

Impact of Open and Distance Learning on Human Capital Development In South West, Nigeria

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Article History	Abstract
Original Research Article	<p><i>This study explored the perceived influence of Open and Distance Learning (ODL) on human capital development in South West Nigeria, focusing on institutions such as the National Open University of Nigeria, the Distance Learning Institute of the University of Lagos, Stanbic IBTC (Adeola Odeku branch), and the Nigeria Police Force (McCarthy Station). The research was structured around four key objectives and corresponding research questions. A survey research design was employed, utilizing a five-point Likert scale questionnaire to collect data from a sample of 339 respondents. Additionally, oral interviews were conducted with selected personnel from the participating organizations to complement the survey responses. Key findings from the research include: (a) ODL enhances employee efficiency and productivity, (b) ODL institutions employ effective delivery systems, (c) some learners experience challenges with online study materials due to associated costs, and (d) ODL is generally cost-efficient for both institutions and learners. Based on these findings, the study offered several recommendations: (1) the government should provide subsidies to offset the initial setup costs for ODL institutions, (2) public sensitization efforts should be intensified to raise awareness about the benefits of ODL, (3) the delivery mechanisms of online courses should be improved for better learner engagement, and (4) an independent regulatory body, separate from the National Universities Commission, should be established to oversee ODL operations in Nigeria.</i></p> <p>Keywords: Productivity, Efficiency, human capital development and ODL</p>
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INTRODUCTION

Background of the Study:

Currently in the world today, Open and Distance Learning (ODL) is a relatively modern educational approach with roots that trace back nearly a century. Mesut, Ozkeskin, and Ayse (2014) describe ODL as an evolving field, while Gunawardena and McIsaac (2003) observed that it experienced significant global expansion beginning in the early 1980s. This growth was largely driven by advancements in technology, which transformed ODL from its initial form of print-based correspondence education—where course materials were physically mailed to learners—to a dynamic, flexible system accessible globally at any time through digital platforms. In Nigeria, the challenge of providing widespread access to higher education has persisted for decades, as the country recognizes education as a cornerstone of national development. Human resources play a vital role in the

productivity of all other factors of production. Numerous initiatives have been undertaken, especially in South West Nigeria, to increase educational attainment—such as implementing free education and school meal programs—but many of these efforts have not achieved the desired outcomes.

Human capital differs significantly from physical or financial capital. Adelowotan (2014) defines human capital as the collection of knowledge, skills, and competencies acquired through education and training, which enable individuals to perform tasks more efficiently and effectively. It is also viewed as an intangible asset that adds value to organizations (Meritum, 2002). Recognizing this, Nigeria has made repeated attempts—often through the establishment of educational commissions—to enhance human capital development by improving access to quality education for its citizens.

Furthermore, Open and Distance Learning has been operational in Nigeria for a long time now since the days of Rapid Result College and other correspondence education in the country. According to Prasenjit and Ritimoni (2012:12) education is the main indicator of human capital formation or manpower planning. Therefore in a democratic nation like Nigeria, every person has the right to be educated no matter the class of the person. Therefore, it is worthy to note that open and distance learning in conjunction with conventional method of education can extend education beyond all barriers into reality. It is on this premise that this paper seek to investigate the “Impact of Open and Distance Learning in Human Capital Development in South West Nigeria”

Statement of the Problem

Although the Nigerian government has implemented various strategies to expand access to higher education, several obstacles remain. By 2013, Nigeria had established 128 universities across federal, state, and private sectors, as well as a comparable number of polytechnics and colleges. Despite these efforts, the higher education system continues to face difficulties in delivering inclusive, accessible, and globally competitive education. One major concern is the lingering perception that graduates of Open and Distance Learning (ODL) programs are of lower quality than those from traditional, on-campus universities. This belief has contributed to persistent bias and doubt surrounding the competence of ODL graduates.

A major concern is the limited admission capacity of conventional universities, which continues to deny many qualified candidates access to tertiary education. According to statistics from the National Universities Commission (NUC, 2013), in 2011 alone, over 1,043,611 qualified applicants were unable to secure university admission. This figure slightly declined in 2012 to 1,003,933 but surged again in 2013 to 1,215,729 applicants who were denied access, largely due to inadequate institutional capacity. Open and Distance Learning was introduced, in part, to help bridge this gap by offering flexible learning opportunities to a larger population. However, concerns remain regarding whether the system can produce graduates of sufficient quality to contribute meaningfully to national development.

Given these circumstances, the key issue this study seeks to address is whether the ODL system in Nigeria—particularly in the South West region—can serve as a viable alternative for expanding access to higher education and, more importantly, for developing the human capital necessary for national progress. This study, objective is to assess the impact of **Open and Distance Learning on Human Capital Development in South West Nigeria.**

Objective of the Study

This study wished to elucidate the Impact of Open and Distance Learning in Human Capital Development in providing productive personnel in Nigeria today.

The specific objectives were as follows:

1. To determine the productivity of ODL graduates in their various organizations.
2. To determine if the delivery modes of ODL institutions are capable to impart on the learners.
3. To determine the cost effectiveness of ODL to both institutions/providers and Learners.
4. To determine the carrying capacity of ODL institutions.

Research Questions

1. To what extent do the performance/productivity of ODL graduates achieve their employers' objectives?
2. To what extent is the effectiveness of mode of delivery of ODL institutions in impartation of knowledge to learners?
3. How cost effective is ODL to both institutions and learners?
4. To what extent can ODL institutions absorb the qualified candidates that could not be admitted by conventional universities?

