremacy of the nation's security and national interest. The legislature and the judiciary have not fared better. While the legislature; the State of Houses of Assembly and the National Assembly have not demonstrated independence of the dictates and undue influence by the Executive arm of the government, the judiciary is not completely exempted. The independence and incorruptibility of some judges and justices of the superior courts are still questionable. Abuse of judicial process is evident; operating a federation without fiscal federalism is meaningless. Thus, Maier (2001), rightly or otherwise, has described Nigeria as "the largest failed state in the third world"

Economic Challenges

Economic diversification and the need to put Nigeria on the fast lane of economic recovery, national prosperity, growth and sustainable development are urgent and indispensable. Regrettably, despite her population strength made up of largely young and dynamic youths, Nigeria lacks highly skilled and competent manpower which is necessary to drive her development agenda and process. The level of multi dimensional poverty, hunger, inflation and unemployment, especially by graduates is very high. Nigeria's external debt profile is steadily on the increase, following excessive external borrowings, especially by the Buhari-led Federal Government (₦87.38 trillion as at second quarter, 2023, according to the National Bureau of Statistics). Foreign direct investment is not only low, the World Bank's Doing Business (DB) index ranking of Nigeria is also low. In 2019, Nigeria was declared as the "Poverty Capital of the World" and that appellation does not seem to have changed. The virus of corruption, especially political and bureaucratic variants are endemic and ubiquitous. Kalagbor in Orugbani (ed)(2010) noted Chief Olusegun Obasanjo's reference that "corruption is the greatest single bane...." of Nigeria. Mohammed Buhari, Nigeria's immediate past President also stated that either Nigerians kill corruption or corruption will kill Nigeria. Furthermore, Nigeria has remained a monocultural economy for many years, depending mostly on revenues from exportation of oil; many of her abundant natural resources have not been fully exploited and optimally applied to her development needs, oil theft has become a lucrative

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

business for some rapacious individuals in and outside governments, thereby denying the government the much needed financial resources to fund government policies, development projects and programmes for the benefit of the people; continuous depreciation of the value and purchasing power of the naira is alarming, etc.

Security and Scio-Religious Challenges

According to Darah (2017), “one index that qualifies Nigeria to be grouped by political scientists among “failed states” is the inability of the government to provide security for the citizens as enshrined in section 14(2) (b) of the 1999 Constitution: “ the security and welfare of the people shall be the primary purpose of Government”. Security of lives and prosperity is not only fundamental to the people and government, it is also a condition precedent to peace-building and co-existence, stability, progress, prosperity and sustainable development. Nigeria, in recent times, has been facing serious security challenges such as kidnapping, banditry, armed robbery and crude oil theft. Others are cultism and ritual killings, separatist agitations, Boko Haram insurgency, oil militancy; Fulani Herdsmen clashes, terrorism and porous borders, leading to unrestricted inflow of small arms and light weapons into the country, which have further heightened crimes and criminalities across various states. (Padem, 2016) In 2020; Nigeria was rated as the third worst country with respect to insecurity in the world by the Global Terrorism Index (GTI), after Afghanistan and Iran. Other security threats are piracy, state police and military violence against civilian population, part of which resulted in the EndSARS protest in Lagos in 2021, that claimed the lives of some youths. Admittedly, Nigeria is a multi-ethnic, multi-lingual and secular state, with a high level of religious and ethnic extremism in certain parts of the country. Ethno-religious differences, cleavages and intolerance constitute principal threats to national unity, stability and cohesion. There is apparent fear, distrust and mutual suspicion among various ethnic nationalities and members of major religions, Christianity and Islam, etc. Ethno-religious conflicts and fatalities, at times, sponsored or instigated by the government or its officials are regular occurrences, particularly in the northern and eastern regions of the country. Drug abuse, suicides, child molestation and labour, rape, same sex marriages, child marriages, sexism or discrimination against women are virtually daily social malaise. Many personnel of various security agencies are ill-trained and ill-equipped to frontally tackle the lingering insecurity in the country. Many times, there have been allegations of diversion of funds made available for security weapons, equipment and logistics by some government officials. The

security personnel are poorly paid and in many cases, without life insurance covers. Institutional penetration of the security agencies by agents of destabilization and compromise of the security architecture are also salient areas of concern. High-tech business and cyber crimes are equally serious threats to business and financial transactions and discourage Foreign Direct Investment (FDI) to the country.

