

# TRADITIONAL AND MODERN SYSTEM OF TEACHING IN HIGHER EDUCATION OPEN DISTANCE LEARNING (ODL) AND HYBRID FORMAT

## Article History

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## Introduction

Teaching is a process that involves how knowledge is been shared and imparted to learners to enable them develop skills and apply knowledge that foster critical thinking and creativity.

Teaching takes place in various settings, these include schools, university, workplace, community and informal setting. Effective teaching takes place when the appropriate methods, strategies and learning tools are used to engage learners, and facilitate their learning to achieve the learning objectives.

The role of a teacher in creating an ideal environment for learning cannot be overemphasized as they are saddles with the responsibility of designing the method, providing support and giving feedback to learners.

Every learner is unique and as a result of this, the teacher needs to find the right teaching methods to deliver the curriculum and impart instruction to the learners.

Traditional and modern methods of teaching in higher education are simply the collision of new ideas and old concepts and according to Yuemeng Wang (2002). The traditional teaching method is teacher-centered to impart book knowledge to students. With the development of the new era, science and technology are more developed, and people's thinking is more active. Students not only want to learn from textbooks but also are attracted by innovative knowledge. To improve the quality of teaching and provide students with a better education, modern teaching methods are also widely used. Modern teaching methods pay more

attention to improving students' values and abilities. In the modern classroom, the teaching atmosphere is more relaxed, and there are multiple technology products to assist teaching and the classrooms are student-centered.

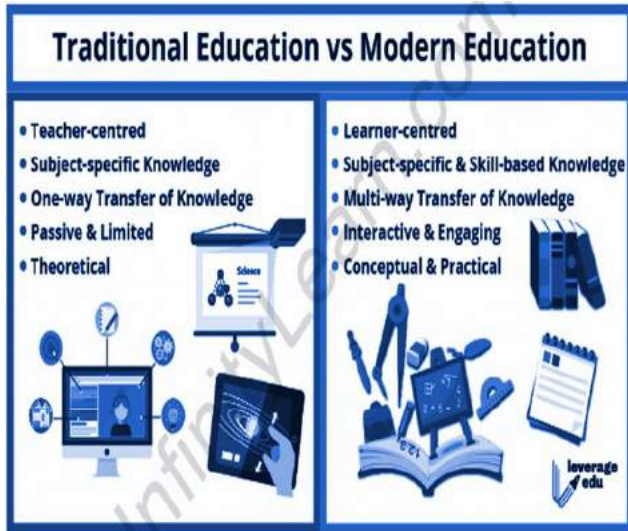
Educational systems are structures created by States, Countries, Institutions to take care of its citizens and it is normally the function of an organized system whether public or private entity. This paper will look at the diversity of such systems in the following dimensions

- Traditional methods
- Modern methods
- The Open System Education

The hybrid system and a host of others

- ✓ **Traditional methods:** In traditional teaching methods, classrooms are teacher-centric. Teachers are the main source of knowledge in the traditional method of teaching. They take the responsibility of knowledge dispensers, not the facilitators. In traditional teaching methods, chalk and talk methods are highly used. Regimented classrooms are the focus of the traditional method of teaching. As the traditional method of teaching is teacher-centric, it shows a lack of collaboration and group learning among students. Teachers give lectures and students learn.
- **Modern methods:** The education system has been transforming and is introducing new methods of teaching which have a completely

different angle and approach towards learning and teaching. In modern teaching methods, teachers teach every student on a different level. They assume all students are different and apply different educational practices to them individually. They consider the needs of every student and deliver accordingly.



### Innovations for Education



To innovate is to look beyond what we are currently doing and develop a novel idea that helps us to do our job in a new way. The purpose of any invention, therefore, is to create something different from what we have been doing, be it in quality or quantity or both.

To produce a considerable, transformative effect, the innovation must be put to work, which requires prompt diffusion and large-scale implementation

Educational innovations emerge in various areas and in many forms. According to the US Office of Education, “There are innovations in the way education systems are organized and managed, exemplified by charter schools or school accountability systems. There are innovations in instructional techniques or delivery systems, such as the use of new technologies in the classroom.

Innovation can be directed toward progress in one, several, or all aspects of the educational system: theory and practice, curriculum, teaching and learning, policy, technology, institutions and administration, institutional culture, and teacher education. It can be applied in any aspect of education that can make a positive impact on learning and learners.

Innovations can be categorized as evolutionary or revolutionary (Osolind, 2012), sustaining or disruptive (Christensen and Overdorf, 2000; Yu and Hang, 2010). Evolutionary innovations lead to incremental improvement but require continuity; revolutionary innovations bring about a complete change, totally overhauling and/or replacing the old with the new, often in a short time period. Sustaining innovation perpetuates the current dimensions of performance (e.g., continuous improvement of the curriculum), while disrupting innovation, such as a national reform, radically changes the whole field.