Scope of Study

This research work is to ascertain the impact of Open and Distance Learning on Human Capital Development in South West Nigeria with specific reference to National Open University of Nigeria, University of Lagos (DLI), Stanbic IBTC (Adeola Odeku) and Nigeria Police Force (McCarthy Station) Lagos.

Significance of Study

This research/study shall be of immense benefit to Management and Staff of the organizations studied, educational institutions and human resource practitioners. It shall also be useful to future researchers, government and policy makers.

LITERATURE REVIEW

Conceptual Framework

Concept of Open and Distance Learning (ODL)

Open and Distance Learning (ODL), also referred to as distance education, has undergone significant transformation from its early beginnings as

correspondence study. Initially, distance education involved sending printed learning materials to students via mail, allowing them to study independently. Today, with technological advancements, many higher education institutions across the globe have adopted **e-learning platforms** to deliver instruction remotely, creating flexible opportunities for learners who might otherwise be excluded from formal education systems. In many developing countries, including Nigeria, ODL has become an essential strategy for human capital development due to its accessibility, cost-effectiveness, and learner-centered approach.

ODL is characterized by its openness in terms of learner entry requirements, flexible pacing, and accessibility across geographical locations. These features made it a powerful tool for expanding access to higher education, particularly in countries with limited physical infrastructure or university admission capacity. For developing nations, the importance of ODL lies not only in access but also in its potential to **build human**

Evolution of Open and Distance Learning in Nigeria

The origin of Open and Distance Learning (ODL) in Nigeria is deeply embedded in the legacy of correspondence education. Initially designed to extend educational opportunities to populations excluded from conventional classroom settings, distance education gained acceptance due to its ability to address gaps between the soaring demand for tertiary education and the limited capacity of existing institutions. As Calvert, cited in Rashid and Kester (2004), explained, distance education was instrumental in widening educational access by reaching underserved learners. Rashid and Kester further observed that the systemic inability of traditional Nigerian universities to accommodate growing enrolment needs catalyzed the development and formal integration of distance learning programs in the country.

Nigeria's involvement with distance education dates back to the late 19th century when Nigerians began enrolling in external programs offered by the University of London, widely regarded as the world's first Open University. As noted by Bell and Tight (1999) and reinforced by Tait (2003), the University of London allowed students from across the British Empire to undertake degree programs through self-paced, correspondence-based models. Prominent Nigerians such as Eyo-Ita, H.O. Davies, E.O. Ajayi, Alvan Ikoku, and J.S. Ogunlesi were among the early beneficiaries of this system. These individuals leveraged their qualifications to contribute meaningfully to the Nigerian educational landscape, particularly in the

area of teacher training and curriculum development.

Historical accounts provided by Omolewa (1976, 1982) further affirm the significant role of distance education in Nigeria's early intellectual development. His records highlight the achievements of Nigerian scholars who, without formal ties to foreign institutions, earned degrees through correspondence programs and later became influential educators. Their contributions were especially impactful at institutions such as St. Andrew's Teachers' College in Oyo, where they applied advanced methodologies acquired through distance learning.

Even after the establishment of the University College Ibadan in 1948, distance education continued to thrive. Many academic staff and students relied on foreign correspondence degrees to enhance their qualifications while maintaining employment. This dual engagement enabled a continuous expansion of Nigeria's academic workforce during the post-colonial period.

Over the years, various Nigerian universities and government agencies have embraced and institutionalized distance learning. While early programs were largely print-based, the advent of modern educational technology has allowed for more interactive, blended, and online learning models. According to Aderinoye (1992, 1995), distance learning remains a vital educational tool in Nigeria, contributing significantly to inclusive access and national human capital development.

A number of Nigerian institutions played pioneering roles in the evolution of ODL:

- i. Ahmadu Bello University launched the *Teachers' In-Service Education Programme (TISEP)* in 1976, aimed at upgrading middle-level teaching staff in primary schools.
- ii. The University of Lagos established the *Correspondence and Open Studies Unit (COSU)* in 1974—now known as the Distance Learning Institute (DLI)—to produce graduates in fields critical to national development, such as education and healthcare.
- iii. The National Teachers' Institute (NTI), established in 1978, was the first independent institution solely focused on distance education. It was tasked with up-skilling unqualified primary school teachers, particularly in response to the Universal Primary Education (UPE) program of 1976 and later the Universal Basic Education (UBE) initiative of 1999.
- iv. The University of Ibadan introduced the *External*

Study Programme (ESP) in 1988 through its Department of Adult Education. It later evolved into the *Centre for External Studies (CES)* and now operates as the Distance Learning Centre (DLC), providing in-service teacher training to elevate NCE holders to university degree status.

- v. The University of Abuja followed suit in 1992 by setting up the *Centre for Distance Learning and Continuing Education*, expanding access for working professionals and underserved learners.

A major milestone in Nigeria's distance education history was the re-establishment of the National Open University of Nigeria (NOUN) in 2001. Originally launched and later suspended, it was reopened as a single-mode distance learning institution, dedicated to delivering flexible, technology-driven education to a nationwide audience.

Beyond public institutions, private organizations, professional bodies, and governmental agencies have also ventured into distance education. Many now offer accredited programs in areas such as law, accounting, business administration, science, and teacher education, thus contributing to the broader goal of educational democratization and human capital enhancement.

In summary, the evolution of Open and Distance Learning in Nigeria reflects a strategic response to systemic constraints in the traditional education system. By providing accessible and flexible learning platforms, ODL continues to play a pivotal role in building a knowledgeable and skilled population capable of driving sustainable national development.

