

### Application of Open and Distance Learning in Positioning Nigerian Educational System for Sustainable National Development

### Application De La Formation Ouverte A Distance Dans Le Positionnement Du Systeme D'education Du Nigerian Pour Le Developpement National Durable

Dr. Jonathan E. Aliede Department of Mass Communication National Open University of Nigeria Nnamdi Azikiwe Expressway Jabi, Abuja, Nigeria +234-806-9395-473; jaliede@noun.edu.ng

### Abstract

Globally, universities are seen as centres for evolving ideas, mechanisms and strategies for positioning nations on the part of enduring development. Indeed, they are the pivot for implementing Sustainable Development (SD). The concept of sustainable development which is the hallmark of the United Nations' Millennium Development Goals (MDGs) has as part of its main objectives the eradication of extreme poverty; achievement of universal primary education and promotion of gender equality and women empowerment, ends that cannot be attained without effective and functional tertiary educational system. Yet, the conventional system seems to be incapable of contributing to its attainment; hence an alternative mode is required. Open and Distance Learning mode of education seems to be the answer. This study, therefore, while focusing on the National Open University of Nigeria (NOUN) used qualitative and contextual methods to examine how the institution's ODL system of education is aiding Nigeria's achievement of sustainability. Its findings included that the ODL mode has a lot of potentials and inbuilt devices favourable to aiding NOUN in putting Nigeria on the part of sustainable development, though the system faces some challenges. It, therefore,

recommended adequate funding and staffing; provision of infrastructure and further expansion of the mode of education in order to assist NOUN pursue the objective.

### Résumé

À l'échelle mondiale, les universités sont considérées comme des centres d'évolution des idées, des mécanismes et des stratégies pour positionner les nations sur la ligne du développement durable. En effet, elles sont le pivot de la mise en œuvre du développement durable (DD). Le concept de développement durable, qui est la marque des Objectifs du Millénaire pour le développement (OMD) des Nations Unies, a pour *objectif principal d'éradiquer l'extrême pauvreté : l'éducation primaire* universelle et la promotion de l'égalité des sexes et de l'autonomisation des femmes, des objectifs qui ne peuvent être atteintes sans un système d'enseignement supérieur efficace et fonctionnel. Pourtant, le système conventionnel semble incapable de contribuer à sa réalisation : par conséquent, un mode alternatif est nécessaire. Le mode de formation ouverte à distance semble être la réponse. Cette étude, par conséquent, tout en se concentrant sur l'Université nationale ouverte du Nigeria (NOUN) a utilisé des méthodes qualitatives et contextuelles pour examiner comment le système d'éducation de l'ODL de l'institution contribue à la réalisation de la durabilité au Nigéria. Il a été conclu que le mode ODL a beaucoup de potentiels et de dispositifs intégrés favorables à aider NOUN à mettre le Nigeria sur la ligne du développement durable, bien que le système soit confronté à certains défis. L'étude recommande un financement et une dotation adéquats ; l'infrastructure et l'expansion du mode d'éducation afin d'aider NOUN à poursuivre l'objectif.

### Introduction

Education is not only the key to resolving such myriads of issues facing mankind like poverty, diseases, ignorance and superstition, but also the answer to other socio-economic challenges facing humanity. Jegede (2016) captures this aptly by arguing that: It is an established fact, globally, that education plays a significant and important role in national development. All countries of the world seemed to have accepted the tremendously compelling arguments to make education the cornerstone of national development. The arguments include (i) the vital role education plays in economic and technological development, (ii) education of the citizenry to remove illiteracy and poverty, and (iii) developing a culturally and socially tolerant people who exercise ethical and moral considerations in national and local affairs, with a community spirit.

Education is highly regarded as the fulcrum of global economies. Apart from providing the needed manpower to drive economies, it is both a factor in development and growth of other spheres. It is also an imperative for individual self-development and self-realisation. Shah (2011) maintains that education is generally considered as an essential and powerful instrument in triggering economic growth, enhancing earnings at private level, reducing poverty, empowering people, encouraging health and flexibility in environment and developing competitiveness in the economy. This found meaning in Nelson Mandela, former South Africa's president's assertion that education is the most powerful tool which can be used to change the world (Mandela, 2001).

Education is critical to growth. It not only improves choices available to individuals, but an educated population provides the type of skilled labour necessary for industrial development and economic growth (Schultz, 1961). It performs an important role in the formation of human capital. It has been found that well educated human capital has consistent and strongest direct and positive effect on productivity, prosperity, development and economic growth of a country (Shah, 2011). This is why debates and national discourses on how to revitalise Nigerian economy and create jobs for the teeming population of the largest African country have centred mainly on improving her

educational system. It is in same vein that *The Punch* (2018) cites Atueyi as giving hint on the potency of education, prescribing it as the antidote to the challenges in the entire constituent sectors of the country.