Innovations can also be tangible (e.g., technology tools) and intangible (e.g., methods, strategies, and techniques). Evolutionary and revolutionary innovations seem to have the same connotation as sustaining and disruptive innovations, respectively

When various innovations are being introduced in the conventional course of study, for instance Universal Design of Learning (Meyer et al., 2014); or more expressive presentation of new material using multimedia;

or more effective teaching methods; or new mnemonic techniques, students' learning productivity may rise to some extent. This is an evolutionary change. It partially improves the existing instructional approach to result in better learning. Such learning methods as inquiry based, problem based, case study, and collaborative and small group are evolutionary innovations because they change the way students learn. Applying educational technology (ET) in a conventional classroom using an overhead projector, video, or iPad, are evolutionary, sustaining innovations because they change only certain aspects of learning. National educational reforms, however, are always intended to be revolutionary innovations as they are aimed at complete system renovation.

This is also true for online learning because it produces a systemic change that drastically transforms the structure, format, and methods of teaching and learning. Some innovative approaches, like "extreme learning" (Extreme Learning, 2012), which use technology for learning purposes in novel, unusual, or nontraditional ways, may potentially produce a disruptive, revolutionary effect.

Innovations are nowadays measured and compared internationally. According to the 2011 OECD report (OECD, 2014), the USA was in 24th place in educational innovativeness in the world. This report singled out the use of student assessments for monitoring progress over time as the top organizational innovation, and the requirement that students were to explain and elaborate on their answers during science lessons as the top pedagogic innovation in the USA. Overall, the list of innovations selected by OECD was disappointingly unimpressive.

**The Sustainable Development Goals (SDGs):** were established in 2015 by the international community as part of the UN 2030 Agenda for Sustainable Development through which countries of the world collectively pledged to eradicate poverty, find sustainable and inclusive

development solutions, ensure everyone's human rights, and generally make sure that no one is left behind by 2030. The EU made a positive and constructive contribution to the development of the 2030 Agenda. We are committed to implementing the SDGs in all our policies and encourage EU countries to do the same. 17 SDGs have been defined, with 169 associated targets, to be reached by 2030. They address the global challenges the world faces and tackle all dimensions of sustainable development, in a balanced and integrated manner.



### TARGETS

- 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 4.2: By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- 4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 4.5: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and

vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

4.6: By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

4.a: Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

4.b: By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries

4.c: By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

### **Implications for Education for Sustainable Development**

One of the most articulated discourses in the twenty-first century is the challenge of sustainable development, human induced climate change, rapid depletion of natural resources, frequency of natural disaster, spread of

infectious diseases, loss of biodiversity, widespread poverty, unsustainable consumption pattern and so forth

Sustainable development therefore has been acknowledged as a potent instrument for articulating the need to depart from present dominant models of development which appear incapable of balancing the needs of people and the planet in the pursuit of peace and prosperity

The aims of the decade are to help improve the quality of education and learning through education for sustainable development; assist countries in achieving education for sustainable development progress towards attaining the Millenium goals through effort; gives countries new opportunities to incorporate education for sustainable development into their educational reform and facilitate the formation of network and interaction among education for Sustainable Development stakeholders

Education for sustainable development is broad and encompassing, according to UNESCO (2005) it implies the following

- ✓ Education that enables people to foresee, face up to and solve the problems that threaten life on our planet
- ✓ Education that disseminates the values and principles that are the basis of sustainable development (intergenerational equity, gender parity, social tolerance, poverty reduction, environmental protection and restoration, natural resources conservation and just and peaceful societies). Education that highlights the complexity and interdependence of three spheres, the environment, society broadly defined to include culture and the economy

Higher education institutions play an important role not only in shaping the way we think, but also in educating the next generation of decision makers, including business leaders and government executives. They are also critical as they are the main point of training for key multipliers

and the core of teaching itself (Tilbury, Keogh, Leighton & Kent 2005)

The vision of education as proposed by UNESCO (2005) is a world where everyone has the opportunity to benefit from quality education and learn the values, behaviours and lifestyles required for a sustainable future and for positive transformation. Institutions of higher learning are thus in the best position to effect these transformations and provide the leadership training required for sustainability.

Higher institutions by their traditional role in the society should epitomize development and set agenda for sustainability by producing a crop of individuals who are adequately prepared for exhibiting the qualities that properly situate the nation on the path of sustainable development

### **Higher Education**

Higher Education institutions especially Universities have for all time been identified as the space for generating knowledge through research. Unfortunately, for many African countries, higher education has witnessed a long period of relative neglect and stagnation. Many higher education institutions especially Universities in Africa are burdened with a myriad of problems to the extent that they have little time and resources for effective research

So far Google Apps for Education is now available to millions of students and university faculties. Nigerian universities have access to Google Apps for Education, a free suite of hosted Email and collaboration applications exclusively for schools

The modern world is currently being transformed through research. The growth of nations and indeed the economics of nations today depend on their commitments to knowledge generation and utilization through research.

There are over 2300 higher tertiary institutions in Africa enrolling over 10 million students. Within the past ten years, Africa has witnessed a high growth in the number of private and distance learning tertiary institutions. This is

partly because the public institutions that had been in existence for many years can no longer cope with the increasing population and high demand for education in the continent, which is just 5% is still the least when compared to North America with 70% and Europe with over 24%.