Differentiating Types of Open and Distance Learning

According to Common Wealth of Learning, open and distance learning gained prominence about 15 – 20 years ago, however there are some terms that need to be distinguished which still cause confusion depending on application. Among them are:

Correspondence Education: This could be referred to as home study or independent study. This type of study is over a century old and it is based on stand alone, self-study materials and the learners do not need to leave their homes for study. It communicates to learners through postal services or telephone. There are other means for tutorial, among them are e-mail, television and radio broadcasts, video and audio cassettes. Correspondence education in most places today has been renamed open and distance learning or independent study.

Continuing Education: This generally applies to non-credit education and courses that can be delivered on campus or at a distance. Through this kind of learning employees of an organization can be developed while still on the job.

Distance Teaching: This refers to only half of the open and distance learning equation which encompasses both learning and teaching but emphasizes the teacher's role rather than the system.

Synchronous Versus Asynchronous Learning

Synchronous Learning: According to Joseph (2014) it means online courses that could be taken on schedule. It requires both learners and facilitators to be online at the same time but not necessarily at the same place. In this situation, lectures, discussions and presentations are done at a specific time and it is expected that all students and facilitator would be online at that specific time to participate.

Sources of Synchronous Learning:

- i. **Chatting:** This is a situation where learners log into a chat room and discuss issues that relate to their studies. Questions are shared in this platform and most time responses are received. The facilitator can coordinate the activities in this chat room. A major setback on this medium is that when there are many people in the chat room, it may affect the conversation which can break communication into tangents. Also the faster typists are better rewarded and it is expected that the chat room participants should save (archive) the interaction for later review.
- ii. **Voice (telephone or voice-over IP):** Another feature of synchronous learning is where the learner and the facilitator could meet on a conference call over the phone or through internet protocol. The participants are required to log into a website where they will speak through built-in microphone or a headset. Learner who wishes to participate in this study would need to acquaint himself with necessary documents for the interaction and it would be helpful to plan ahead of time.
- iii. **Video conferencing:** In video conferencing, it will require all participants to have their webcams running. In this case there is a conference administrator who helps to transmit images of the participants. Most times this requires very fast connection and lot of bandwidth for operation. In most cases video conferencing involves two webcams operating, i.e. the instructor's and another key person. Or the conference might transmit presentations of slides and graphics with

questions and answers session at the end.

- iv. **Web conferencing:** The difference between web conference and video conference is the fact that instead of the learner relying on video as primary instructional content, the person will rely on wider variety of media elements. However, web conferences are more interactive and the learner will probably be asked to respond to questions (survey, poll, and questionnaire) which will give the learner chance to interact. This usually involved chat and often has a question and answer session at the end.
- v. **Internet radio/podcasts:** In some cases where there is not enough bandwidth for live video, the facilitator could stream the audio over the internet. Advantage of this is that audio streaming includes concerts or political speeches. This enables the students to access the stored information and review it later. Students can send chat messages while the event is happening in internet radio/streaming.
- vi. **Virtual worlds:** Educational "islands" in virtual worlds like Second Life are wonderful places for students to meet "live" and to interact. They are ideal for learning languages because it is possible to speak with each other through headsets and VoIP. It is a wonderful way to practice conversation while being immersed in a virtual place that has the look and feel of another country or culture. While virtual worlds can be very engaging and productive as learning environments, they can be frustrating for those who are new. There is quite a learning curve as you learn to navigate the worlds, and to clothe and operate your avatar. Students should also bear in mind that virtual worlds require significant bandwidth along with a computer that has a lot of usable memory and a great video card.

Asynchronous Learning:

Asynchronous learning is opposite of synchronous learning. Here the facilitator gives the study materials, lectures, test and assignments to the students online which can be accessed by the students anytime. Usually, in asynchronous learning, learners are given a timeframe for which they need to connect or accessed the assignment/lecture and they are also free to make their contributions in the same platform.

There are benefits and drawbacks to both designs. Some students like synchronous courses because they need to feel involved, in real-time, with the class experience. It is

rewarding to ask a question or offer a comment, and to receive instant feedback. For some people, real-time communication allows for more fruitful discussions.

For others, asynchronous courses provide a better way to learn. Many students need more time to form their thoughts or consider all the sides of an issue before offering an opinion. In a synchronous classroom, these students might get overshadowed by faster typists and spontaneous thinkers.

Whatever your preference, you can find an [online college](#) that offers your ideal course design. Most online courses operate asynchronously. But if you like the synchronous format, you can look for a program that offers more traditional class meeting times. You'll also find that many courses incorporate elements from both formats.

As you're researching synchronous and asynchronous options, you may want to ask college enrollment advisors which elements from the following list are used at their schools.

Sources of Asynchronous Learning:

i. Virtual Libraries and Multimedia Repositories:

Online courses typically provide a range of instructional resources accessible through digital platforms. These materials may include downloadable articles in PDF format, presentation slides, diagrams, and other visual aids. In addition to text-based content, learners may engage with multimedia materials such as audio recordings, video clips, or full-length documentaries. These resources are often available via streaming to minimize data consumption and avoid large downloads.

ii. Email Communication:

Email remains a core component of virtual learning environments. It serves as a primary means of communication for submitting inquiries, maintaining contact with instructors and classmates, and receiving updates, assignments, and feedback. In some programs, email may be the central communication channel for all course-related interactions.

iii. Online Discussion Forums:

Discussion boards are an essential feature of online education, fostering interactive learning and collaborative dialogue. They provide a platform for learners to share opinions, upload relevant files or links, seek clarification on complex topics, and engage in peer-to-peer discussion.

iv. Integration of social media Tools:

Modern online learning platforms often leverage social

networking tools to promote community engagement and interaction among learners. These tools may be embedded directly within the learning management system, allowing for seamless integration. Commonly used platforms include blogs, wikis, Facebook, Twitter, YouTube, Flickr, and others that support collaborative learning and content sharing.