Anwukah (2018) agrees with this view while quoting Amartya Kumar Sen, an economist and the 2001 Noble laurate as noting that education geometrically increases the capacity of the citizen to function and leads to the realisation of his/her potentials. Exemplifying this point, he further observes that China and other South East Asian nations of Singapore, South Korea, Malaysia, Thailand and Indonesia have been "able to attain enviable level of astronomical socio-economic growth and development since 1970s through the provision of intellectual infrastructure" (p. 6). Anwukah (2018), Nigeria's Minister of State for Education further emphasises the importance of education by stating that

Historically, proper and well directed educational policies have lifted many countries out of poverty by producing a virile and well diversified workforce that propelled massive industrialisation and export, leading to economic growth and development in such countries (p. 6).

Indeed, hardly can anyone name any facets of the society that can enduringly progress without the immense contribution of education. Various experts have severally harped on this as they advance reasons why the required priority should be placed on the sector. To this end, Ajadi, Salawu, Femi & Adeoye (2008), Ofoha (2012), Aderinoye and Ojokheta (2012), Onwe (2013), Rupande (2015) and Ugbaja (2018) have reiterated the place of education in the overall growth of the society. Whether it is in terms of human capital, economically, socially, politically, education is both the hub and the oil for lubricating the engine. But this only possible if the educational system is functional and effective. It must be devoid of operational hiccups and challenges while the system itself must be, in line with global practices, tailored to meet the needs of the people and effectively managed to actualise such objectives. Overall, education is aimed at assisting Nigeria attain sustainable development. Yet, the Nigerian educational system dominated by conventional mode is faced by numerous challenges, among them: poor funding, shortage of staff, decayed infrastructure, perennial industrial unrest and mismanagement, are thus, ill-equipped to make any meaningful contribution towards this goal (Adamu, 2019). Then, are the opportunities offered by Open and Distance type of education as piloted by the National Open University of Nigeria capable of aiding the attainment of the goal? Attempting to answer this is the task before this study.

### **Conceptual Clarification**

For purpose of clarity and focus, the study clarifies these key terms:

### Educational Sustainability

Sustainable Development is best expressed by the Millennium Development Goals (MDGs), a strategic platform for championing global advancement and aims to maintain economic progress alongside protection of long-term environmental value. MDGs' attempt to eradicate extreme poverty; achieve universal primary education and promote gender equality and women empowerment is directly linked with and are attainable through education. Understandably, SD is closely associated with environmental perceptions, social and economic growth, according to Giddings, Hopwood and O'Brien (2002), Gough (2002), Rauch (2002), UNESCO (2006) and Summers and Childs (2007).

It was, however, Brundtl in the report, *Our Common Future*, who gave sustainable development its most enduring definition, claiming it is a "development that meets the needs of the present, without compromising the ability of future generations to meet their own needs" (WCED, 1987). Jickling and Wals (2008) further amplified the report's position. UNESCO (2006), and Kungolos, Christodoulatos, Koutsospyros, Emmanouil, Laspidou, Mallios and Dermatas (2016) additionally insist that there are three main dimensions (environmental, social and economic) in relation with education and learning, for Sustainable Development: Socio-cultural perspectives, Environmental perspectives and Economic perspectives, to strive.

Anwukah (2018) describes sustainable education as:

The process of education management change in a balanced fashion in which the exploitation of resources, the direction of investments, the orientation development and institutional change are all in harmony and enhance both current and future potential to meet society's educational needs and aspirations...Sustainability means the retooling of all the human and material resources dedicated towards achieving a society's education needs and aspirations in the present time without compromising the ability of future generations to meet their own needs and aspirations. It involves maintaining change in human and material resources geared towards achievement of the society's educational needs in a balanced way for optimal returns for both present and future generations (p. 6).

The Minister, Anwukah, however, regrets that Nigerian educational system could not be sustainable in view of the numerous challenges facing it. He named such factors like poor funding; non-prioritisation by past governments; poor infrastructure; inadequate academic staff; poor remuneration, and inadequate security, most endemic of which is inadequate funding. While Ghana surpasses the **UNESCO** recommended benchmark of channelling at least 26% of nations' annual budget to education, Nigeria's 2019 allocation to the critical sector is abysmally low: 8.83%, Anwukah (2019) and Vanguard (2019) observe. This situation clearly makes rejuvenating the educational system for sustainability difficult, if not impossible. The system can only aid national sustainability if it is sustainable itself.

#### **Open and Distance Learning (ODL)**

Distance education helps to increase access to education for those who have difficulty in accessing education within the mainstream such as the poor, illiterate, women, marginalised and those living in remote areas. It is the means by which the teacher is taken literally to the student as teaching and learning process take place while students and the teacher may be separated by physical distance. This is often bridged by communication technologies (Dhanarajan, 2008). Open learning on the other hand refers to policies and practices that permit entry to learning with no or minimum barriers with respect to age, gender or time constraints and with recognition of prior learning (Glen, 2005).