### **RESEARCH AND DEVELOPMENT**

Research is facing a lot of challenges. It is known that sub-Saharan Africa spends less than 0.3% of its GNP on research and the region has been identified as the region that contributes the least to research funding in the world. Africa's share of global scientific output has fallen from 0.5% in the mid-1980s to 0.3% in the mid-1990s. Apart from this, Africa accounts for the lowest ratio of researchers per million inhabitants in the world. Africa, which accounts for 12% of the world population accounts for less than 1.5% of research publications annually.

Findings from research in Africa in the tertiary institutions also observed that these research institutions are limited by poor infrastructures, ill-motivated staff, incessant and inadequate power supply, outdated equipment, poor funding and poor connectivity to the rest of the world

### **Challenges of Higher Education in Nigeria**

Students face a lot of challenges when the institution itself is not in proper shape

- ✓ **Over enrolment:** despite the involvement of National Commission (NUC) to regulate the number of intakes in the tertiary institutions vis-à-vis the inadequate resources or dense population in the institutions, there is students' population explosion in Federal and State universities due to over enrolment without expansion of facilities. Over enrolment has its effect on the students and the resources concurrently, students are made uncomfortable while resources are overstretched
- ✓ **Quantity and quality of academic staff:** when there are no or few quality staff in the institutions,

it affects the teaching and learning process which invariably affect the products of such institutions

- ✓ **Interruption of academic calendar:** the major consequences of strike is delay and interruption of the academic session. Nigerian tertiary education is characterized by the truncation of academic sessions and the epileptic closure and reopening of universities occasioned by recurring and sometimes protracted strike action by staff
- ✓ Repetition and dropout rates, issues of examination malpractice, cultism and sale of handouts are indicators of inefficiency in an education system. These may be high in Nigeria Tertiary Institution if proper research is done and these are indicators that show it is not well with Nigerian Tertiary education. carryover syndrome is taken to be normal by Nigerian students, there is also delay of release of results. many students come to the knowledge of carry-over courses only at the point of graduation

### **Information Technology Applications & Challenges**

The challenges facing Information Technology has been explained by the Association of African Universities AAU and these include

- (a) The bandwidth limitations: limited bandwidth and its high cost are the major problems that inhibit communication and collaboration between academic and research institutes in Africa. the absence of connectivity to fiber backbone makes many of the countries to be dependent on the low bandwidth and costly satellite links
- (b) Bandwidth management: apart from the limited bandwidth, the improper use of connectivity is a major challenge. Ineffective utilization of existing bandwidth due to absence of bandwidth management strategies promotes bandwidth wastage on unwanted traffic (virus, music and

movie download etc.). institution therefore need to put in place necessary policies for optimizing the available bandwidth in academic and research institution

- (c) Human Resources: lack of skilled human capacity in many countries is a limitation to the use of IT connectivity for research. Human resources are needed to evolve the necessary vision and policy framework for ICT
- (d) Policy and regulatory challenge: there are many regulatory policies affecting IT connectivity for research in some countries. These include
  - Restrictive telecommunication sector policy and regulations that constrain academic institutions from owing and operation satellite for fiber network
  - Lack of clear policy and regulations on the status of academic and research networks
  - Lack of open access to fiber network and lack of competition

The emergence of Information Communication Technologies, issues of social media e. g Chat GPT the latest version, Facebook, Twitter, You Tube, Flickr, Tumblr, Pinterest, Google +, Instagram, LinkedIn and many more have now constituted the 7<sup>th</sup> generation of models of technology for instructions, which have significantly changed the face and practice of teaching and learning. I seek the indulgence of scholars to enumerate more on the historical perspectives of these trends and a look at how Nigeria has embraced these technologies as they now form the thrust of the CORE CURRICULUM MINIMUM ACADEMIC standard this workshop is to address. For conveniences of learners and researchers, some identified apps and software mostly consulted are listed below. However, researchers should be advised to get acquainted with e- learning applications in the design,

production and utilisation of current practices directly impacting educational development.

**Facebook:** Instructors and colleges can meet students where they are by incorporating social media platforms, they're likely already familiar with like Facebook. Have students follow a class Facebook Page or join a Facebook Group to view posts about course updates, homework assignments and tests. Universities can have publicly accessible pages dedicated to specific schools or departments that students can see even if they aren't active on Facebook.

**Twitter now X:** X is a great option for providing quick updates and reminders to students. Teachers can create a single handle per class and reuse it every year, or they can create a new handle each school year. Use X threads to share resources like practice quizzes, interesting perspectives or thought-provoking quotes to foster critical thinking. Hashtags can mark specific discussions or chats with guest speakers.

**Pinterest:** Educators can use Pinterest to prepare and organize resources, lesson plans and worksheets for their classes in one place. They can also set up Pinterest boards for each of their classes and save pins that are relevant to lessons. Create boards according to class or subject, and create sub-topic boards for weekly units, projects or worksheets. Pinterest can also be useful for students to curate a digital bibliography for research projects, papers or group assignments. Students can pin websites, books or videos to a board on a single topic and refer back to it when it's time to write an essay or thesis.

