Open and Distance Learning: A Modern and Cost-Effective Approach for Mass Literacy in Nigeria

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Abstract

*This paper titled **Open and Distance Learning: A modern and cost-effective approach for mass literacy in Nigeria** is an opinion survey carried out to investigate the success level of open and distance learning system in Nigeria. The research unveiled the progress level and the challenges of the programs. It was observed that the programs had good intentions but has been hijacked by education miscreants whom don't want to learn but needs certificates. The study revealed that the system has been over flooded with youngsters who were supposed to be in regular schools but prefers distance learning due to academic laziness. The positive contributions of the system were highlighted and major areas of bottlenecks identified. The study was concluded with recommendations on the proper ways of restructuring the programs to suit the standards of a developing country like Nigeria.*

Keywords: Teacher, Learner, Open, Distance, Learning, Education, Non-Formal, Literacy, Industrialization, Theory, Nigeria, University, School.

Introduction

The need for mass education has long been advocated to quash the primal nature of man. Education being a crucial sector that drives every other sectors of a nation is a major investment in human capital development. Education plays a critical role in sustaining long-term productivity and growth of micro and macro levels of national economy. These roles are indicators why the extent of quality education in Nigeria will continue to be at the front burners of national discourse. Consequently, the implication of the declining quality of education at all levels has far unleashed negative impacts on the nation's moral rating, civic attitudes, as well as cultural and economic sustainability. Therefore, it is imperative to appreciate discussions on education and its reforms in order to achieve a meaningful national development plan capable of transforming a third world country into a first world country. Accordingly, it will be of tremendous benefits should we gradually and systematically move away from a mere education politicized nation to a more

analytical approach that will assist us appreciate the complexities intrinsic in proffering genuine and workable elucidations for revamping our educational system. For education to be reformed in Nigeria, proper funding of the sector is required. Proper funding and judicious usage of the funds will ameliorate the issues of strike actions by the Academic Staff Union of Universities (ASUU) and other schools related union bodies. Adequate education funding and structures will help in eradicating examination malpractices and also build trust and confidence in the learners.

Due to the continuous growth in population, increase in social vices as well the challenges of poor health, decrease in lifespan, unified interactive medium, quest for science and technological advancement, agricultural boost among other factors that can sustain the immediate needs of man, stakeholders in every sector has made it a point of duty to call for the restructuring and advancement of the educational system in Nigeria. Right from the dark ages to the medieval, renaissance down to the 21st century, different types of educational system has emerged yet the number of educated people remains insignificant in Nigeria due to several factors not limited to; inability of extending education to rural areas, unacceptability of an adequate kind of education by different schools of thought, social needs, economic imbalance, political interests, poor infrastructures among others. However, the common point is the acceptance for the need of a more progressive approach of addressing these aforementioned issues which education ranks the foremost accepted approach, therefore the establishment of distance and open learning system is a panacea.

The Concept of Open and Distance Learning
Open learning and distance learning are two conglomerates of terms used interchangeable to describe learning system that is open and at a distance in an educational system. The term Open system connotes open with respect to flexible entry process, low entry qualification requirements, use of electronic media technology, self instruction and proxy pedagogy as well as non-formal curriculum. On the other hand, distance learning implies the condition of learning and teaching process separated between the teacher and learners without constrain of time, pace and place.

Origin of Open Institution
Historically, Open University (OU) was firstly established in 1969 in the United Kingdom. The setting was perceived as 'University of the Air'. The establishment was principally based on the use of televisions and radios although; at the first instance the ideology met some stiff restrictions and rejections before 1969 by the government of United Kingdom. (www.open.ac.uk/about/ou/p3.shtml).
The open and distance institutions became famous at the end of its first session in the early 1970's on the basis of institutional autonomy and independence in terms of running the university and the use of wide range of learning resources for the distance learners. Meddle and peasant workers embraced the concept including nursing mothers and some physically challenged persons. The institution bridged the gap of education and expanded the scope of learning in UK. In the late 70's other countries keyed into the project hence its grandaunts were able to compete favorably with regular schools graduates.