v. Wikis and Shared Documents:

Collaborative writing tools enable students to co-author documents, edit shared content, and contribute to collective knowledge construction. Wikis, in particular, allow users to build entries similar to Wikipedia, incorporating both textual and visual elements. These tools foster creativity and collective responsibility among participants.

vi. Electronic Portfolios (e-Portfolios):

Some online programs require students to compile digital portfolios using platforms such as Mahara. These e-Portfolios often serve as capstone projects and allow students to showcase their academic and practical achievements by integrating various media formats, including text, images, presentations, videos, and hyperlinks, along with reflective commentary.

vii. DVD/CD-ROM Resources:

In areas with limited or costly internet access, physical media such as DVDs or CD-ROMs bundled with textbooks provide offline access to instructional videos and other multimedia content. These resources enable students to engage with course materials without relying heavily on internet connectivity, optimizing their time online.

Definition of Human Capital Development

Human Capital Development (HCD) refers to a systematic and strategic effort aimed at enhancing the knowledge, skills, competencies, and overall capabilities of individuals within an organization or society. It encompasses various initiatives designed to improve employee performance, increase organizational productivity, and foster long-term competitiveness.

According to Healthfield (2011), human capital development involves the implementation of targeted strategies such as training and development programs, mentoring, coaching, performance management systems, career progression planning, tuition assistance, and broader organizational development efforts. These activities are geared toward equipping employees with the necessary tools to perform effectively, adapt to change,

and contribute meaningfully to organizational objectives.

The core goal of HCD is to build a **highly skilled, motivated, and adaptable workforce** that not only meets current job demands but is also prepared for future challenges. Investing in human capital is therefore seen as a strategic priority for both organizations and nations, as it leads to improved service delivery, innovation, and sustained economic growth.

Healthfield further observed that a shortage of skilled personnel poses a significant constraint not just to organizational performance, but to national economic development. This underscores the importance of prioritizing the development of available human resources to drive progress at both micro and macro levels.

In line with this, Shaktz (1993) identified human capital as a critical asset in enhancing a firm's productivity and sustaining its competitive edge. He emphasized that human capital development encompasses all forms of investment in people—including education, training, and social development initiatives—that enhance employee capabilities. These efforts ultimately result in improved job satisfaction, individual performance, and overall organizational success.

Theoretical Framework Independent Study

Charles Wedemyer developed the theory of Independent Study in distance education in USA from early 1960 – 1970s. He analysed the difference between distance education and conventional face-to-face education. According to Daryal Pyari (2011), Wedemyer focused on major differences between the two as follows:

Autonomy of the learner: According Pyari (2011) distance education replaced correspondence education in 1982. Wedemyer popularized independent study, open learning and distance education in this theory. This concept indicates that the learner studies independently in his own environment free from the constraints of inappropriate class placing and develops in him a capacity and maturity that enables him to carry on self directed learning.

Distance Between the Teacher and the Learner: Wedenyer inferred that the strongest of pedagogic implications of ODL is students' autonomy from the teacher. The conventional/orthodox classroom teaching involves the teacher, the learner, the subject-matter being taught, the communication system, and the classroom.

Structural Systems: Furthermore, Wedemyer suggested that due to adjustments in teaching/learning method and other pedagogies, there is a need to change the

orientation/characteristics of the learner, teacher, and the education system. By this adjustment/redefinition of characteristics, a system structurally different from the traditional formal system of education is formed. In the ODL the learner takes more responsibility for learning than he was used to. He has wider choice of both content and methods of learning.

Empirical

Independent Study Revisited

Michael Moore (1972) revisited the independent study and said that independent study involves all educational transactions that may be different from conventional/traditional formal education regarding distance and autonomy. Therefore, all educational transactions that allow distance and autonomy are types of independent study. It may be Open University, correspondence course, online programmes etc. According to Pyrat (2011) both distance and autonomy are variables which can be expressed on the basis of three critical characteristics; namely:

1. Dialogue
2. Individualization (lack of structure)
3. Structure

There is a higher degree of dialogue and individualization in distance learning i.e between distance learner, distance teacher and distance teaching compared to their colleagues in conventional educational system.

Theoretical Foundations of Open and Distance Learning

1. ODL as an Industrialized Form of Teaching and Learning

Otto Peters (1973), through comprehensive studies conducted in the 1960s, conceptualized distance education as an industrialized model of teaching and learning. Drawing from traditional learning theories, Peters argued that the structure and processes of Open and Distance Education (ODE) significantly differ from conventional face-to-face education. His theory emphasizes that distance learning exhibits features similar to industrial production, including standardization, mechanization, and systematic processes.

According to Peters, as cited in Pyari, several distinctions exist between conventional and distance education:

- i. Instructional Focus: In ODL, the teacher's didactic focus is largely on higher-order cognitive skills, while the psychomotor and affective domains receive relatively less attention due to the limited physical interaction.
- ii. Curriculum Scope: The variety and flexibility of content are often constrained in ODL. Practical or hands-on components typically require face-to-

face engagement, which may limit the breadth of content delivered remotely.

- iii. Instructional Methodology and Media: Teaching methods and media selection must be adapted to suit remote delivery. Many traditional classroom techniques are not feasible in distance learning contexts.
- iv. Learner Diversity: Students' individual characteristics and socio-cultural backgrounds vary widely and do not align neatly with the structure of conventional education models.

Consequently, Peters concluded that traditional didactic models are inadequate for analyzing distance education. He proposed the use of industrial theory and practice as a more appropriate framework for understanding and improving the structure of ODL.