**Instagram:** Have students practice storytelling on Instagram by creating class-specific accounts where they can present photos or graphics (and delete them once the course is over, if they so choose). This can work especially well in visual-heavy classes: Have photojournalism students post essays or challenge the social media marketing class to create a faux-brand campaign.

**LinkedIn:** LinkedIn can help current students develop networking skills, craft their personal brand and connect with alumni. Flexing these career muscles could help them earn internships, gain mentors and secure job offers before they walk across the stage on graduation day.

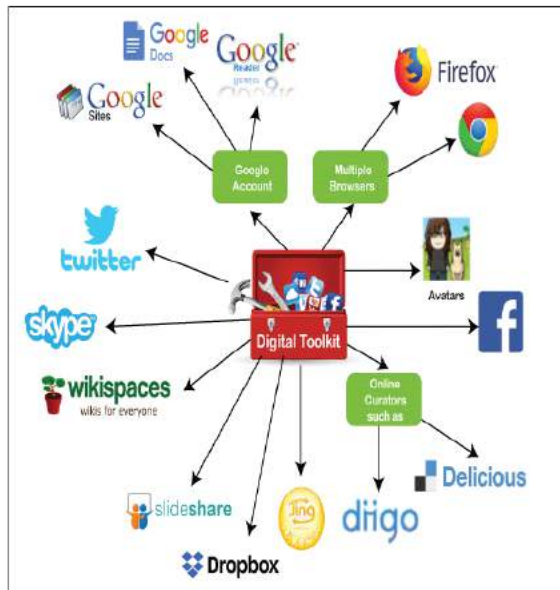
Institutions can use LinkedIn for university colleges as well. For example, a business school may have several private LinkedIn Groups for regional alumni chapters to connect them with students and faculty for internships, fundraising, volunteer opportunities and events.

**Blogs:** Blogs are another great outlet for incorporating social media in the classroom. Students can link to the class blog on other social channels. For example, a student might share a photo from their visual essay on LinkedIn to attract the attention of recruiters for job or internships. Using blogs as a semester-long assignment can improve students' short-form writing and critical thinking.

**Chat GPT:** GPT can be used to create chatbots and virtual language tutors that help students practice their language skills. These chatbots can simulate real-life conversations and provide students with instant feedback on their grammar, pronunciation, and vocabulary

**Tumblr:** Tumblr is a web based social media platform that was designed to make it easier for people to share digital media with each other. Unlike Facebook and Twitter, where conversation is a common mode of communication, Tumblr is more about sharing content. It is a great resource and tool for people and professionals of every stripe.

Teachers are finding it useful too.



## Defining the Purpose of Learning Management Systems & Learning Management Systems

### Purpose:

1. School Management System must capture the vision and mission statement of the school.
2. SMS must Capture the goalband objectives of the School
3. SMS must Captures the ethos rules, and regulations.
4. SMS must Capture teacher qualificationand human resources and the capacity of management
5. SMS must capture the elements of learning such as the environment, teaching aids, etc
6. SMS must capture attendance, monitoring evaluation of the entire process of management.
7. SMS must Capture the attitudes, passion of the teachers towards teaching and abilities to helo learners and relate to stateholders.

### B. Learning management systems.

#### Purpose:

- 1, LMS is Curriculum based
2. Explainshow Curriculum is delivered

3. Ensure Curriculum is well implemented, looking at adaptive learning,
4. LMS. Track records of learners to engage learners are achieving the aims of the curriculum.
5. Aid the course of study of learner s
6. Track the teachet4to be sure of their certification competency to enable the learners achieve thd set learning outcomes
- 7.Track their assessment and performance.
8. Ensure continuous training to meet the curriculum, such as computer training and continuou professional development
9. LMS should be on different methodologies.

### The top online learning statistics in 2023

- Worldwide, 49% of students have completed some sort of online learning
- Online learning is the fastest-growing market in the education industry – it has grown 900% since its creation in 2000
- 70% of students say online learning is better than traditional classroom learning
- The number of online learning users is expected to increase to 57 million by 2027
- 80% of businesses now offer online learning or training solutions
- 63% of students in the US engage in online learning activities daily
- Online learning can increase student and employee retention to as much as 50%
- Online learning can reduce the time needed to learn a subject by 40% to 60%
- The online learning industry is projected to be worth more than \$370 billion by 2026
- Online learning and training can improve employee performance by 15% to 25%



### *The Commonwealth of Learning (COL)*



This organisation has been of tremendous support in the provision of capacity, training and development of Open Distance Learning (ODL) strategies within the commonwealth states. In particular, COL in its years of existence has provided institutional support to the understanding of the massification of open distance learning using the Millennium Development and the current Sustainable Development frameworks.

COL is an intergovernmental organisation of The Commonwealth headquartered in Metro Vancouver, British Columbia, Canada. Working collaboratively with governmental and nongovernmental organizations and other institutions in the Commonwealth, as well as with international development agencies, COL has the mandate to promote the use of open learning and distance education knowledge, resources and technologies.