Definitions of Open and Distance Learning

Open and distance learning is a form of education and training in which its medium is based on the learner's ability to use the learning resources, rather than attending classroom sessions as the central feature of the learning experience (Commonwealth of Learning, 2003, p.3). Commonwealth of Learning's definition emphasized the importance of learning resources rather than attending face-to-face classes. In other words, learning resources is the quintessence of distant learning.

According to Merril (2008), Open and Distance Learning (ODL) is a general term used in explaining the roles of telecommunication in providing or enhancing learning around the world. He stated that, the academic community is discovering and exploring the Internet, teleconferencing, and other related means to achieve an extended classroom or learning experience.

Eluozo and Nwaogu (2019) summarized open and distance learning thus;

> "*Semi-formal education is a new form of education described by scholars in different views. This kind of education was firstly experimented in the United Kingdom far back in 1968. It is typified by separation of the three elements of education (leaner, teacher and the environment). Some scholars refer to it as distance education while others call it correspondence education. Semi-formal education is structured with the consideration of the leaner being in a distant location. Its major intent is population management. This form of education is facilitated by four Medias audio, visual, audio-visual and printed media. The curriculum is designed to venerate the contents of formal education curricula. The teacher in this context uses one medium to reach out to so many people at the same time. The learners are spatial, self-disciplined, dedicated, courageous and mostly adults. This type of education shares similarity with formal education in the areas of conventional school building, well structured learning materials, group and individualized examinations as well as certification*".

Based on the definitions, it is pertinent to state that open and distance learning is an eclectic educational system that comprises informal, formal and non-formal educational setting, aimed at resuscitating educational impaired people, return of school dropouts, extension of education to rural environments as a continuous education program with the aid of computers, textbooks, audio, visuals, and audiovisuals, including internet facilities with limited teacher's present during the class sessions.

Theoretical framework

Two theories were reviewed in this article. Peters' theory of Industrialization and Holmberg's theory of Open and Distance learning were x-rayed.

Otto Peters Theory of Industrialization (1988)

This review is based on Peters' theory of Industrialization. This piece linked distance learning to the European distance teaching organizations of the 1960s. According to Peters (1988), distance education is an upshot from the analysis and comparison of industrial production of goods and services. Peters stated that conventional, oral, group-based education was a pre-industrial form of education that was predominant due to manageable populations and low demand of goods and services. Peter maintained that open and distance education emanated as a result of increasing demand for educated manpower capable of manning the economic and industrial theory revolution. Peters further proposed the following new categories (terminology) for the analysis of distance education with relations to industrial factory production:

*Rationalization***:** the use of methodical procedures to condense the required amount of input of time, power and money in achieving quality education.

*Division of labor***:** the dissection of a task into simpler components or subtasks and units of learning.

*Mechanization***:** the use of equipments in a work procedure. Peters noted that distance education would be impossible without machines such as computers and projectors.

Assembly line: a technique of work in which workers vestiges at one station controlling several other stations. In traditional distance education programs, materials for both teacher and students are not the product of one individual but configuration of ideas and products.

Mass production: the production of goods in large quantities. Because demand outstrips supply at colleges and universities, there has been a inclination toward large-scale operations and compression of studies into modules.

*Preparatory work***:** influencing how workers, machines, and materials can usefully relate to each other during each phase of the production process. The success of distance education depends on a preparatory phase.

Planning: the system of decisions that determines a process prior to its being carried out.

Organization: creating general or enduring measures for purpose-oriented activity. Organization makes it possible for students to receive predetermined instructional units at appointed times.

*Scientific control methods***:** methods by which work processes are analyzed systematically, particularly by time studies, and in accordance with the results obtained from measurements and evaluation data.

*Formalization***:** the predetermination of the phases of the manufacturing process. In distance education, all the points in the cycle must be determined correctly.

*Standardization***:** the limitations of manufacturing to a restricted number of types of one product to make these more suitable for their purpose, cheaper to produce, and easier to replace.