2. Guided Didactic Conversation Theory

Another foundational theory in the field of distance education is the Guided Didactic Conversation, developed by Börje Holmberg in 1981. Holmberg posited that effective distance learning mirrors a structured, yet conversational interaction between the learner and the instructor. He emphasized that this form of guided conversation—whether in written, verbal, or mediated form—can facilitate meaningful learning.

According to Holmberg, ODL involves two-way communication between tutors and learners, which may be synchronous (real-time interaction) or asynchronous (independent study guided by structured materials). The use of well-designed course materials simulates a conversation in which learners feel a sense of personal engagement, despite the physical distance from instructors.

3. Human Support in Industrialized Education

David Sewart, as referenced by Pyari (2011), contributed further to the discourse by highlighting the critical role of human interaction in distance education. While acknowledging the efficiency and scalability of the industrialized model, Sewart emphasized that learner diversity and individual needs necessitate human support beyond automated systems and self-study materials.

He argued that a one-size-fits-all approach—such as distributing the same course material to thousands of students—fails to account for individual learning differences and contexts. As a solution, Sewart advocated for advisory and tutorial support systems to be integrated into ODL programs. This human support, often delivered through facilitators or tutors, enhances learner engagement, provides personalized guidance, and improves overall learning outcomes.

Sewart's perspective underscores the importance of

balancing technological efficiency with human interaction to meet the holistic needs of distance learners.

Synthesis of Existing Theories on Distance Education

According to Perraton (1988), as cited in Pyari (2011), the theory underpinning distance education draws from a blend of communication theories, diffusion models, and educational philosophies. This theoretical framework is articulated through fourteen core propositions, with the first five emphasizing how distance learning can optimize educational delivery:

1. Any instructional content can be conveyed through any medium.
2. Distance education disrupts the constraints imposed by fixed teacher-student ratios, allowing for broader educational outreach.
3. Under specific conditions, distance learning may prove more cost-effective than traditional education, particularly when evaluated by learner reach or instructional efficiency.
4. The economic viability of distance education depends on variables such as educational level, audience size, selected media, and production complexity.
5. Distance education can serve populations that conventional institutions often fail to reach.

Equivalency Theory

Simonson (1995) introduced Equivalency Theory, which holds that no learner group should face disadvantages due to the instructional delivery mode they receive. The theory argues that educational experiences should be contextually appropriate and designed to suit the learners' environment and access level. Therefore, those involved in designing distance learning should strive to ensure that students receive learning experiences equivalent in quality and outcomes, even if the format differs.

This concept is further supported by Shale (1988), who posited that distance education should not be treated as a separate educational discipline. Keegan (1995) echoed this view, highlighting that virtual learning environments call for a different theoretical foundation than traditional models. He emphasized that the study of virtual and digital classrooms represents an emerging and significant domain with the potential to enrich educational theory.

Critical Evaluation of Theories

Keegan (1986) posed three fundamental questions essential to framing a theory of distance education:

1. Is distance education genuinely educational?

Keegan affirmed that while some distance learning institutions may share operational traits

with commercial enterprises, their primary focus remains education, affirming their legitimacy as educational bodies.

2. Can distance education be classified as conventional education?

He argued that it diverges from traditional models because it lacks real-time interpersonal interaction and is characterized by individualized learning structures. Consequently, while it shares a foundation with general education theory, it cannot be entirely situated within theories that emphasize group-based or oral instruction.

3. Is distance education a viable educational model, or is it inherently contradictory? Keegan questioned whether education, which traditionally involves shared experiences and direct teacher-learner engagement, could truly occur at a distance. He concluded that while distance *instruction* is feasible, distance *education* in the conventional sense may be philosophically inconsistent.

However, advancements in virtual learning environments have begun to reshape this perspective. The interactive capabilities of digital platforms challenge earlier assumptions, suggesting that distance education can, in fact, foster meaningful educational engagement and shared experiences.

METHODOLOGY

Research Methodology

This section presents the key methodological approaches adopted in conducting this study. It outlines the research design, sources and methods of data collection, target population and sample size, as well as the steps taken to ensure the validity and reliability of the research instruments.

Research Design

A research design is a structured plan that defines how data is collected, analyzed, and interpreted in a research project. It serves as a blueprint for achieving the study's objectives systematically and logically. For this study, a survey research design was employed. This design was deemed suitable because it enables the collection of data from a broad sample, allowing for generalizations to be made about the larger population. Furthermore, it supports the integration of both quantitative and qualitative methods, enhancing the depth and comprehensiveness of the research findings.

Sources of Data

To ensure comprehensive data collection, the study made use of both primary and secondary data sources:

- i. **Primary Data:** These are original data collected directly from the field. In this study, primary data were gathered through the administration of structured questionnaires and semi-structured interviews. The questionnaire was distributed to respondents across selected institutions, while interviews were conducted with key personnel to gain in-depth understanding of specific issues that may not be fully captured through the questionnaire alone.
- ii. **Secondary Data:** These are data obtained from existing sources. Relevant literature, including textbooks, peer-reviewed journals, official reports, policy documents, internet sources, newspapers, and unpublished academic theses, were reviewed. These materials were used to provide theoretical context and support the analysis of the primary data.

Population and Sample Size Determination

The target population for this study comprised both junior and senior staff of four selected institutions considered relevant to the research topic. These institutions were selected based on their alignment with the study's objectives and the accessibility of their staff for data collection.

Data from the Human Resource Departments of the selected institutions were used to determine the total number of staff members, which served as the sampling frame. A table (to be inserted) summarizes the population distribution across the four institutions.

To ensure the sample was representative, a stratified sampling technique was employed. This method allowed the researcher to group respondents into sub-categories (junior and senior staff), thereby ensuring proportional representation from each group. The sample size was calculated using statistically sound methods to minimize sampling error and bias, ensuring inclusivity and the reliability of findings.