COL was founded at the 1987 Commonwealth Heads of Government Meeting (CHOGM) and inaugurated in 1988. Its title is a phrase used by philosopher John Locke to describe the body of knowledge developed over time by scientists and other thinkers, for the benefit of all people. At the time of its founding, COL focused on promoting economic development by providing education and teaching skills.

In 2012, Professor Asha Kanwar was appointed the president and chief executive officer of COL.

In 2015, COL created a six-year strategic plan to align itself with the Sustainable Development Goals (SDGs), specifically SDG4, which work to ensure inclusive and equitable quality education and lifelong learning for all by 2030. The Strategic Plan for 2021-2027 was developed against the backdrop of the COVID-19 pandemic. In this Plan, COL has reinvigorated its mandate to provide access to learning opportunities to those in need, making use of distance education and technologies. The 2021-2027 Strategic Plan also re-animates COL's various roles as enabler, capacity builder and catalyst for educational development.

COL hosts a triennial Pan-Commonwealth Forum (PCF) on Open Learning where its Excellence in Distance Education Awards (EDEA) are presented. The Ninth Pan-Commonwealth Forum (PCF9), co-hosted with The Open University, United Kingdom was held at BT Murrayfield Stadium, Edinburgh, Scotland on 9–12 September 2019. The Forum brought together 541 policy makers, practitioners and thought leaders from 61 countries. The resulting Edinburgh Statement summarised the collective actions necessary to significantly accelerate progress towards the aim and targets of SDG4.

#### **Ethical Revival in Higher Education Institution**

It needs be stressed that ethics is the basis of human existence. The constitution of the federal republic of Nigeria in section 23 states as one of its fundamental objectives and directive principles of state policy that the national ethics shall be discipline, self-reliance and patriotism. It is therefore necessary to address the issue of ethics in institutions of higher learning by recognizing that ethics is fundamental to the achievement of the objectives of education generally as well as those of tertiary institutions specifically. Looking at the goals of education as stated in the national policy on education, one can conclude that they geared towards evolving an ethical and moral society. They are geared towards the building of:

- 1) A free and democratic society;
- 2) A just and egalitarian society;
- 3) A united, strong and self-reliant nation;
- 4) A great and dynamic economy;
- 5) A land of bright and full opportunities for all citizen

Ethics therefore is fundamental to the underlying principles of educational institutions. The objective of a tertiary institution is not only to teach ethics but also to be an ethical institution

An unethical tertiary institution devoid of ethics in the way it operates as a moral community or business would be a paradox. ethics should thus play a central role in a tertiary institution. Section 8 subsection 59 (b) of the national policy on Education (NPE) states that tertiary institutions are meant to “develop and inculcate proper values for the survival of the individual and society”

The baseline of ethics in tertiary institutions is that our main task is not only to teach ethics and values for the market place but to model these values ourselves as we fulfil our own moral responsibility as educators in the universities/colleges where our students begin the ethics journey in the first place

### **National Policy on Information and Communication Technology (ICT)**

The main objective of the National ICT Policy is to create a conducive environment for the rapid expansion of ICT networks and services that are accessible to all at reasonable costs; and that contribute to the development of the various socio-economic sectors. Therefore, the specific objectives of this National ICT Policy are:

- To ensure that the reality of convergence is reflected in the ICT sector, notably in the areas of regulation, operation, and service delivery;
- To unify all Policy Administrators under a single Ministry

- To facilitate the development of an appropriate legal framework for effective implementation of ICT policies;
- To promote universal access to high quality and advanced ICT and services;
- To develop and enhance indigenous capacity in ICT technologies and software development;
- To ensure the country’s effective participation in regional and international ICT fora in order to promote ICT development in Nigeria, meet the country's international obligations and derive maximum benefit from international cooperation in these areas;
- To actualize the implementation of an administrative and legal framework for the transition to digital broadcasting and ensure a smooth switchover in accordance with International Telecommunication Union (ITU) guidelines;
- To develop the framework for the implementation of Community Broadcasting in Nigeria;
- To reposition the postal subsector so that it can deliver universal access to postal services for all Nigerians;
- To pursue the elimination of multiple regulations and taxation in the ICT sector;
- To foster the development of broadband services that will enable Nigerians to enjoy the benefits of globalization and convergence;
- To ensure an enabling environment, and provide incentives in order to sustain investments into the ICT sector in Nigeria;
- To promote cyber, digital, ICT infrastructure and national security;
- To utilize ICT in energizing and supporting the various programmes and sectors that contribute to Nigeria's socio-economic development including

agriculture, education, finance, health, justice administration, oil and gas, power, small and medium sized enterprises, solid minerals, sports, trade and commerce, transport and youth development; and

- To facilitate the creation of a robust and consolidated national digital archive.