Jimoh (2013) explains that open and distance learning education utilises variety of teaching aids (course components or learning materials) which include but not limited to teaching texts, study guides, course guides/materials, readers or anthologies and assignments (with or without an accompanying tutor guide). Others are television broadcasts or videotapes, radio broadcasts, audiotapes, software or online information and data, CD-ROMS, textbooks and laboratory materials. Tests and examination materials are also administered for the students' assessment. In addition, students' support is provided, either through personal communication at local universities or through online student tutors. Both the media used for open and distance learning and the student support arrangements are meant to enhance the level of interaction in open and distance learning; they not only widen the scope, but also ensure accessibility, quality, value, cost effectiveness, functionality and flexibility in the ODL mode of education, (NOUN, 2018a, 2018b). These attributes, no doubt, position the ODL system to engender sustainable national development.

# Institutions of Higher Learning as Centres of Sustainable Development

Both Fabricio, Gustavson and Frota (2001) while quoting UNESCO (1998) and UNESCO (2014) state that tertiary institutions, institutions of higher learning or Higher Education Institutions (HEIs) are "...organizations meeting requirements for the development of best-practice in teaching, acting as learning facilitators and knowledge disseminators, congregating innovative ideas and creative actions towards a resilient and just society". From their goals, they are the fulcrum of educating and training the manpower needs of their countries as well as solving other social and economic problems besieging the society. Many international initiatives are in place for positioning educational institutions and aligning them to the tenets of sustainable development whose goals and principles embrace the collective interests of HEIs and the entire society, (Lozano, Ceulemans, Alonso-Almeida, Huisingh, Lozano, Waas, Lambrechts, Lukman and Hug"e, 2015 and UN, 2012). This attempt to use tertiary education as

the hub for attaining sustainable development led to the emergence of declarations, charters, agreements, reports, and treaties, according to Lozano, Lukman, Lozano, Huisingh and Lambrechts (2013). These efforts are strengthened by the UNESCO World Conference on Education for Sustainable Development held in Japan, culminating in the Nagoya Declaration, which calls for "an urgent action to further strengthen and scale up education for sustainable development", (UNESCO, 2014, p. 1).

Educational institutions of higher learning must work in synergy with the society in order to provide the needs of the latter. They must be responsive to "society's changing necessities" (Razak, Sanusi, Jegatesen and Khelghat-Doost 2013). All the activities of higher institutions, therefore, must be geared to integrated and strategic actions meant to improve the society, as Lozano (2006) and Lozano, *et al.* (2015) claim that it is such actions that would guarantee sustainability in the system.

Universities and research institutions across the globe are championing this cause, which is already yielding enviable results in advanced and industrialised countries. Notable among such countries is the United States of America. This is, perhaps, not surprising as the United States is the world's largest national economy, as well as in a pivotal position in political engagements, affecting the ability of the international community to implement effective and communal solutions towards sustainable development (ECB, 2009). Many factors of course positioned the United States for these critical roles, including "its leading economic position, consumption patterns, cultural identity, diversity in lifestyle and its notable production of technology and innovation" with its higher institutions of learning's "strong international reputation for academic excellence and integrity" (Lozano, *et al*, 2015).

When functional and responsive, universities are agents of social engineering; they should be ready to tackle most of societal challenges. Ugbaja (2018) exemplifies this notion with the current global scourge, climate change. He paints a bleak picture of the probable plight of Africa in the face of the menace, naming rise in temperature, lesser

rainfall, drier areas, droughts, famine, high winds, floods, resulting in drop in GDPs of many nations in Africa, as some of the implications. Other challenges, he notes, include reduction in crop lands, increase in food insecurity, escalated health issues, rise in fears and insecurity, as some "diseases are deeply affected by (a) socioeconomic issues, (b) the public health context, and (c) weather related changes", Ugbaja (2018, p. 1). Other calamities would be more diseases, impaired nutrition and food and toxic soils. In this vein, WHO Africa Region (2015) argues that universities should be essential agents of change in the global economy and in the preparation of professionals who can influence the attainment of a sustainable society. Universities are in a strategic position to educate and research for sustainability. Considering the fact that most corporate organizations have sustainability on their agenda. there is a need for universities to produce professionals that are sustainability-minded. Universities should increasingly focus in such crucial areas like transportation, construction, energy, waste; food, water, and landscaping, which should be encouraged among students' organizations on campus (Emanuel, 2010). This is urgent and pertinent if they are to be relevant in the global quest for sustainability.