Health Challenges

It is said that health is wealth. It is the desire of God that man should be in good health. 3 John 2 (KJV) states that “Behold, I wish above all things that thou mayest prosper and be in good health, even as thy soul prospereth”. Sustainable Development Goal Three (SDG3) is on promotion of good health and wellbeing and the World Health Organization recognizes “health as a fundamental human right and a worldwide social goal..” In fact, Article 25 (1) of the United Nations Declaration of Human Rights, 1948, reads:

Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing and medical care and necessary social services and the right to security ...

Similarly, section 17 (3) (d) of the 1999 Constitution of the Federal Republic of Nigeria (as Amended), with Fourth Alteration, provides that “the state shall direct its policy towards ensuring that there are adequate medical and health facilities for all persons”. Unfortunately, health and medical facilities are not adequately available to, accessible and affordable by many Nigerians. The common cliché in the address of coupists in Nigeria many years ago that public hospitals had degenerated into mere “consulting clinics” are still very much the case in the country today. Nigeria is currently ranked 187th out of 191 countries, according to World Health Organization’s health system performance ranking. Kalagbor (2004) had observed that

as a manifestation of the apparent lack of confidence in the sorry and horrible state of Nigeria’s health system, many wealthy Nigerians, top politicians and bureaucrats regularly go abroad for medical check-ups, attention and treatments. Those who cannot afford overseas medical trips are either treated in expensive clinics and hospitals at home, or are rendered helpless and hopeless.

Life expectancy in Nigeria for males is 59 years and 63 years for females. This is classified among the lowest in the world. Some of the identifiable and major challenges in Nigeria’s public health sector are underfunding, brain drain, poor staffing, remuneration and motivation; inadequate, obsolete and weak

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

medical facilities and infrastructure and poor health service delivery. Others are weakness of the primary and secondary tier levels of health care; high fatalities due to diseases and accidents; corruption, ineffective health insurance scheme, lack of competent, experienced and dedicated medical personnel and incessant strikes. Additionally, there is insecurity of health and medical professionals, especially the occasional abduction of the personnel, including humanitarian workers; weak institutional capacity, general lack of data on health for effective planning and absence of sustained commitment and political will on the part of successive governments to transform the health sector (Kalagbor, 2004; Omoleke&Taleat, 2017). Nevertheless, Nigeria, among others, recorded impressive and commendable successes and performance in the fight against the outbreak of Ebola diseases in 2014 in West Africa and the Covid-19 pandemic in 2020. Also, in August, 2020, Nigeria became the last country in Africa to be declared certified poliovirus free.

Environmental Challenges

Nigeria like most developing countries of the world is confronted with diverse challenges arising from man's activities and interactions with his environment. In recognition of the need to address the negative consequences of the impact of man's activities on the environment, the United Nations included clean water and sanitation (Goal 6), sustainable cities and communities (Goal 11), climate action (Goal 13), Life below land (Goal 14) and life on water (Goal 15) as integral parts of the Sustainable Development Goals (SDGs).

Despite concerted efforts by successive federal and state governments, Nigeria is still contending with the following environmental challenges: gas flaring in the oil producing states, thereby causing air pollution and other environmental disorder; indiscriminate bush burning, rapid deforestation, soil degradation, erosion and other ecological threats; pollution as a result of use of wood and charcoal in cooking and oil and gas exploration activities, including oil spillage which pollute the environment, resulting in loss of biodiversity (flora and fauna, etc). Others are poor and ineffective sanitation and waste management strategies, wildlife resources depletion (e.g hunting), traffic congestion; urbanization, poor and unplanned housing development, overpopulation and rise of squalor settlements and ghettos; flooding, draught, mining and climate change. By virtue of these challenges, ecotourism is unattractive and not yet developed in the country. In all, lack of environmental education by a greater proportion of the population poses one of the greatest environmental challenges in the country.