S/NO	BANK	NO. OF EMPLOYEES
1	National Open University of Nigeria, Lagos (Lagos)	1,820
2	University of Lagos (DLI)	98
3	Stanbic IBTC, Adeola Odeku	133
4	Nigerian Police Force (McCarthy) Lagos	178
	TOTAL	2,226

Among the various methods used in determining sample size, the researcher adopted proportionality formulae. For the purpose of this study, the actual population is 2,226 employees of National Open University of Nigeria, University of Lagos (DLI), Stanbic IBTC Plc (Adeola Odeku) and Nigerian Police Force (McCarthy). A total of 2,226 questionnaires were distributed to the respondents.

The researcher opted for Yamen's statistical technique to determine the sample size.

The sample size was determined using Yamen's formulae; thus;

$$n = \frac{N}{1 + N(e)^2}$$

Where; n = sample size

N = actual population

1 = Constant

e = level of significance/or limit of tolerable error 0.05 or 5%)

$$n = \frac{2,226}{1 + 2,226(0.05)^2} = \underline{\underline{339}}$$

The sample size for each bank branch to be sampled is derived using Bowley's proportional allocation statistical technique.

$$n_h = \frac{nN_h}{N}$$

Where

n_h	=	The No. of staff in each branch office investigated		
N_h	=	The No. of staff in each branch		
n	=	The total sample size		
N	=	The actual or total population		
National Open University of Nigeria, Lagos		$\frac{339 \times 1,820}{2,226}$	=	277
University of Lagos (DLI)		$\frac{339 \times 98}{2,226}$	=	15
Stanbic IBTC, Adeola Odeku		$\frac{339 \times 133}{2,226}$	=	20
Nigerian Police Force (McCarthy) Lagos		$\frac{339 \times 178}{2,226}$	=	27
TOTAL				<u>339</u>

3.3 Description of Research Instrument

To collect relevant data for this study, the researcher employed two primary instruments: the questionnaire and the interview. These tools were chosen to ensure both breadth and depth of information, offering a combination of quantitative and qualitative perspectives.

1. Questionnaire: The questionnaire was designed to elicit structured responses from the selected sample. It was developed in line with the research objectives and research questions. The instrument consisted of 15 items divided into two sections:

- i. Section A focused on the demographic and general background information of respondents, including age, gender, educational qualifications, and organizational affiliation.
- ii. Section B addressed the core issues related to the research topic and was designed using a five-point Likert scale to measure respondents' levels of agreement. The scale was structured as follows:
 - i. 5 – Strongly Agree
 - ii. 4 – Agree

iii. 3 – Neutral

iv. 2 – Disagree

v. 1 – Strongly Disagree

This scaling method was employed to quantitatively capture attitudes, perceptions, and opinions on key issues surrounding the study.

2. Interview

In addition to administering questionnaires, **semi-structured interviews** were conducted with a selected group of participants to obtain qualitative insights. This method facilitated direct, face-to-face engagement, allowing the researcher to probe deeper into respondents' views and seek clarification where necessary. The interviews complemented the questionnaire data by capturing nuanced opinions and perspectives that may not have been revealed through structured survey items. This approach enriched the overall dataset and strengthened the credibility of the findings through **data triangulation**, enhancing both depth and reliability.

3.4 Validity of Instrument

Validity refers to the extent to which a research instrument effectively measures what it is designed to measure. In this study, efforts were

made to ensure both **content validity** and **face validity** of the research instruments.

To achieve this, the questionnaire was subjected to expert review. The researcher consulted the project supervisor and other academic professionals with experience in educational research and instrument design. Their feedback was instrumental in refining the items to ensure clarity, relevance, and alignment with the study's objectives.

Additionally, a **pilot study** was conducted involving a small group of respondents (excluded from the main study). The aim was to identify any ambiguous or confusing items. Based on the feedback from this preliminary test, modifications were made to improve the clarity and appropriateness of the questions.

The final version of the questionnaire was designed using **simple and straightforward language** to ensure that all respondents, regardless of background, could understand and respond accurately. This careful attention to design reduced the likelihood of misinterpretation and significantly enhanced the instrument's validity. The combination of expert evaluation and pilot testing provided a strong foundation for

ensuring the instrument's effectiveness in capturing relevant and meaningful data.

3.5 Reliability of Instrument

Reliability refers to the degree of consistency, accuracy, and stability in the responses obtained from a research instrument over time (Carriger, 2000).

To assess the reliability of the instrument, the test-retest method was employed. A total of 20 copies of the questionnaire were initially distributed across the selected banks, with five copies administered to each bank. After a brief interval, the same instrument was re-administered to the same group of respondents.

The completed questionnaires from both rounds were analyzed using Spearman's Rank Order Correlation Coefficient to determine the consistency of the responses. The result yielded a reliability coefficient of $r = 0.98$, indicating a high level of internal consistency and demonstrating that the instrument was reliable for data collection in this study.

PRESENTATION AND ANALYSIS OF DATA

Method of Data Analysis

The questionnaire for this research was analysed using simple percentage (%) distribution formulae:

$$\frac{r}{n} \times 100$$

r = number of variable responses

n = total number of responses to a particular question

Data Presentation

The researcher distributed 339 copies of the questionnaires to respondents in the selected organizations as follows;

National Open University of Nigeria	227
University of Lagos (DLI)	15
Stanbic IBTC (Adeola Odeku)	20
Nigeria Police Force (McCarthy)	27

From the questionnaires distributed as indicated above, three hundred and twenty (320) representing 94% of the respondents returned their questionnaire while nineteen (19) representing 6% of the respondents did not return their questionnaire. This indicates that the response rate was high.