It is time for change and experts strongly insist on this, that "... existing ways of thinking (and acting) need to be overcome in order to enter a process of transition in terms of sustainable development", (Adomßent, Fischer, Godemann, Herzig, Otte, Rieckmann and Timm, 2014, p. 3). This prescription is even more pertinent for developing nations like Nigeria. It is a consensus that a change is needed if man's existence on earth is to be sustained. With sustainable development seen as the solution, the cause of the sustainability paradigm must be relentlessly pursued at all levels, especially in such areas like the academia, policy-making and administration as well as business management. Adomßent, et al (2104, p. 3) capture the essence very succinctly when they observe that "A paradigm shift towards sustainability will thus greatly impact the education and training processes of future professionals, opening up new perspectives on lifelong-learning processes and developing new attitudes towards nature, different cultures, and consumption patterns. It is, therefore, that education has been prioritised as an important strategy that has a major role in bringing about sustainable development".

The United Nations appreciates not just the importance, but also the urgency of the goal, hence its Agenda 21 (Chapter 36) emphasises that education would play a major role in achieving sustainable development (UNCED, 1993). This has triggered increased political attention as globally there is a strong political commitment to integrating education for sustainable development (ESD) at all educational levels, according to Wals (2012). To place high premium on the development, the United Nations declared a Decade for Education for Sustainable Development (DESD) (2005-2014), with the ESD seen as "a process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities" (UNESCO, 2005, p. 17). X-raying its opportunities, Haigh (2005, p. 32) observes that the Decade "offers academies the best chance to date for making the deep and radical changes that will be necessary if the world's higher education institutions are to enact their responsibilities for creating a better and self-sustainable world." It, therefore, affords universities the chance of using their cardinal functions of education, research and outreach to generate new knowledge and contribute to developing competencies and raising awareness towards sustainable development of the various sectors of their countries. While summing up, Adomßent, et al (2104, p. 4) further postulate that "The goal of higher education for sustainable development (HESD) is to enable individuals to reflect, through multicultural, global and future-oriented perspectives, on their responsibility for the complex effects of decision-making and behaviour". Then, the question could be, to what extent is the Nigerian university system ready for this added responsibility at a time they are poorly rated?

# Aiding Nigeria's Sustainability through the Open and Distance Learning

Research comparing distance education to traditional face-to-face instruction indicates that teaching and studying at a distance can be as effective as traditional instruction. When the method and technologies used are appropriate to the instructional tasks, there is timely teacherto-student feedback and there is student-to-student interaction, Tilwani and Jain (2005) insist. From all indications, and given the forgoing perspectives on open and distance learning, it is apparently clear that

the system is more student-centred than the conventional university system. Open and distance learning ensures that candidates with the required entry qualification gain admission to study their choice courses, as admission opportunities are widened. This is contrary to what is obtainable in some conventional universities where candidates are often denied admission on account of unavailable spaces or admitted into courses other than those they applied for, due to absence of spaces in their areas of choice. This act has been found frustrating due largely to candidates' lack of interest, aptitude and dexterity to pursue the courses so chosen for them. The negative impacts of this go beyond the individuals affected to significant consequences on the nation, its economy, workforce and the overall development of the country. This stems from the fact that the universities end up churning out graduates into the labour market who lack interest and adequate knowledge of their professions. Open and distance learning, on the other hand, has the capacity to provide access to as many applicants as possible and in their chosen programmes and courses, according to Ajadi, Salawu & Adeoye (2008) and Akpan (2012).

The cost of establishing and sustaining conventional universities is staggering and sky-rockery such that government subventions have been considered grossly inadequate to carry on with all academic needs and attain the required minimum standards of operation, (Akpan, 2018). This is partly the cause of hike in tuition fees in private and some state universities. The effect of this is non-affordability of higher education by many average citizens. Conversely open and distance learning can remove the cost of running physical structures, yet it meets the education needs of the people. With ODL, Wambugu and Kyalo (2013) agree, students can learn from the comfort of their homes or offices and only periodically commuting to campuses. Additionally, helpful cutting-edge data are often accessible on compact discs (CDs). portable personal computers (PCs), and have taken the place of instantly obsolete books. Online classrooms and libraries are gradually replacing traditional campus facilities. Rather than requiring students to travel to specific physical classroom or library, the Internet and other information and communication technologies have facilitated the delivery of (nearly) unlimited learning resources to students. These features and attributes combine to make the ODL mode of education

more dynamic, efficient and also in tune with the concept of sustainability, in the views of Ajadi, Salawu and Adeoye (2008), Akpan (2012), Onwe (2013) Jegede (2016) and NOUN (2018).