Power and Energy Infrastructure Challenges

Power and energy infrastructure are critical to social welfare and wellbeing, economic growth and development in Nigeria, inclusive of industrialization, efficient conduct of businesses and attraction and retention of foreign investments. With epileptic electricity supplies in the urban areas, absence of electricity in many rural communities, irregular maintenance of the national grid, astronomical rise in electricity tariff; price of fuel, diesel and gas, particularly as a result of removal of subsidy on petroleum products, life has become very difficult for many Nigerians and business operators. In fact, many businesses have been shut due largely to high cost of diesel and irregular electricity supplies. Major refineries have been abandoned for many years without regular turnaround maintenance. Alternative sources of energy supply such as gas, clean energy and green energy are yet to be developed and made available, stable, reliable, affordable and accessible to many Nigerians. Green energy is renewable and generated from natural sources, with low negative environmental impact or consequences. Nigeria also faces power and energy infrastructure challenges such as inadequate transmission and distribution of electricity, inefficient storage systems or facilities and weak refining capacity.

Possible Areas of Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria

Based on the analysis of the challenges of the 21st century Nigeria, it can be deduced and contended without any iota of doubt and kernel of contradiction, that the said challenges can be summarised and best described as “the challenges or crisis of Development”. Therefore, the fundamental question that arises at this point is: how can improving the synergy between formal and informal education address the challenges of development of the 21st Century Nigeria? In providing answers to this critical poser, emphasis will be placed on three key areas: Knowledge-based Economy, Skills Development and the Promotion of Entrepreneurship Education and the Culture of Entrepreneurship in Nigeria.

What is Development?

The holistic concept of Development has been a subject of multiplicity of definitional analyses and operational interpretations by different scholars. Development is all encompassing multidimensional, continuous and dynamic process which brings about positive changes, qualitative and quantitative progress and prosperity. It also varies from one context to another. The

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

dimensions of development include political, legal, economic, educational, socio-cultural, human, physical and technological, etc. (Kalagbor, 2004). It can also be short-term, medium-term or long-term; industrial or personal, community-based; local, national, regional and international. The goal of development is generally to enhance the welfare and wellbeing of individuals in society. Its first objective must be to eradicate or at least, reduce poverty to the barest minimum. This is confirmed by the United Nation's Sustainable Development Goal Number One (SDG1), "No Poverty". The second objective is to reduce unemployment through the provision of productive employment in order to guarantee access to basic needs of the people and the third objective is to reduce inequality. (The Report of the South Commission, 1993).

Development is a fundamental human right (right to development), recognised by the United Nations, which entitles all human persons to participate in and contribute to in order to improve their wellbeing. The United Nations Declaration on the Right to Development, 1986, defines Development as:

a comprehensive economic, social, cultural, and political process which aims at the constant improvement of the wellbeing of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in their fair distribution of the benefits, resulting therefrom.

For the purpose of realising the goals of development, critical enabling structures, institutions and systems must be put in place to efficaciously drive the process. It must also reflect three core values such as life sustenance (the provision of basic needs: housing, clothing, food, and minimum education), self-esteem and freedom (Desai & Potter, 2008). Other basic needs that must be achieved include security, health. Employment, social participation, environment and justice needs (Kalagbor, 2004).

Angaye's (1995) definition is in line with the above position, thus:

Development should be seen as improvement in the material, physical, mental, spiritual and real moral quality of life, resulting from rising incomes, the reduction or eradication of poverty, unemployment, unjustified inequalities; the provision of better food, shelter, health, education and protection; high self-esteem or respect, increased freedom of choice and ability to determine one's destiny. Consequently, development can be social, economic, physical, educational, political, etc.

At the level of the individual, Rodney (1972) opines that development implies increased skill, capacity, greater freedom, creativity, self-discipline, responsibility and material wellbeing. On his part, foremost political economist, Ake (2001) asseverated that development is "the process by which the people

create and recreate themselves and their life circumstances to realise higher levels of civilisation in accordance with their own choices and values”.

Man, individually and jointly or collectively, is at the centre of all development policies, programmes, projects, efforts and actions. He is both the major agent and ultimate beneficiary or recipient of development. Development begins with people and not with things or goods. In essence, it begins and ends with the promotion of the interests and qualitative improvement of the wellbeing of the people. To this end, every true development must be people-oriented. It must enhance the orientation, values, beliefs, attitudes, behaviours, organisation, confidence, self-discipline of the people; enable the people to systematically apply their scientific and technical knowledge, creative skills, abilities and capacities to transform their environment, increase their production and productivity to satisfy their needs and live a better life. Economic growth as measured by gross national product (GNP) is not synonymous with development. It constitutes what is commonly referred to as “growth without development”. Development per se encompasses economic growth and includes the satisfaction of basic needs. The four elements or wheels (enablers) of development are human resources, capital formation, natural resources and technology. A mix or combination of these wheels are imperative to facilitate the development process with the human resources being at the foundation.