Questionnaire Distribution

Number sent out	=	339 = a
Number returned	=	320 = b
Number not returned	=	19 = c

$$\begin{aligned} \text{Response rate} \quad \frac{b}{a} &= \frac{\text{No. returned}}{\text{No. sent out}} \times 100 \\ &= \frac{320}{339} \times 100 \\ &= \mathbf{94\%} \end{aligned}$$

$$\begin{aligned} \text{Non response rate} \quad \frac{c}{b} &= \frac{\text{No. not returned}}{\text{No. sent out}} \times 100 \\ &= \frac{19}{339} \times 100 \\ &= \mathbf{6\%} \end{aligned}$$

$$\begin{aligned} \text{Total response rate} \quad \frac{b+c}{b} \times 100 &= \frac{320+19}{339} \times 100 \\ &= \mathbf{100\%} \end{aligned}$$

Table 1: Analysis of Impact of Open and Distance Learning on the Productivity of Employees

S/NO	QUESTION	SA (%)	A (%)	N (%)	D (%)	SD (%)	Total
1	Do you agree that graduates of ODL institutions perform well in their working places compared to their counterparts from Conventional University?	194 (61)	80 (25)	10 (3)	14 (4)	22 (7)	320
2	ODL graduates work with less supervision in their working place because they are use to individual learning	201 (63)	50 (17)	7 (2)	55 (17)	7 (2)	320
3.	ODL students do not make a good team work	40 (13)	12 (4)	5 (2)	89 (28)	174 (53)	320

Source: Field Survey 2025

Table 1 highlights how respondents perceive the professional performance of graduates from Open and Distance Learning (ODL) institutions.

A large majority—86% of respondents (274 individuals)—believe that ODL graduates perform effectively in their workplaces. In contrast, 11% (36 individuals) expressed disagreement, while 3% (10 respondents) remained undecided. This indicates a strong level of trust in the competence and job readiness of graduates from ODL institutions.

When asked about the level of supervision ODL graduates require, 80% of respondents affirmed that these graduates are capable of executing tasks with minimal oversight, suggesting a high degree of self-direction and autonomy. However, 19% felt that ODL graduates need the same level of supervision as their peers from conventional universities, and 1% were undecided.

Regarding teamwork, only 17% of respondents believed that ODL graduates struggle with group or collaborative tasks. In contrast, a substantial 81% disagreed with this claim, indicating that most ODL graduates are perceived as competent and cooperative team members. The remaining 2% were undecided.

In summary, the data in Table 1 point to a broadly favorable assessment of ODL graduates in the workplace. Respondents view them as productive, capable of working independently, and effective in team environments. These findings reinforce the credibility of ODL as a viable educational pathway that equips learners with the necessary skills to thrive in today's dynamic professional settings.

Table 2: Analysis of Effectiveness of Mode of Delivery in Open and Distance Learning Institutions

S/NO	QUESTION	SA (%)	A (%)	N (%)	D (%)	SD (%)	Total
1	Do you agree that mode/method of instructional delivery in ODL institutions are good enough to impart on learners	133 (41)	76 (24)	5 (2)	90 (28)	16 (5)	320
2	Course materials distributed by ODL institutions to learners are elaborate enough to take the place of the teacher	86 (27)	115 (36)	2 (1)	100 (31)	17 (5)	320
3	Soft copies of ODL study materials are convenient for learning compared to the class room situation in conventional education	79 (25)	60 (19)	1 (0)	100 (31)	80 (25)	320

Source: Field Survey 2025

Table 2 presents insights into how respondents evaluate the instructional delivery techniques employed by Open and Distance Learning (ODL) institutions.

According to the data, 65% of respondents believe that the instructional methods used by ODL institutions are effective in delivering knowledge to learners. Meanwhile, 33% disagreed, and 2% were undecided, indicating that although the majority view the delivery methods positively, a significant minority remain unconvinced about their efficacy. This suggests that while most respondents perceive ODL teaching approaches as meeting educational expectations, there is still room for improvement.

Furthermore, 63% of participants agreed that the course materials provided by ODL institutions can adequately substitute for traditional face-to-face instruction. This highlights a general confidence in the self-directed learning materials. However, 36% disagreed, and 1% were

undecided, signaling that some learners may find the materials insufficient without direct teacher interaction.

A different pattern emerged regarding the convenience of using digital (soft copy) course materials. Only 44% of respondents found them convenient, while 56% disagreed. This indicates a major challenge related to the use of online or downloadable materials, likely due to infrastructural issues such as limited internet availability or high data costs—barriers that were also reported in qualitative responses.

In conclusion, the data from Table 2 suggest that while ODL's instructional delivery methods are generally viewed as effective, issues related to digital access and affordability limit the full benefits of ODL. Addressing these infrastructural and financial barriers is essential to enhancing the learning experience and ensuring equitable access for all students.

Table 3 Analysis of Cost Effectiveness of ODL to Both Learner and Institution

S/NO	QUESTION	SA (%)	A (%)	N (%)	D (%)	SD (%)	Total
1	ODL operations are cost effective to both learners and institution	127 (40)	91 (28)	2 (1)	49 (15)	51 (16)	320
2	Initial outlay for operations are expensive to ODL operators	190 (59)	90 (28)	5 (2)	29 (9)	6 (2)	320
3	Learners receive value for any cost incurred in ODL institution	140 (44)	45 (14)	0 (0)	100 (31)	35 (11)	320

Source: Field Survey 2025

Table 3 presents respondents' views on the cost-effectiveness of Open and Distance Learning (ODL) institutions for both students and providers.