Prior to the emergence of the distance education system, the provision of quality education to her teeming millions has been one of the struggles facing Nigeria. The high cost of education, lack of access and underfunding had compounded the difficulty of sustainability of the system. Vanguard (2019) argues that poor funding has been identified as the major reason for the rot and challenges in the education sector, especially tertiary education, which has led to frequent strikes by teaching and non-teaching staff since the early 1990s. For instance, while the UN recommended benchmark budgetary allocation to education is 26%, the 2019 allocation to education in Nigeria is least in 9 years, with just 5.23%. Vanguard (2019) states that "Federal Government's allocation to education in the last 10 years has been miserly. In 2010, the Federal Government allocated N249.09 billion (4.83 per cent) of its N5.160 trillion budget to education. There was a marginal improvement in 2011 when education got N306.3 billion (6.16 per cent) of the N4.972 trillion budget. The marginal improvements continued in 2012 (8.20 per cent), 2013 (8.55 per cent), and 2014 (9.94 per cent) until 2015 (7.74 per cent), when a significant drop in allocation to education was recorded as shown in the Table 1:

Year	Budget (Trillion N)	Edu Allocation N Bn	Percentage
2010	5.160	249.09	7.25
2011	4.972	306.30	6.16
2012	4.877	400.15	8.20
2013	4.987	426.53	8.55
2014	4.962	493.00	9.94
2015	5.068	392.20	7.74
2016	6.061	369.60	6.10
2017	7.444	550.00	7.38
2018	9.120	605.80	7.03
2019	8.830	462.24	5.23
Total	61.481	4.564 Trillion	7.423%

Table 1: Nigeria's universities budgetary, 2010-2019.

Vanguard, Jan. 6, 2019.

Thus, this leaves much to be desired about a sector which is widely held as the wheel of other sectors. With the continuous increase in the population of students in tertiary institutions, Ugbogbo, Akwemoh and Omoregie (2013) note that it is obvious that the facilities needed for educational programmes in schools have increased over the years bringing about a drastic increase in the course of providing a befitting education.

However, beyond poor funding, statistics indicate that conventional education institutions are extremely hard pressed to meet the demands of today's socio educational milieu in Nigeria. The limitation of spaces in the universities imposes restrictions on access to higher education by qualified candidates; opinion corroborated by Anwukah (2018). If they had their way almost every product of the senior secondary system would want to seek for admission in a conventional university. However, statistics from the Unified Tertiary Matriculation Examination (UTME) or the Joint Admission and Matriculation Board (JAMB), have revealed that they cannot have their way. The National Bureau of Statistics (2017) quotes JAMB data as stating that 11,703,709 applications were received between 2010 and 2016, while only 2,674,485 students were admitted across the 36 states and the FCT between 2010 and 2015. This is abysmal, appalling and disturbing.

Sn	Year	Total	Total	States	JAMB	No.	Percentage
		JAMB	Admission		Offer	Admitted	
		Candidates					
1	2010	1,513,940	423,531	Adamawa	14,483	5,678	38%
			(28%)	Niger	16,556	6,278	38%
2	2011	1,636,356	417,341	Yobe	7,879	3,185	40%
			(26%)				
3	2012	1,632,835	447,176	Yobe	9,064	4,138	46%
			(27%)				
4	2013		(24%)	Yobe	11,222	4,084	
5	2014		(25%)	Yobe			36%
6	2015		(30%)	Yobe	17,461	9,703	56%

Table 2: Nigerian university admission through JAMB, 2010-2015.

Source: NBS Report.

Table 2 further graphically illustrates the agony of potential candidates for university admission, between 2010 and 2015. The figures from the National Bureau of Statistics indicate that of the over 1.6 million

candidates who sought admission in 2010, only 28% made it to the universities. Two states, Adamawa and Niger used to further amplify the presentation, had only 38% each of admission of their candidates who sat for the examination. Nationally, (the 36 states and the Federal Capital Territory), the figures fluctuated for the other years, 2012 to 2014, ranging from 24% to 27%, until 2015 when it rose to 30%. Therefore, going by this statistics, less than half of those who annually seek admission into Nigerian conventional universities do not get it on account of lack of spaces in the existing institutions and of course as a result of not been qualified. Consequently, an urgent measure is needed to solve this quagmire.

On the average, Jimoh (2013) notes that less than 12 percent of those who apply for admission are able to secure placement. Therefore, the questions begging for answers here are: how can the education system be effectively complemented to serve the nation's geometrically growing admission applicants? What university education system or policy should be adopted to ensure sustainability of higher education? Which system will guarantee easy access and flexibility to Nigerians in line with current realities in the country?

The inability of qualified candidates to get a space in the conventional universities in Nigeria calls for strengthening of Open and Distance Learning (ODL) programme to take in more prospective undergraduates. Open and Distance Learning is a university education system which focuses on opening access to education and training provision, freeing learners from the constraints of time and place and offering flexible learning opportunities to individuals and groups of learners.

Thus, the mandate of this paper is to: Create understanding of the role of education in national development, highlight how Open and Distance Learning (ODL) can be used to enhance Nigeria's sustainability and underscore the potentials of National Open University of Nigeria in the realisation of this goal.