Sustainable Development

The Millennium Development Goals (MDGs) conceived and initiated by the United Nations (2000-2015) is the precursor to Sustainable Development Goals (SDGs). The United Nations in 2015 adopted the Sustainable Development Goals by projecting another fifteen years (2015-2030) for all countries to work towards the realisation of the goals.

Sustainable Development, according to the Brundtland Report of the World Commission on Environment and Development (WCED), as cited by Worika (2002) is “Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs”. It emphasizes development that is devoid of the depletion of natural resources. The four pillars of sustainable development are economic sustainability, which aims at reducing extreme poverty and guaranteeing fair-paid employment opportunities; social sustainability, which stresses the need for access to basic resources and services and strengthens social cohesion and stability among social groups; and environmental sustainability which emphasizes protection of the environment and limits the negative impact of human activities on the

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

environment; and human sustainability, which targets the ability to improve and maintain the quality of human capital, human resources being the most important factor of production and agent of development.

The SDGs have seventeen (17) goals and 169 targets. The 17 goals are:

1. No poverty
2. Zero Hunger
3. Good health and well-being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Land
15. Life on Water
16. Peace, Justice and Strong Institutions
17. Partnership for the Goals.

Knowledge-Driven Economy (KE)

According to Tagore, “The widest road leading to the solution of all our problems is education”. I hasten to add that without education, Nigeria cannot inaugurate a knowledge-driven economy, as one of the models to address her 21st century challenges. The concept of knowledge-based or knowledge economy was formulated by an Austrian-American economist, Fritz Machlup in 1962 and popularised by the economist and management consultant, Peter Drucker in 1969. Knowledge economy is an economy in which economic activities in terms of production of goods and services are principally driven by intellectual capital, based on advancement in technical and scientific discoveries, innovation and applied research. In other words, it depends more on intellectual property and capabilities of the people than natural resources to stimulate and drive economic diversification, growth and sustainable development. Artificial intelligence, internet, robotics, etc, play active roles in such economies and priority is given to advancement in knowledge (i.e. new knowledge).

The OECD (1996) describes the knowledge economy as an economy that is directly based on the production, distribution and use of knowledge and information. Knowledge economy also stresses the need for huge investments in research and development (R&D) by government and the private sector, effective utilisation of research funds, findings and recommendations and promotion of culture of entrepreneurship; improvements in the level of education, technical and vocational training, radical technological innovation; information and communication technology and skills are essential in a knowledge economy. Commercialisation of research findings and scholarship are key elements in a knowledge economy. Learning, creativity and openness are highly encouraged.

The World Bank has identified four pillars that define knowledge economy as follows:

1. Institutional structures that provide incentives for entrepreneurship and the use of knowledge;
2. Availability of skilled labour and a good education system;
3. Access to information and communication technology (ICT) infrastructure; and
4. A vibrant innovation landscape that includes the academia, the private sector and civil society.

According to the latest United Nations Programme Global Knowledge Index, the three top-ranked knowledge economies in the world are Switzerland, Sweden, and the United States. Nigeria has over the years recorded miniscule progress in the advancement of knowledge, scientific discoveries and innovation to facilitate her transition to a knowledge-based economy. In 2021, Nigeria ranked 124th out of 154 countries in the Global Knowledge Index.

No doubt, knowledge plays critical and pivotal roles in a knowledge economy and knowledge can only be acquired, sustained and improve upon through informal and formal education. Herein lies the importance of improving the synergy between informal and formal education to meet the 21st century challenges of Nigeria. In the light of the present state of the education sector in Nigeria as already highlighted, can the Nigerian economy be effectively driven by knowledge to address her 21st century challenges? The answer is obviously in the negative. Therefore, there is the indispensable need not only for more investments in education by government and the private sector, but also to urgently tackle the various challenges in the sector. That way, Nigeria can fast track her progress and transition to the knowledge economy as a foundational basis to tackle other challenges facing her in the 21st century. Many countries

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

have successfully used knowledge-driven economy model to develop, sustain and advance their economies for the benefit of their people and resolve their development challenges. Nigeria can equally do the same. The Asian Tigers – Singapore, South Korea, Taiwan, Hong Kong; China, India, etc., are classic examples. Japan, which is poor in natural resources and sits on a volcanic and rocky island has effectively used knowledge economy to propel her development, especially in hi-tech innovations. Japan is one of the largest and most developed industrial economies in the world.