*Change of function***:** the change of the role or job of the worker in the production process. The original role of knowledge provider as lecturer is divided into those of study unit author and marker.

*Objectification***:** the loss, in the production process, of the subjective element that had previously determined work to a considerable degree. In distance education most teaching functions are objectified.

Concentration and centralization: because of the huge amount of investments required for throng production and the dissection of labor, there has been a movement towards large industrial concerns with a concentration of resources, a centralized administration, and a market that is monopolized. Peters concluded that for distance teaching to be effective, the principle of division of labor is a critical element. He buttressed that teaching and learning process is gradually being restructured through increased mechanization and automation.

Peters highlighted some bullet points that will help to standardize Open and Distance Learning process in line with quality production as followings:

1. The development of open and distance study courses is as important as the preparatory work that takes place prior to the production process.

2. The effectiveness of the teaching process is particularly dependent on planning and organization.

3. Courses must be formalized and expectations from students should equally be standardized.

4. The teaching process should be largely objectified.

5. The function of academics teachers at open and distance learning has changed considerably alongside university teachers in conventional teaching methods.

6. Distance study can only be economical with a concentration of the available resources and a centralized administration. According to Peters, when decisions about the process of teaching and learning are made, the industrial structures characteristic of distance teaching should be taken into account.

Borje Holmberg's Theory of Open and Distance learning (1995)
Holmberg in 1995 criticized the theory of Peters' industrialization, referring to it as an incomplete theory. Holmberg stated that the theory was more of power explanation with few elements as

indicators of essential characteristics of effective distance education. In 1995, Holmberg significantly broadened his theory of distance education. This comprehensive theory is divided into a number of parts with believe that distance education serves diverse purposes of the individual learners who cannot or do not want to make use of face-to-face teaching.

Holmberg explained that distance education promotes students' independence and freedom of choice to learning, that societies benefits from distance education's provision of liberal study opportunities for individual learners, and professional/occupational training. Holmberg stated that distance education is an instrument for recurrent and lifelong learning and for free access to learning opportunities and equity. According to Holmberg, distance education is characterized by the following statements against that of Peters:

1. All learning concerned with the acquisition of cognitive knowledge and cognitive skills, as well as affective learning and some psychomotor learning, is effectively provided for by distance education.

2. Distance education is based on learning as an individual activity. Learning is guided and supported by noncontiguous means.

3. Distance education is open to behaviorist, cognitive, constructivist, and other modes of learning.

4. Personal relations, study pleasure, and empathy between students and those supporting them (tutors, counselors) are central to learning in distance education. Feelings of empathy and belonging promote students' motivation to learn, influencing learning favorably.

5. While it is an effective mode of training, distance education runs the risk of leading to mere fact learning and reproduction of accepted 'truths'. However, it can be organized and carried out in such a way that the students are encouraged to search, criticize, and identify positions of their own.

From the theory reviewed, open and distance learning gains its industrial revolution based on its inputs in humans capacity building and economical advancement.

Characteristics of Distance and Open learning
Teaching adults relies more on teachers' interaction with the students rather than one-way communication as in the lecture and didactic methods. Discussion or tutorial methods supported by appropriate technology are the most preferred method to get them involved in active participation in the learning process. Adult learners preferred to bring their experiences into the classroom and would like to share their experiences with their fellow friends instead of receiving information directly from the teacher. Their experiences with real world problems create meaningful learning and thus bring more of an understanding of the subject matter to the classroom. In order to understand the characteristics of adult learners, higher education instructors should create effective instructional media.

Characteristics of Adult Learners

Knowles identified six key characteristics of the adult learner as depicted:

1. Adults have a self-concept of a self-directing personality: Adult learners are not only defined by their role as a student. It is more common for an adult to have other roles in their life, roles that may take precedence over their identities as students.

2. Adults bring a wealth of experience to the learning process: Unlike children who have limited experience with the subject matter as well as limited life experience, an adult learner brings prior educational, professional, and life experience to the classroom.