Perhaps, going by its potentials, the ODL mode of learning for now is better equipped than any other system and consequently is in position to accelerate Nigeria's quest for sustainable development. Jegede (2016) is one of those who strongly believes in the efficacies and capacity of the system to promote the higher educational needs of Nigerians. He postulates this when he exhaustively justified what he called the Critical Relevance of ODL to Nigeria. They are:

- Access and equity for comprehensive national development;
- Alleviation of capacity constraints for economics, human resources and rural development;
- Education for all to reduce or totally eliminate illiteracy and poverty;
- Capacity building for human resource development especially in areas of acute deficiencies such as vocational and technical education, science and technology;
- Life-long and life-wide education in order to build a learning and knowledge-based society; Access to, and capitalising on, emerging market opportunities both within the African region and globally;
- Avenue for transforming our higher education sector to make our institutions respond to contemporary changes, developments and needs of Nigeria;
- Providing the answer to the perennial problems of teacher education;
- Appreciating, educating the citizens about, and using information and communication technologies (ICTs) to accelerate national and community development and provide an organised entry into the global information superhighway;
- Generating spin-off effects on other sectors of national development such as raising development in telecommunications, information technology industry, broadcasting, postal and informatics and the development of many education- related small-scale industries; and Alleviating budgetary constraints as expenditure on open and distance education has been shown in other countries to be as low as 30 per cent of the total cost of the conventional form of education beyond the take-off costs.

These qualities evidently demonstrate clear latitude acting as antidote to the numerous challenges facing the conventional educational system in the country. It is, therefore, a welcome development and recommendable.

# National Open University of Nigeria and Promotion of Distance Education (ODL)

The National Open University of Nigeria has distinguished itself as the flagship of Open and Distance Learning in the country. Ajadi, Salawu and Adeoye (2008) quote the University's Vision Statement as affirming that NOUN is to be regarded as the foremost university providing highly accessible and enhanced quality education anchored by social justice, equity, equality and national cohesion through a comprehensive reach that transcends all barriers. On the other hand, its Mission Statement states that NOUN is to provide functional, cost-effective, flexible learning, which adds life-long value to quality education for all who seek knowledge. Besides, the following are NOUN's objectives. To:

- Provide a wider access to education generally but specifically in University education in Nigeria.
- Ensure equity and equality of opportunities in education.
- Enhance education for all and life-long learning.
- Provide the entrenchment of global learning culture.
- Provide instructional resources via an intensive use of ICTs.
- Provide flexible, but qualitative education.
- Reduce the cost, inconveniences, hassles of and access to education and its delivery.
- Enhance more access to education.

The National Open University of Nigeria is equipped to provide unfettered access to quality education based on social justice, equity, equality and national cohesion through a comprehensive reach that transcends all barriers. These it is to achieve through the use of instructional resources and Information and Communication Technologies (ICT). It is probably the reliable answer to Nigeria's higher education challenges. With its ODL mode of educational delivery, NOUN is properly placed to proactively tackle the issues of admission spaces in the tertiary education system, inadequate instructional and infrastructural availability and perceived low quality of standard. Experts extol the attributes of the innovative system. Akpan (2015), for instance, names these as the advantages of the ODL system of education:

- 1. It makes education open to many people irrespective of age, sex, religion, location, qualification and time; thereby providing access to education for all.
- 2. It provides opportunities for employees to combine education and work.
- 3. It provides affordable, cost effective and flexible educational opportunities to many.
- 4. It is a veritable instrument for lifelong education.
- 5. It provides opportunities for drop-outs of the formal school system who are still interested in learning to continue their education.
- 6. It increases access to education for women irrespective of cultural and religious background.
- 7. It reduces inequalities in educational services.
- 8. It provides speedy and efficient training for target groups.
- 9. It provides technology for learning and research.

While justifying the need for distance education, Awe (2012) on his part recalls reliance on correspondence learning by ambitious individuals and the efforts of missionaries in the country during the colonial era, even beyond Nigeria's political independence in 1960 and concludes that another mode of education was highly required. "However, shortages in critical areas of manpower demand, the need to meet unsatisfied demand for higher education as well ability to acquire further education while on the job make distance education imperative in Nigeria today", p. 7. He further quotes The Commonwealth of Learning International (2001) as identifying four major reasons for strong and growing institutional commitment to distance education in Nigeria as follows:

- Institutions see potential for it to expand their reach and scale of operations.
- They regard distance education programmes as a strategy to absorb large number of students who cannot currently be placed in face-to-face programmes.
- They see it as a means to provide education to working students.
- They see it as an opportunity to generate income. (Commonwealth of Learning International, 2001).