Skills Development

Skills development is essentially a major part of knowledge economy. Acquisition, effective application and utilisation of relevant skills are unassailable requirements if the challenges of development of the 21st century Nigeria will be adequately addressed. According to Kazaure (2021):

as Nigeria aspires to become a major player in the world economy, it is very clear that the most crucial vehicle for attaining such ambitious goal apart from power infrastructure, is a skilled and competent workforce. This is necessary for the effective implementation of national development projects and for attracting necessary international investments, especially hi-tech industries.

Ibrahim (2022) in his book titled “Skills Rather Than Just Degrees” contends that there should be a radical departure from excessive reliance on certificates and degrees, which do not necessarily confer requisite skills on the holders and to encourage all stakeholders, namely: government, educational institutions, the private sector, parents and individuals, etc., to “give skills their rightful important place in our educational system...” and that “no knowledge-based economy can thrive except there is an abundant supply of highly skilled citizens”.

Darity (2008) variously defines skill as “an ability to do something well, either manually, mentally or both”; “actual competence that has been acquired by training, schooling or practice” or “a level of individual performance, in the sense of accuracy and speed in performing particular tasks” or “qualities required for successful performance in particular jobs and tasks”. Unlike degrees, skills focus on the practical ability to solve given problems or carry out specific assignments. Both informal and formal education, especially through technology education, given the right synergy, can provide and mobilise the relevant skilled labour for enhancing economic growth and sustainable development in Nigeria. Technology

education provides practical or problem solving and employability skills that are necessary for creativity, innovation, self-employment, self-reliance and promotion of entrepreneurship. Essentially, technical skills require the use of tools, instruments and technologies by technicians and other professionals, drawing on their sets of abilities, practical knowledge, experience and exposure to perform practical tasks in the applied sciences, engineering, arts, commerce, management and other areas of need to contain the challenges of development in the country (Kalagbor, 2023).

The NICEF, UNICEF and WHO have identified ten life skills, strategies and techniques such as:

- Problem-solving skills
- Critical thinking skills
- Effective communication skills
- Decision-making skills
- Creative thinking skills
- Interpersonal skills
- Self-awareness building skills
- Empathy skills
- Stress-coping or management skills; and
- Emotional management skills

Skills can be categorised into “motor skills”, requiring voluntary body movement to achieve a goal and “cognitive skills” involving knowledge, problem-solving and reading. “Hard skills” are job and industry specific and include both motor and cognitive skills. They constitute the technical knowledge or training acquired through life experience, career development or education (Darity, 2008; Ibrahim, 2022). Some examples of hard skills, according to Ibrahim will include blockchain, cloud computing, analytical reasoning, artificial intelligence, cybersecurity, cloud security, internet and computing skills, business risk management, UX design, Adtech and Martech (advertising and marketing technology), etc. On the other hand, “soft skills” are non-technical skills or personal habits that determine, shape and influence how we work and interact or relate with others. They include interpersonal relationship skills, effective communication, leadership, creativity, team building and team work, flexibility, change readiness and disposition (adaptability), conflict management, curiosity and grit. Others are public speaking, delegation of power and assignment of responsibility, etc.

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

Considering the importance of skills in the development of any nation, the National Board for Technical Education (NBTE) has adopted a Skills Advocacy Slogan “Skills, not Degrees”. It is a fundamental paradigm shift aimed at making skills development indispensable in the acquisition of polytechnic education in the country. The NBTE as the regulatory and supervisory agency of polytechnic education in Nigeria is using the slogan to refocus the attention of the government, managers and operators of polytechnics to pay greater attention to the promotion and acquisition of problem-solving business, scientific and technical skills by polytechnic students and graduates. Politico-economic history has shown that the Asian Tigers (South Korea, Hong Kong, Taiwan and Singapore) in less than forty years used technology education, with emphasis on training and production of highly skilled manpower to transform their economies and put them on the fast lane of sustainable development. Today, they have achieved extraordinary results in technological breakthrough in hi-tech goods and services, computer hardware, and software, electronics, automobile, solar power, etc. In particular, Singapore encouraged skills development by establishing many technical schools and engaged the services of international agencies to train, upskill and reskill her unskilled labour in information technology, electronics, etc, while the government of Taiwan made huge investments in technical and vocational education (Kalagbor, 2023).