The curriculum for each category varies. The heart of all the categories is for sustainable development which will be addressed in the global sustainable development goals 2015-2030

**The Advent of ODL, Open Distance Framework and Regulation.**

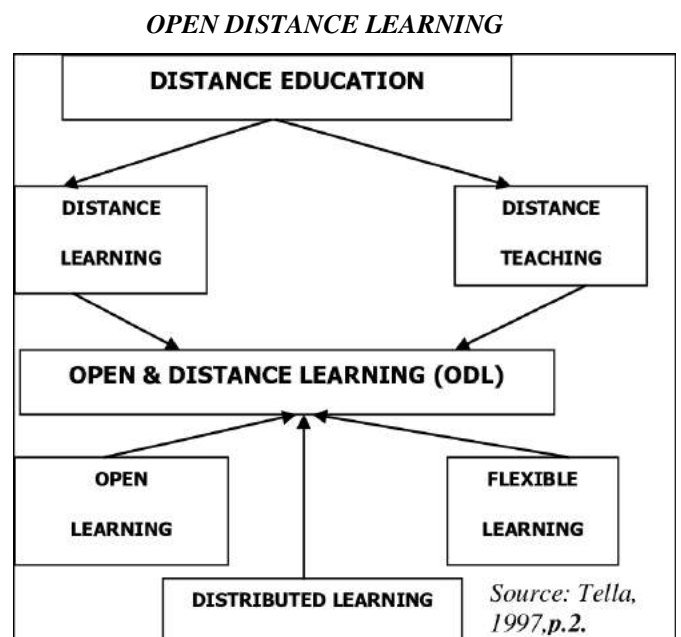
Open and Distance learning began as correspondence education with the use of print technology and the postal service to reach learners far removed from the teacher. Directed toward adult learner who are unable to engage in formal schooling, correspondence education was tailored towards learning new skill for particular jobs

In 1873, Anna Ticknor created the society to encourage studies at home for the purpose of educational opportunities for women of all classes in the society. The volunteer effort which was based in Boston provided correspondence instruction to 10,000 members over a 24-year period despite its resolutely low profile (Ticknor, 1891). Printed materials sent through the mail were the main way of communication, teaching and learning. In 1883 a correspondence university headquartered at Cornell University was established, but never got off the ground (Gerrity,1976)

The first official recognition of education by correspondence came from 1883 to 1891 by Chautauqua College of Liberal Arts. This college was authorized by the state of New York to grant academic degrees to students who successfully completed work at the summer institutes and by correspondence during the academic year (Watkins, 1991) in her book cited that Vincent (1885) wrote, the day

is coming when the work of the correspondence will be greater in amount than that done in the classrooms of our academics and colleges; when the students who shall recite by correspondence will far outnumber those who make oral recitations.

it is interesting to note that the experimental use of the print technology in 1873 by Anna Ticknor has now become the strategic agent for empowerment and transformation in all areas related to ODL from Moses (as recorded in the holy bible) who was the first known ODL student when he received God’s message via tablets of stone as the medium of instruction to today’s millions of students who now routinely use the emerging sophisticated technologies, including social media for learning. Technology has had a defining and controlling influence on ODL. The range that has gained entry into ODL include print, broadcast television and radio, audio tapes, video tapes, computer-based learning packages, interactive videos (disk and tapes), CDTV, audio-teleconferencing, audio graphic communication system (smart 2000), video conferencing and the web, enhanced by computer communication network.



Open learning is a term with no universally agreed definition. To some 'open' will indicate open entry and access to learning opportunities. To others it may include aspects of methods and organization, with the consequence that 'open learning' may sometimes be substituted by FLEXIBLE LEARNING.

Distance Education on the other hand shares the concern of openness and flexibility, but definitions tend to focus on the possibility of communication between participants in the learning process across time and / in space, particularly as brought by old and new learning technologies. Distance Education involves the use both of presentation of Information and for communication between participants of a range of media, such as print, written correspondence: audio, video and computer-based media and networks as well as multimedia facilities. Open and distance learning is therefore often used when one wants to address a whole range of related forms of teaching and learning. It stresses openness concerning ACCESS, ORGANIZATION and METHODS as well as FLEXIBILITY in delivery and communication patterns, and the use of various Technologies in support of learning. Some of the innovative Technologies of the past decades are functional to these conversations, such as Open Educational Resources (OER) and the Emergence of Massive Open Online Courses (MOOC)

### **Major Contributions of ODL**

Open and distance learning is used for a wide range of purposes.

1. **General Education:** Distance education can be used at primary and secondary education levels to provide both in-school and out-of-school programmes. In-school distance education programmes are used to support teaching in schools when learning materials are lacking, or where enrichment is thought to be desirable. They may also be used where teachers do not have

formal qualifications or to support subjects where the number of pupils is too small to be able to organize conventional teaching. A variety of approaches are used, including Interactive Radio Instruction (IRI), schools' radio, educational television through terrestrial and satellite networks, multimedia schemes delivered through satellite, and Web-based delivery of multimedia schemes. The materials may be designed for young children or for adolescents and adults. Distance education is used in out of school programmes both at primary and secondary level to educate school-age children and youth who are unable to attend ordinary schools, including those who are disabled, suffering from long-term illness, or living in remote areas or living outside their own countries.