In addition, all revised National Policy on Education, (2004), (2010), (2013), (2014) and (2018) articulate some core objectives of open and distance education. Setting out these goals is a tacit indication of Federal Government's recognition of the incontrovertible place of the ODL is repositioning the Nigerian educational system. The goals are:

- Provide access to quality education and equity in educational opportunities for those who otherwise would have been denied.
- Meet special needs of employers by mounting special certificate courses for their employees at their work place.
- Encourage internationalization especially tertiary education curricula
- Ameliorate the effect of internal and external brain drain in tertiary institutions by utilizing experts as teachers regardless of their locations or places of work, (NPE, 2004, p. 45).

While underscoring the pioneering and vibrant position of the National Open University of Nigeria in the country's quest for educational fulfilment, Ohioze, Odishika, Adedeji, Olusanya and Adesina-Uthman (2015) observe that "The National Open University of Nigeria has made remarkable milestone in the fulfilment of Federal Government's strive to provide education for all realizable". They named NOUN's achievements to include: widening access, gender equality, poverty eradication, vocational and lifelong education, cost effectiveness, economies of scale of programmes, on-the-job training, course relevance, quality assurance, and local and international (recognition and) partnership. Numerous strategies are applied to widen the scope of reach and accessibility of NOUN educational programmes to every Nigerian irrespective of gender, status, creed and political persuasion. To this end, its campus/study centres have been opened in various formations in all sectors of the country, among them Army, Navy, Air Force, Prisons, Immigration, Customs, Nigerian Security and Civil Defence and National Union of Road, Transport Workers and community study centres, while aiming at least one study centre in each of the 774 local government areas in Nigeria. This is besides its traditional study centres in each of the 36 states of the country and the Federal Capital Territory, Abuja, (Ajadi, Salawu, Femi & Adeoye (2008). While collaborating these views, Fabunmi (2004) notes that through increased equitable accessibility via technologically mediated learning strategy, NOUN is aiding Nigeria's sustainable development by creating the required change in skills, values, attitudes and knowledge, and these are relevant to the development of the people and Distance education is able to deal with large numbers of the nation. learners in a cost-effective manner. According to Thomas (2004), distance education is a more cost-effective means for allocating educational resources, and it is especially capable of reaching large number of potential targets, a trail NOUN is already bracing.

The institution's forefront capacity in broadening the opportunity for aspiring students' admission in the country is one area it has outstanding quality. While aptly elucidating on this, Tenebe (2013) states:

We are limitless, that is why we are called open. Our capacity is at infinity. Open Universities today can accommodate 5 million, 10 million students. As many as are interested in acquiring education, we have room for them. We are opened as wide as the capacity of this country. As I speak to you, the Open University of India has a student population of 3.8 million. At the moment we are already at the capacity of 132,000 students. I want to assure you that in the next two sessions, we want to hit 500,000 students. My dream for the Open University is that in the next five years, we should have at least 1.5 million students. So there is no carrying capacity. This is the only university that has the mandate to admit as many students as possible because we have the technology to accommodate the academic needs of these students. Open University is a peculiar and special university, designed to do this without undermining quality, (p. 3).

The National Open University of Nigeria is in the forefront of enhancing educational prospects for all, the rich and the poor alike. This is evident in thousands of students graduated by the university annually (Adamu, 2019). With its programmes and courses across disciplines and professions, the university is contributing significantly to massive skills development in Nigeria. Generally, the importance of open and distance learning in enhancing sustainability in education system lies in its unique characteristics briefly highlighted in our conceptual clarification. ODL gives general access to quality education. According to Dodds (2005), the characteristics of ODL which make it important include:

- 1. ODL accommodates
- 2. Openness of entry, time and space
- 3. Massification of education
- 4. Quality in teaching and learning
- 5. Flexibility in the use of multi-media
- 6. Innovation of curricular
- 7. Technology for learning and research
- 8. Keeping the human face and opportunities for many.

Alaezi (2005) also itemises other benefits of ODL to include:

- a. Allowance for open and flexible entry requirements to increased access and equity.
- b. Degrees, diplomas and certificates are awarded by cumulative credits to give learners time to attend to their personal social commitments.
- c. Courses are organized and prepared by specially designated course coordinators and programmes leaders including a variety of local and international experts to provide up to date and latest information of easy access, group, retention and retrieval.
- d. Programmes are made available to learners at their chosen places, homes, schools or work places to be completed at the student's own time and pace and at affordable costs.