According to Agba and Ozor (2018):

...one of the major factors as observed in the development stages of the Tigers was the emergence of the educated class that has a mastery over technology... Education in particular is cited as playing a major role in the mastery of technology... allowed for high levels of literacy, cognitive skills and highly productive labour force.

In 2014, with the intention to produce more technically trained and highly skilled labour, China announced a major education reform through gradual transition intended to convert six hundred universities to institutions of applied learning or polytechnics. Morocco has also prioritised investments in vocational education and skills development to boost the skills set of her population. Today, skilled Moroccans easily get international jobs in China, France and Canada, etc. Also, Finland, with one of the best functional education systems in the world, pays uncompromising attention to skills development (real-life problem-solving skills). Furthermore, Switzerland is reported to have the most highly skilled workforce in the world today as a result of her “skills and catch them young approach” (Ibrahim, 2022).

The provisions of Sections 1 (6)(e) and 7 (c) of the National Policy on Education (NPE) (2014) are to the effect that the goals of education are the “development of appropriate skills, mental, physical and social abilities and competencies to empower the individual to live in and contribute positively to the society” and “promote functional education for skills acquisition, job creation and poverty reduction”. Unfortunately, despite these provisions and concerted efforts, policies and programmes by successive governments at the federal and state levels, the level and quality of skilled labour in Nigeria are still low. Aside from the high rate of unemployment, many of the graduates with various certificates, diplomas and degrees are unemployable because they do not possess the requisite skills needed by employers. And without such skills, it is extremely difficult to effect economic growth and sustainable development, with the overall aim of tackling the development challenges of the 21st century Nigeria.

Enterprise or Entrepreneurship Education and Culture of Entrepreneurship Who is an Entrepreneur?

As earlier remarked, there is a reciprocal relationship between knowledge-economy, skills development and entrepreneurship. An entrepreneur is a person who undertakes a business risk, recognises, creates or finds a new idea or opportunity with the aim of promoting same by acting as a change agent and making profit or creating other values. He is not only a risk bearer, he is an organiser, visionary, creative and innovative (Darity, 2008; Nwiyi, 2021). According to Akpomi (2021), entrepreneurship is not only a process by which individuals on their volition or as members of organisations pursue opportunities, it is a major driving force for job creation, structural changes and economic development. It is also the ability to conceive, identify and undertake business opportunities or bringing a vision to reality.

Entrepreneurship Education and Culture

Enterprise or entrepreneurship education is a functional and specialised training which prepares and enables students of vocational, technical and business education to acquire and develop cognate skills, ideas and managerial abilities and competencies to be self-employed, create employment opportunities for others, promote businesses and drive economic growth and development (Igbongidi&Iwalaje, 2016). The major objectives of entrepreneurship education are to encourage social change and self-reliance, develop and sharpen the entrepreneurial skills and competencies of students for enhanced productivity. In view of its importance in the development process, it has been incorporated into

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

the curricula of tertiary education in Nigeria. Recently, some tertiary institutions, especially universities have established either Departments or Faculties of Entrepreneurship Studies. This is in line with Section 5 (86)(a) of the National Policy on Education (NPE), which stipulates that “University Education shall make optimum contribution to national development by making entrepreneurial skills acquisition a requirement for all Nigerian universities”.

Some universities are now also being referred to as “entrepreneurial universities”. Akpomi (2021) argues that entrepreneurial universities maximise their abilities, reduce dependency on public funds and diversify their resources; break through traditional boundaries to promote new relationships; initiate synergy among the stakeholders (internal and external) and retain staff and students who have demonstrated entrepreneurial experience, behaviours and attitudes capable of promoting entrepreneurship culture. Entrepreneurial universities also encourage and promote research findings and output, partner and collaborate with the private sector (e.g. industries) to solve problems of the society. They are equally, creative, innovative and break new grounds in diverse areas.