2. **Teacher Education:** Teacher education is an important area where distance education has been used extensively to provide pre-service teacher preparation, upgrading of academic qualifications, and in-service continuing professional development in particular subjects, content areas and instructional methods. The distance learning initiatives in countries such as Burkina Faso, Chile, China, India, Mongolia, Nigeria, and South Africa to prepare new teachers or upgrade skills of the existing teaching force. The use of open and distance learning for teacher education is therefore a crucial strategy when expansion or quality improvement is needed in the public education system. Distance education may play an increasingly important role during this decade in helping address the growing shortage of teachers, educational administrators and other.

There are a growing number of high-quality Web-based professional development resources available for educators globally. The Web also provides opportunities for online mentoring and support of novice teachers during their first year of teaching and to develop online communities of practice. Virtual Web based environments for teachers now enable them to seek help from other teachers, locally, nationally, or globally in solving classroom problems, sharing lesson plans and materials, interacting with experts in particular fields, and in planning collaborative curriculum development projects. Distance education may also play a major role in upgrading the knowledge and skills of teacher educators both in higher education and educational agencies

The advantage of distance education is that it makes teacher preparation and professional development programs accessible to indigenous peoples and others located in remote, rural areas who do not have convenient access to higher education institutions and where there is often a shortage of well-prepared teachers and other educational professionals.

**Vocational and Continuing Education:**

Technical and vocational education have in recent years played important roles, not only in contributing to the improvement of productivity of a national labour market, but also in assisting individuals to improve their employment prospects in rapidly changing socio-economic conditions. In this context the ODL system has the role in the field of technical and vocational education to respond effectively to the growing demand of working adults or any others who have difficulties in getting training in conventional

education because of lack of flexibility in the timing and location of courses. Open and distance learning in the field of technical and vocational education makes up a mixed and complex picture. It may include experimental work and hands-on training as an integral element. It has often been developed by private institutions and enterprises, and makes an important contribution to human development.

**Non-formal Education:** The distance education has been used to considerable effect in the non-formal and community development sectors of education. The basic adult education grew in the 1960s and 1970s just as technology began to be used more widely in education. Mass communication methods, often linked with some kind of group meetings and face-to-face support, were seen as one way of delivering a wide range of educational and skill based program to support agriculture, health and nutrition, political education and development and employment-related projects, to large numbers of adults. This approach was used in India and Ghana. Radio campaigns were

another early and influential model. The idea was to deliver short, highly intensive campaigns to support major development ends. Botswana, for example, used the approach in 1976 to raise awareness on a new policy for cattle on tribally owned land, and there was another project run by the cooperative movement in Zambia in 1982. There is much subjective evidence of the effectiveness of small-scale non-formal education projects using radio. for example, to support health care in Sudan and rural women in Mongolia. Latterly radio and television dramas have been used in countries such as Gambia and

Nigeria as a means of educating people about the concept of ODL system. Indeed, radio in particular has a powerful role to play in non-formal education.

**What is OER?** – The concept of OER describes any educational resources (including curriculum maps, course material, textbooks, streaming video, multimedia application, podcast and any other materials that have been designed for use in teaching and learning)

It is teaching, learning and research resources that reside in the public domain or have been released under an intellectual property that permits their free use and re-purposing by others while MOOC, is a type of OER, labeled as Distributed Open Online learning (DROOL) that welcomes any and all enrollees, free of charge, amasing rosters that reach several hundred to thousands of participants. Sebastian Trun, one of the MOOC Pioneers at Stanford University USA, created the Artificial intelligence course along with Geoffrey Honik, the godfather of Artificial intelligence and subsequently established COURSERA, which aims to provide a platform for ither universities to host online courses. All these phenomena are necessary for scholars to grapple with the issues of quality assurance, of online courses, recognition of learning and certification that are emerging issues and accomplishments in the portfolios of Higher education. In order to address issues relating to the Hybrid formats of education these best practices and approaches must be applied and lessons drawn from proposed strategies the challenges of our environment that is, Nigeria for institutional development and reforms.

The term OER is largely synonymous to another term **Open Courseware (OCW)**, although the latter may be used to refer to refer to a specific, more structured subset of OER. An open Course Ware is defined by the OCW Consortium as an open digital publication of high-quality

university-level educational material. These materials are organized as courses and often include course planning materials and evaluation tools as well as thematic content

**The Open Distance Learning Delivery channels:** The open distance learning (ODL) education requires instructional situation that will use more than one medium to achieve its objectives. It uses a multimedia approach of

1. Print media
2. Recorded media which are classified into photographic and electronic

### ***THE OPEN DISTANCE SYSTEM IN NIGERIA***

Since the early 1960's there has been a rising commitment to strengthen the delivery of Education in Nigeria. This interest was born out of the desire to remedy perceived deficiencies in the colonial education strategy, which targeted only a few privileged people in selected regions of the country and was ill- tailored to the need of a newly independent Nigeria.

According to a report of the Federal Government of Nigeria (2002) the quest for massification of quality education had translated into the Universal Primary Education (UBE) which provided a compulsory Education scheme funded by government. This later led to the National Policy on Open and Distance Education to provide the policy framework of the open distance education delivery system.

The ODE system encompasses Education for all, education for life, life- long learning, life- wide Education, self-learning, personalised learning, part – time studies, and much more.