According to the data, **68% of respondents** agreed that ODL operations are cost-effective for both learners and the institutions themselves, while **31% disagreed**, and **1% remained undecided**. In addition, **87%** acknowledged that although the initial setup costs for ODL institutions are high, they are a necessary investment. However, **11% disagreed**, and **2% were undecided** on this issue.

When comparing value for money, **58%** of respondents believed that learners derive greater value for the costs they incur in ODL institutions compared to traditional universities, whereas **42% disagreed** with this sentiment.

In summary, the responses suggest a general consensus that despite significant initial investments, ODL systems are ultimately cost-effective and provide meaningful educational value to learners as well as institutional benefits in the long term.

Table 4: Analysis of Carrying Capacity of Open and Distance Learning Institutions in Nigeria

S/NO	QUESTION	SA (%)	A (%)	N (%)	D (%)	SD (%)	Total
1	ODL institutions has the capacity to admit qualified candidates who could not get admission into conventional institutions because of space	203 (63)	70 (22)	1 (0)	37 (12)	9 (3)	320
2	ODL institutions covers wider range of programmes and can easily reach the unreached	176 (55)	89 (28)	6 (2)	30 (9)	19 (6)	320
3	A working class person can improve his/her efficiency through ODL while working without leaving the workplace in search of knowledge	205 (64)	79 (25)	5 (2)	27 (8)	4 (1)	320

Source: Field Survey 2025

Interpretation of Table 4: Respondents' Perception of ODL Capacity and Accessibility

Table 4 illustrates respondents' perspectives on the capacity, inclusiveness, and adaptability of Open and Distance Learning (ODL) institutions in comparison to traditional universities.

The analysis indicates that a substantial majority—**85% of participants**—believe that ODL institutions are capable of enrolling a larger number of qualified applicants than conventional, campus-based universities. This finding suggests that ODL can serve as an effective response to the chronic issue of limited admission slots in Nigeria's higher education sector. However, **15% of respondents** disagreed, possibly reflecting skepticism about the scalability or operational capacity of ODL systems.

Additionally, **83% of respondents** agreed that ODL institutions offer a broader selection of academic programmes and are well-positioned to serve learners in remote or marginalized regions. This highlights ODL's role in reducing educational inequality by extending learning opportunities across geographic and socio-economic boundaries. Conversely, **15% disagreed**, which may point to doubts regarding the consistency and accessibility of programme delivery in underserved locations.

Moreover, **89% of those surveyed** supported the view that ODL enables working professionals to pursue further education while maintaining their employment. This emphasizes the flexibility inherent in the ODL model, which is designed to accommodate adult learners and individuals with professional obligations. Only **9% disagreed**, indicating minimal resistance to this perception.

In summary, the findings reflect a generally favorable perception of ODL institutions as more capable, inclusive,

and adaptable than traditional universities. These attributes position ODL as a critical mechanism for enhancing access to higher education, particularly for populations hindered by limited admission spaces, job constraints, or geographical isolation.

Findings

Based on the data collected and analyzed during the research, the following key findings emerged:

1. Open and Distance Learning (ODL) institutions contribute significantly to enhancing employee efficiency, effectiveness, and overall productivity within organizations. This supports prior studies, including those by Adeniyi (1995), which recognized the positive impact of ODL on Nigerian professionals.
2. The instructional delivery methods employed by ODL institutions are generally effective in facilitating knowledge acquisition among learners.
3. Despite the convenience of ODL, many learners are discouraged from engaging with digital course materials due to the high cost of internet access.
4. ODL proves to be more cost-efficient for both students and institutions. Although the initial setup cost may be substantial for institutions, long-term expenses are minimized through the limited need for printed materials and the absence of extra charges such as recreational or handout fees typical in conventional universities.
5. ODL institutions are capable of accommodating a much larger student population compared to traditional institutions. Their flexible, non-campus-based model enables mass enrollment without the need for extensive classroom infrastructure, relying instead on robust course content and high-quality instructional materials.

6. ODL offers a viable opportunity for working individuals to upgrade their qualifications and skillsets without leaving their jobs, promoting continuous professional development.

Conclusion

Although Open and Distance Learning is still relatively new in Nigeria, awareness and acceptance are gradually increasing. However, a lack of widespread knowledge about ODL has led to partial acceptance of qualifications, particularly from the National Open University of Nigeria (NOUN). This skepticism largely stems from insufficient public sensitization and misconceptions about ODL's credibility. Nevertheless, graduates of ODL institutions are proving their competence in the workforce, indicating the system's growing relevance. As the global education landscape shifts towards more flexible and technology-driven models, many traditional institutions are adopting a dual-mode system, integrating ODL with conventional methods to meet diverse learner needs.

Recommendations

Drawing from the research findings, the following recommendations are proposed:

1. **Public Awareness Campaigns:** ODL institutions should invest in advocacy and awareness initiatives to educate the public on the quality and effectiveness of ODL programs. Greater awareness could help enhance the credibility and acceptance of ODL certificates.
2. **Government Support:** The government should go beyond budgetary allocations to subsidize the high initial costs of setting up ODL institutions. Encouraging private sector participation in establishing ODL centers will also help meet the increasing demand.
3. **Employer Engagement:** Both public and private sector employers should be encouraged to recruit ODL graduates, as evidence shows that many perform excellently in their respective workplaces.
4. **Improved Online Access:** ODL providers should enhance the accessibility of digital learning materials. Reducing data costs and providing internet-enabled devices or facilities would support more efficient online learning.

Dedicated Regulatory Body: A specialized regulatory commission should be established to oversee ODL operations in Nigeria. This would ensure that the unique characteristics of ODL are properly recognized and regulated, rather than applying conventional university standards that may not align with the ODL model.

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