Many entrepreneurial universities in Europe, America and Asia provide consultancy services and business advisory to governments and private organisations, own and manage large-scale commercial entities and conglomerates. Some of such universities include the University of Leeds, Cambridge University, and University of Reading in the United Kingdom. In fact, the University of Reading is reported to be the sole owner of a big real estate business, among other companies and investments (Akpomi, 2021). In Nigeria, while some first- and second-generation universities may be classified as entrepreneurial universities with marginal impacts, other universities and tertiary institutions are yet to fully embrace the entrepreneurial spirit and explore new opportunities to identify, meaningfully and substantially contribute to national development efforts like their counterparts in Europe and America. Consequently, the following questions come to the fore:

1. To what extent have students and graduates of Nigerian tertiary institutions acquired entrepreneurial skills?
2. What is the impact of such entrepreneurial skills on the economic growth and development of the country? Undoubtedly, it does appear that entrepreneurship education has not been institutionalised, fully embraced by government, tertiary institutions, students and all Nigerians at large. Thus, its impact is miniscule vis-à-vis the 21st century challenges of Nigeria. Entrepreneurship culture is, therefore, lacking among many Nigerians.

Conclusion

In conclusion, it is imperative to re-state that addressing Nigeria's 21st century development challenges require urgent, active and effective synergy between informal and formal education; huge investments in education, with emphasis on vocational and technical education and skills development; promotion of entrepreneurship education and culture of entrepreneurship in the country. It also calls for the adoption of a comprehensive or holistic approach which must include the installation of a visionary, competent, credible, committed and transformational political leadership; entrenchment of democracy, the rule of law and good governance; progressive investments in power and energy infrastructure; improved security and healthcare services; economic diversification and the implementation of strong anti-corruption initiatives and strategies, etc. The federal and state governments alone cannot achieve these lofty goals. It needs the collective efforts and collaboration of the government, the organised private sector, civil society organisations, the citizens and the international community to confront these seemingly intractable development challenges of the 21st century Nigeria and put Nigeria on a solid and genuine path to economic growth and sustainable development for the benefit of all Nigerians. This is the surest way to guarantee the sustainability and actualisation of the "Nigerian dream and project", a new Nigeria as envisaged by the founding fathers and education must play vanguard or leading, decisive and significant roles in this direction.

Recommendations

In the light of the foregoing, the following recommendations are hereby made:

1. The requisite political leadership to actively drive the process of ensuring an effective synergy between informal and formal education to meet the challenges of the 21st century Nigeria is a sine qua non. Thus, a competent, visionary, committed and transformational political leadership must be in place;
2. the Federal Government, as a matter of urgency and priority should increase funding and huge investments in education at all levels. This same should be applicable to the state governments;
3. educational institutions should be radically transformed into more functional and knowledge-based institutions with core foci on the pursuit of intellectualism, skills development and entrepreneurship training;

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d And Victoria Osaruchi Sam-Kalagbor, Ph.d**

4. government and other stakeholders should give special attention to the promotion of technology education, especially technical and vocational education and training of the youthful population;
5. applied research and development institutions; technological innovation and activities should be highly encouraged, supported and adequately funded by both government and the organised private sector;
6. all tertiary institutions, should as a matter of deliberate policy, take practical steps to bridge the academia-industry divide through diverse partnerships and collaborations, specifically aimed at addressing the challenges of the 21st century Nigeria;
7. entrepreneurship education should be accorded utmost premium in the curricula of education at all levels and made compulsory for all students. This is to inspire and instill the culture of entrepreneurship in the students; and,
8. certificates (diplomas and degrees, etc) should be de-emphasized as requirements in personnel recruitment processes. Rather, emphasis should be placed on possession of requisite job skills, especially practical and problem-solving skills.

References

- Achebe, C. (1983). *The trouble with Nigeria*. Heinemann Educational Publishers.
- Ake, C. (2001). *Democracy and development in Africa*. Spectrum Books Limited.
- Akpomi, M.E. (2021). Towards the entrepreneurial university – Rivers State University (RSU), Port Harcourt in focus. An Inaugural Lecture Series No. 72, 15 December.
- Angaye, G.S. (1995). *Socio-economic development in Nigeria*. Pam Unique Publishers.
- Darity, W.A. (2008). *International encyclopaedia of the social sciences* (2nd Ed). Gale Cengage Learning
- Desai, V. & Potter, R.B. (2008). *The companion to development studies*. Holder Education.

Daily Post, September 4, 2023.