### **Goals of Open distance Education**

The primary goal of distance learning is to provide a window of opportunity to the rich array of quality instructional resources available to on-campus students to students anywhere, who are committed to higher education but are unable to attend the campus offering their programmes of choice

## Advantage and Importance of Open Educational Resources

The use of Open Educational Resources provides various advantages to educational institutions, academics and learners. It is foreseen that the gap between different classes in the society and countries in the international arena will decrease with Open Education Resources, the quality of education will increase and access to information will accelerate. In addition, it is stated that the number of people receiving informal education and lifelong learning tendencies will increase with OER. From the OER definitions, it is stated that the provided training resources can be used without any limitations, edited, used repeatedly, if necessary, mixed and recreated in line with the purposes. One of the core values of OER is the universal use of these resources, independently of the education system and national curriculum frameworks (Grodecka, Sliwowski, 2014).

Explained by the European Commission the values of OER, Open Educational Resources and open applications as having more personal learning, good learning experience. In addition, they stated that by increasing the access of individuals to information, it allows more efficient and better use of resources that provide learning equality. Students can access different educational resources suitable for their learning styles through OER. They find the opportunity to easily access information by using any device without space, support and time limitations.

Students become more active participants in the education process in collaboration with other participants in virtual learning environments. Thanks to OER, teachers have the opportunity to compare their own teaching materials with the teaching materials of other teachers and to use them as a resource. They can learn to publish their work worldwide with an open license and how to improve the quality of their teaching practices and encourage pedagogical

innovations. Finally, OER can reduce the cost of accessing educational materials (McGreal et al, 2013)

Current practices in the educational sectors globally are using a combination of a Hybrid approach with cloud system among other innovative techniques to deliver quality education. The restlessness in the ICT sector is endless, however few of them will be highlighted.

Hybrid system is an educational approach that combines face-to-face classes and online learning. Through hybrid learning, some students attend the class in person, while others join virtually remotely. Teachers and educators utilize various tools such as video conferencing to teach both of these student groups. Hybrid classes can entail some online exercises, pre-recorded videos, and other materials that will support the in-person classes.

Hybrid learning and Blended learning are sometimes used interchangeably. However, there is a difference between these two learning models. Hybrid learning is an educational approach where some students attend classes in person, and others participate virtually. Here, the educators teach both students groups simultaneously, but there may also be some asynchronous teaching elements such as pre-recorded videos.

Blended learning is a little bit of a different concept. With blended learning, educators, instructors, and facilitators combine various in-person instructions with online learning activities.

However, the difference between the two is that with blended learning, the same individuals learn both in-person and online. With hybrid learning, the students who are the in-person learners are different individuals from the online learners.



Specifically identified are the numerous advantages offered by the cloud-based system application:

The cloud-based learning management system emerges as a beacon of innovation, offering many transformative advantages that transcend the limitations of traditional learning platforms. Embracing the power of cloud technology, a cloud-based LMS seamlessly integrates cutting-edge features and functionalities to redefine how learning is created, disseminated, and experienced. Google Classroom is a cloud-based learning management system that is a part of Google Apps for Education. Google Classroom enables students to access the platform from computers, tablets, and smartphones.



### COMPUTER BASED TESTING

Computer-Based Testing (CBT), otherwise known as E-assessment, can be defined as a pattern of administering tests in which the responses are electronically recorded and/or assessed. It is conducted by the examiners by the use of various Information Technology (IT) equipment or

mechanisms to include computers, the internet, networking, with the aid of special software. The candidates, on their part, can sit for the test with the use of personal computer (PC) or an apt computerized gadget such as cell phone, particularly Smartphone, either at a testing hall or in their respective homes, as the case may be.



### ANALYTIC AND ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) can help create personalized learning experiences for educators, based on their individual profiles, interests, and learning objectives. AI can analyze data from various sources, such as surveys, assessments, feedback, and performance, to generate tailored recommendations, suggestions, and guidance for each learner. For example, AI can suggest relevant courses, resources, or mentors, based on the learner's current skills, gaps, and goals. AI can also adapt the pace, difficulty, and format of the learning content, based on the learner's progress, feedback, and preferences.

Data analytics can help identify the training needs and priorities of educators, based on the evidence and trends from various sources of data. Data analytics can collect, process, and visualize data from different levels, such as individual, team, school, district, or sector, to provide insights into the strengths, weaknesses, opportunities, and challenges of the educators. For example, data analytics can reveal the areas of improvement, best practices, or emerging needs of the educators, based on their students' outcomes, feedback, or benchmarks. Data analytics can



also help compare and contrast the needs and expectations of different groups of educators, such as by subject, grade, or experience.



### **BLOCKCHAIN**

One of the most important applications of blockchain in eLearning is the creation of secure digital badges and certificates that can be easily verified and displayed on one's digital portfolios. Smart contracts can be used to incentivize and facilitate peer-to-peer learning and collaboration. They can be programmed to reward students for contributing to online discussions, or for providing feedback on their peers' work. This can help create a more engaged and interactive learning environment, and help students develop their critical thinking and communication skills.

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