### **Challenges Facing Nigerian Distance Educational System**

Notwithstanding the numerous opportunities it provides, ODL system of education still faces some daunting challenges which must be surmounted to strengthen it to assist Nigeria's sustainable development (Maxwell, Musingafi1, Kudzai and Shupikai, 2015). For instance, Ohioze *et al.* (2015) identify the following as impediments facing the National Open University of Nigeria: Poor attitude of students, negative attitude of facilitators, inadequate technology infrastructure, insufficiency of funding for operations and programmes of the university and inadequate academic staff. These must be overcome if the quest for enduring educational system is to be attained. While agreeing, Awe (2012) further elaborates on the challenges, noting that they also include:

- 1. Negative public perception of the quality of graduates.
- 2. Inadequate funding which infringes on payment of salaries, teaching, research and procurement of instructional technologies.
- 3. Low capacity in coping with the quality assurance of academic programmes.
- 4. Shortage of competent staff in open and distance education management
- 5. Required specialists in instructional design and materials developments
- Absence of necessary infrastructure for technological development of needed instructional materials, (Awe, 2012, p. 8).

On their part, while harping on the challenges facing e-learning and distance education, Ajadi, Salawu, and Adeoye (2008) opine that Nigeria's technological backwardness and socio-economic factors as well impede the attainment of the lofty goals of the system. They enumerated these as the problems impeding the smooth operation of the ODL system of education in Nigeria, even in the National Open University of Nigeria:

1. *Inequality of access to the technology.* This mainly stems from digital divide which NOUN students are also affected. The cost

of a Personal Computer (PC) and Laptop are still very high in Nigeria considering the income level of an average worker in the country. Few of the NOUN students that are privileged to have a PC/Laptop are not connected to the Internet as this attracts extra cost which they cannot afford.

- 2. **Technophobia:** Most of the students admitted by NOUN have no computer education background, hence they are afraid of operating one; some go to the extent of hiring expert at a cost to fill their admission, registration and other document meant for them to fill online. However, the very few who have access to the computer do not know how to use and maximize its usage.
- 3. *Internet Connectivity:* The cost of accessing Internet is still very high in West Africa. It is as high as \$8/Kbps, while it costs a ridiculous amount of \$0.52/Kbps in North Africa and even less in Europe. Most of NOUN Students make use of Cyber Café which charges between #100.00 and #150.00 per hour despite their poor service and slow rate of their server
- 4. *School Curriculum:* Most of the students admitted by NOUN have no information technology/computer education knowledge because it was not entrenched in the curriculum at their elementary and secondary education level. Not until recently when computer education is been introduced at elementary level and it is not yet a compulsory subject at the secondary level of our education.
- 5. *Attitude of NOUN Students:* ICT assists independent learning and most of NOUN students are reluctant to take responsibility for their own learning. But they preferred to be spoon-fed at all times.
- 6. **Software and License Cost:** It is very expensive to get some of the soft wares because they are not developed locally, they are developed in Europe and other developed countries to suit their own system and make their own living. The cost and even the interpretation of the software put off some of the NOUN students who showed interest. Maintenance and Technical Support: There is few technical staff to maintain the system, this make it very expensive for few NOUN students that has a PC to maintain when a technical problem is noticed.

7. *Electricity:* The perennial problem in Nigeria is the problem of electricity instability which has been a major setback for our technological development. Some of NOUN students that reside in cities and towns are faced with the problem of epileptic supply of electricity, while majority of them lives in rural areas that are not connected to the national grid.

### Conclusion

The study reviewed how Open and Distance Learning (ODL) mode of education can be used to aid Nigerian educational system in contributing to Nigeria's sustainable development. While focusing on the National Open University of Nigeria (NOUN), it further explored the roles of ODL and how it can assist Nigeria to attain socio-economic sustainability.

The study identified the numerous advantages of ODL which are capable of transforming the Nigerian educational system and aiding the country achieve sustainability. The hurdles facing Open and Distance Learning mode of education were also x-rayed. As well, the potentials of the National Open University of Nigeria in overcoming the challenges among them: poor funding, shortage of manpower, inadequacy of required technological resources, insufficiency of quality assurance mechanisms and poor level of computer/ICTs appreciation by students. Education was identified as a pivotal tool for transforming the society vis-à-vis the enhancement of socio-economic sectors of the country.

It further recognised education at the university level as a veritable stage where teaching, learning and research can be strategically applied in improving the society and revealed that globally the university system is being adopted and adapted as an instrument for formulating policies and programmes for bettering the lot of man. The National Open University of Nigeria has all the needed attributes, if effectively harnessed and further positioned to be at the forefront of putting Nigeria on the path of progress. That way, the socio-economic situation in the country would be solved and her goal of attaining enduring development would be realised.

#### Recommendations

Following these findings, the study makes the following recommendations:

- 1. Open and Distance Learning system of education should be provided with all it requires in order to widen its scope and consolidate National Open University of Nigeria's chances of using it to contribute to Nigeria's sustainable development.
- 2. The capacity of the National Open University of Nigeria to admit, educate/train and graduate large number of students should be maintained so as to enhance the chances of more Nigerians acquiring capacity to contribute to national development.
- 3. The application of Open and Distance Learning system of education should be enhanced and entrenched as a matter of policy and mechanism for solving the multiplicity of challenges facing the Nigerian educational system.

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