- Fafunwa, A.B. (1974). *History of education in Nigeria*. George Allen & Unwin.
- Fagbemi, O. (1980). *Voice of reason: Selected Speeches of Chief Obafemi Awolowo*. Fagbemi Publishers.
- Darah, G.G. (2017). Democracy and development in Nigeria: The case of Rivers State. Lecture Delivered on the Occasion of Rivers State Golden Jubilee Celebrations.
- Igwe, O. (2007). *Politics and globe dictionary*. Eagle Publishers.
- Halborn, M. and Haralambos, H. (2007). *Sociology: Themes and perspectives*. Harper-Collins Publishers Limited.
- Ibrahim, I.A. (2022). *Skills rather than just degrees*. University of Ibadan Press Plc.
- Igbongidi, P. & Iwelaje, U.E. (2016). Entrepreneurship education: A panacea for youth unemployment in Bayelsa State. *Journal of Technical and Science Education (JOTASE)*, 19(1).
- Ihonvbere, J. (2023). Democracy, transformational leadership and sustainable development: The Rivers experience. Rivers State Government 2023 Inauguration Lecture.
- Kalagbor, S.B. (2004). *Health administration in Nigeria*. Horizon Concepts.
- Kalagbor, S.B. (2004). *Development: Theories, Strategies and Administration*. Horizon Concepts
- Kalagbor, S.B. (2023). Redefining the mandate of polytechnic education for economic diversification and sustainability in Nigeria. Being a Lead Paper Presented at the 3rd International Conference of the Academic Staff Union of Polytechnics (ASUP), Akwa Ibom State Chapter, holding at the Akwa

Improving the Synergy between Informal and Formal Education to Meet the Challenges of the 21st Century Nigeria - **Samuel B. Kalagbor, Ph.d and Victoria Osaruchi Sam-Kalagbor, Ph.d**

Ibom State Polytechnic, Ikot Osurua, Ikot Ekpene, Akwa Ibom State, from 4th–6th October, 2023

Mahakul, B.K. (2022). Mahatma Ghandi's vision on education: Its relevance in the 21st century. *International Journal of Creative Research Thoughts (IJCRT)* 10(8), 2320-2882.

Mahajan, V.D. (1988). *Political theory*. S Chand and Co. Limited.

Maier, K. (2001). *The house has fallen*. Penguin Books.

National Economic Empowerment Development Strategy (NEEDS) Document, 2004.

National Policy on Education (2014). Federal Ministry of Education.

National Science Foundation, 1997.

Nigeria Tribune, September 7, 2021.

Nwiyi, G.U. (2021). *Management and entrepreneurship education in Nigeria: The nexus*. Harey Publications Company.

OECD. (1996). *The knowledge based economy*. OECD.

Ohuabunwa, (2013). *Nigeria: Need for the evolution of a new nation*. Realvalue Trust Limited.

Okoye, V.C., Okoye, E.I., Okaro, S.C., Egbunike, P.A. & Ogbodo, C.O. (2021). *Values and ethics in leadership and governance: A millennial challenge*. SCOA Heritage Nig. Limited.

Omoleke, I.I. and Taleat, B.A. (2017). Contemporary issues and challenges of health sector in Nigeria. *Research Journal of Health Science*, 5(4).

- Orugbani, A. (ed.) (2010). *History, public service and leadership in Nigeria: Essays in honour of Venerable K.O. Amadi*. Onyoma Research Publications.
- Oyovbaire, S.E. (2007). Crisis of governance in Nigeria. Convocation Lecture Delivered on the occasion of the 23rd Convocation Ceremony at the University of Port Harcourt.
- Paden, J.N. (2016). *Mohammadu Buhari: The challenges of leadership in Nigeria*. Huda Huda Publishing Company.
- Report of the National Bureau of Statistics (Second Quarter) 2023.
- Rodney, W. (1972). *How Europe underdeveloped Africa*. Louvrelure Publications.
- Singh, N. (2019). Mahatma Ghandi's thoughts on education in India. *State Council of Education Research and Training*.
- Sterling, S. (2001). *Sustainable Education – Re-visioning Learning and Change*. Green Books.
- The challenges to the South: The report of the south commission (1993). New Oxford University Press.
- Universal Basic Education Act (2004)
- Worika, I.L. (2002). *Environmental law and policy of petroleum development: strategies & mechanism for sustainable management in Africa*. Apex Centre for Environment and Development.