3. Adults come to the learning process ready to learn: Given that many adult learners are returning to school while they are still in the workplace or raising families, adult learners have other priorities that compete for their time and attention. As such, the decision to return to school is done with a firm purpose and determination to learn.

4. Adults are oriented toward immediate application of already learned knowledge: Closely tied to the fact that adults are ready to learn, is the orientation to learning that adults bring to the classroom. Typically, adults seek higher education because they need and want to address issues in their lives.

5. Adults need to know the reason for learning something: Designing a curriculum for adult learners that makes explicitly clear the reason, purpose, and usefulness of the subject matter is a necessary component of effectively enriching adult learners.

6. Adults are driven by an intrinsic motivation to learn: Adults are keenly aware of their reasons for seeking additional education, and they take the initiative to make room in their life for continuing education. Adult learners juggle multiple responsibilities, and take ownership of their education, with the goal of improving their knowledge base, career opportunities, lifelong learning or/and personal satisfaction.

Nature of Open and Distance Learning Programs in Nigeria

1. Spatial school locations: for the institutions that have school buildings, the school is not centered in one location.

2. Borrowed infrastructures: in most cases, open and distance institutions borrow regular school buildings for partial teacher/learners facial contacts.

3. Capable of operating any place where there are few students, even one student with or without teachers.

4. Places greater responsibilities of learning on the students.

5. Free faculty members from custodial-type duties so that more time can be given to truly educational tasks.

6. Offers students and adults wider choices (more opportunities) of courses, formats, and methodologies.

7. Uses as appropriately all the teaching media and methods proven effective for learning.

8. Mix and combine media as well as methods so that each subject or unit within a subject area is taught in the best beneficial way to the learners.

9. Regular design/redesign and development of courses to fit into an articulated media program.

10. Preserves and enhances opportunities for adaptation to individual differences.

11. Evaluates students' achievement simply, not by raising barriers regarding the place, rate, method, or sequence of students study.

12. Permit students to start, stop, and learn at their own pace.

13. Mostly makes use of weekends and evenings for facial contacts between the teacher and the learners.

14. Examinations are usually computer based test.

15. Depends solely on computers and internet services.

An overview of the benefits of Open and Distance Learning
The under listed are few advantages of open and distance institutions over conventional institutions.
Open Access: Open and Distance courses, most institutions don't require any specific entry requirements or qualifications, so all students are welcomed to attend, regardless of their educational background or work experience and locations.

Open Time: Separation of the teachers from the learners makes the program insensitive of time or place or in both time and place. Although some courses, do require online presence during assignments, group and project work and/or examinations on the school portals.

Freedom of Pace: Learners are not required to complete a program of study within a specific period. Instead, learners learn at their pace and make their own decisions about the learning path that is to be followed for their program. However, some distance teaching institutions differ in the offers and some programs are more closely paced. (NTI and NOUN).

Freedom of Place: Learners are not required to fulfill a residency requirement with the host institution. Most learners do not (have to) leave their home or workplace as they pursue a program of study. So being a student at any university from a different continent is possible through correspondent education.

Major Contributions of Open and Distance Learning to Education and the Society

General Education

Distance education can be used at elementary and post primary education levels to offer both in-school and out-of-school programs. In-school distance education programs are used to prop up teaching in schools when learning materials are deficient, or where enhancement is thought to be desirable. They may also be used where teachers do not have formal qualifications, or to maintain subjects where the number of pupils is too diminutive to be able to systematize conventional teaching. An array of approaches are used, including Interactive Radio Instruction (IRI), schools radio, educational television through global and outpost systems, multimedia schemes conveyed via outpost, and Web-based delivery of multimedia schemes. The resources may be considered for infantile kids or for youngsters and adults. Distance education is used in out-of school programs both at elementary and post-primary level to educate school-age broods and adolescence that are incapable to attend commonplace schools, including those who are immobilized, protracted infirmity, or dwelling in isolated vicinities or out of coast.

Teacher Education

Teacher education is a significant aspect where distance education has been applied comprehensively to offer pre-service teacher training, advancement of academic qualifications, and in-service for continuing specialized growth in picky subjects and teaching pedagogy. The exploit of open and distance learning for teacher education is therefore a critical approach when development or eminent progression is desirable in the municipal edification coordination. Distance education has played progressively more central task throughout the last decade in serving and grooming experienced teachers, educational administrators and other educational experts in developing and developed nations. The machine that drives this magical trend is the internet.

The internet is being upgraded on a daily basis to achieve high quality Web-based proficient improvement wherewithal for teachers internationally. The Web also offers prospects for online tutoring and support of greenhorn instructors all through their initial year of training.

Distance education enables teacher training and specialized improvement programs reachable to aboriginal peoples and those situated in secluded bucolic areas who do not have expedient admittance to higher education institutions possible.

Vocational and Continuing Education

Vocational and technical education have in topical years in-cooperated significant functions in Nigeria, not only in the expansion of national labour market output but also in supporting folks to advance their service predictions in the hastily shifting socio-economic state of affairs. In this regard, Open and Distance Learning system has the responsibility in the meadow of technical and vocational education to act in response of the increasing demands of working class

citizens who have impenetrability of training in conventional education due to lack of plasticity in the timing and scene of schools.

Non-formal Education
Distance education has complemented the effects of non-formal education and the public improvement quarters of education. The fundamental adult education gained fame in the 1960s to date following the rapid growth in electronic technology globally. Electronics Medias has contributed in-terms of mass communication, conference telephony and skill acquisitions for agricultural education, political, health and environment, including personal hygiene for the adult citizens.

This method has proved effective when used in European countries and America. Radio and television crusades has been there for decades but more predominant in the African countries since the early 80s and has equally assisted in solving several adult related problems in Nigeria when applied with local languages.

Bottlenecks of Open and Distance Learning Programs in Nigeria
Having harnessed the beneficial inputs of open and distance learning system in Nigeria, it is equally important to highlight some issues associated with its implementation.
1. Open and Distance Education has been hijacked by lazy students whom are young and suitable for conventional education in Nigeria.
2. Open and Distance Education was firstly designed for working class citizens with the mindset that they already have psychomotor skill at workplace. Therefore, the original plan is centered on cognitive and affective domains, but with the influx of youngsters who have no work experiences into the program, makes the program not suitable for a developing nation like Nigeria since technological and practical knowledge is secluded.
3. Open and Distance Education produces half baked graduates and crude learners. Most of the graduates lack social exposures and self acclaimed knowledge.
4. The program is handicapped due to poor electricity supply and epileptic internet services.
5. The hardcopy (text books) course wares are rarely supplied to the end users and some of it is ill printed leading to misconception of contents.
6. Learning is heterogeneous. Due to the spatial nature of the program, different tutors facilitates instructions at different locations, therefore the learners understanding of a particular content is not homogenous.

Conclusion
Conclusively, the arrays of Open and Distance learning have been discussed, the theory of industrialization revealed the importance of Open and Distance learning to the individual and the society, Open and Distance learning relationship to modern technology was assessed, finally the justification for Open and Distance learning was reemphasized. Since students are not able to attend classes on a regular convention, learning materials must be systematically designed to take the place of the teacher. The learning materials should be designed based on the analyses of the learners' characters with a clear definition of the learning outcomes. The learners' entry behaviours and skills should be considered. The lessons should be planned sequentially with some elements

of practical learning activities as well as continuous assessment packages with illustrations and feedback mechanisms.

Recommendations

Based on the findings from this research work, the following recommendations are made;

1. Open and Distance Learning should be encouraged but with proper care in the students selection processes.
2. The program should only be made available in the post graduate levels of studies to avoid saturating the society with half baked graduates.
3. Governments should endeavor to make available basic infrastructures such as steady electricity and internet services for the progress of the program.
4. The designers of the program should create avenues for teacher/learners interactions.
5. Hardcopies of the learning materials should be made affordable and reachable to the students.
6. Distant learners should create time to visit conventional schools in order to be acquainted with real school environment and activities.

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