Towards an Appropriate and Sustainable Model of ODL in Nigerian Universities

1. Introduction

The term “distance education” has been used to mean various things. This is more so that any practice where people have to gather together periodically for the purpose of acquiring Education is regarded as distance learning. Some synonyms for Distance Education in common parlance are: home study, correspondence education, self-instruction, open access, adult education, external studies, distance teaching, distance learning, distributed learning, mediated education, continuing education, in service training, part time studies, sandwich and so on. While each of the above may incorporate one or the other aspect of distance learning, they do not in themselves define the practice. Sometimes actual practice may not be different although the nomenclature may focus on the mode of delivery, the media or practice.

Distance Learning is “the acquisition of knowledge and skills through mediated information and instruction, encompassing all technologies and other forms of learning at a distance” (The United States Distance Learning Association). Distance learning “is instruction that occurs when the instructor and the student are separated in time and space or both” (Western cooperative for Educational Telecommunications). Moore 1966 defines it as planned learning that normally occurs from a different place as teaching and as a result, requires special techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements”. Distance learning frees learners from the constraint of time and space and offers flexible opportunities. To facilitate instruction or learning at a distance, different media may be used such as print, radio, the internet (web based learning resources), computer based resources and television. These media may be used exclusively or in combination, in what has come to be known as blended learning. From the above, it is clear that Learners and teachers are separated in time and space but mediated by various modes of technology and instructional design. Terms such as virtual learning, e learning and online learning describe the use of Information Communication Technologies to enhance learning. It is important to note that there is a degree of distance in all forms of education (Moore 1993, 1996). Any form of technology or ICT can be utilized to enhance learning. If this is the case, what then distinguishes an approach as distance learning?

- An engaging and interactive learning
- Learner driven: course materials address characteristics of learners
- Technology driven (role of internet): Distance learning via the internet presents massive opportunity. It is active and engaging—learning that mandates doing instead of watching. (Andy Rosenfield 2000).
- Learning activities are distributed among many learning venues
- Less susceptible to individual teacher
- Standardize content (open learning materials)
- Specialized administrative structure and learner support driven by technology to cater for learners who are isolated
- Distance learning is particularly valuable because it democratizes access
- Its outreach capacity, meaning the relative ease with which a given distance learning program can meet the needs of a wider audience that would not be the case in situations of face to face teaching.
• It provides opportunity for those who for financial reasons, distance, or personal circumstances cannot attend conventional Universities on a full time basis to get educated.
• It is flexible, in terms of its adaptability to different personal or social conditions (people can study at their pace, location, time).
• It is more cost effective and easy to scale than facilities based education
• Provides opportunities for lifelong and continuous education. As we have already mentioned, the imperatives of globalization and a knowledge economy makes continuous learning and skills update a reality of the work place.
• It is scalable unlike facilities based institutions. It has provided nations with opportunities for addressing the needs for skills, training and education in a cost effective and sustainable way. Distance delivery can be effected immediately without a massive commitment of physical capital that is both immobile and irreversible”.

There is the concept of open learning that often goes with discussions of distance education. Open learning refers to the absence of constraint in the learning process. Such constraints may be administrative (time, space, duration, etc.), and educational (objectives, methods, sequencing, entry qualification, assessments, etc.) (Richard L. Book and Vivian E. Hodgion 1987:5). In summary, open learning is any form of learning in which the provider enables individual learners to exercise choice over one or more aspects of the learning processes.

2. Why distance learning?
Five imperatives recommend distance education mode universally.
• The first is to broaden access to Education.
• The second is to provide needs-driven and skills-based education
• The third is to provide globally competitive education.
• The fourth is to provide opportunities for continuous and lifelong learning.
• There is a crisis of access to education in several developing countries

If the above were to be resolved through brick and mortar and campus based institutions, the share cost will be un-financeable. Education must now be skillfully interconnected with national needs as conceptualized within the global framework. It is now well known that we are in the age of human capital. The basis of development, productivity and competitiveness has shifted from the production of natural resources and trade in commodities to the production of knowledge. The extent to which individuals and economies succeed will be determined mainly by how successful they are in investing and commanding the growing stock of knowledge. Basic education is not enough in the current global environment. New requirements for employees are creating a high and adhoc demand for new knowledge and skills. Prior learning is often not sufficient to meet these challenges. What is required is continuous learning, the acquisition of specific knowledge, and education and training geared to the needs of the individual (Langabach C. & Bodendoff F. 2000: 169).

Distance learning, like any learning, entails information sharing on three complementary levels:

• Among teachers
• From teachers (and publishers) to students
• Among students.
Information sharing requires organization of its content in descending levels, as follows:

- Program
- Course
- Module
- Lesson
- Component.

Distance learning requires assessment, according the following criteria:

- Governance
- Relevance
- Access
- Quality
- Cost.
3. TYPES OF DISTANCE EDUCATION INSTITUTIONS

The following types of DE institutions have been recognized:

- Single Mode, Dual Mode, Mixed Mode and Consortia (COL 2002).
- Single Mode institutions offer distance education alone (National Open University of Nigeria);
- Dual mode institutions combine conventional face to face with distance education (University of Ibadan, Babcock University).
- In mixed mode, there is a convergence of distance delivery and face to face. The same individuals design, deliver and administer programs in both modes. Learners maximise
choice because of flexibility of place and space and mode of study. A single program can offer a choice between face to face and distance delivery (University of Pretoria).

- Consortia involve the pooling of efforts and resources to offer distance education by autonomous institutions. An example of this is African Virtual University.

Although there is a traditional bifurcation between face to face and distance education modes, the new disaggregated and technology enabled environment makes it increasingly difficult to make such a sharp distinction. It is perhaps more important to conceptualise the difference in terms of a continuum from purely face to face environment through varying degrees of combinations of distance delivery, with strictly online or virtual institutions at the extreme end.

**Table 1: Key Characteristics of Different modes**

<table>
<thead>
<tr>
<th>Face-to-face education (Teacher Centred)</th>
<th>Distance Education (Resource centred)</th>
<th>Online Education (Lecturer Centred)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction based on teacher performances</td>
<td>Instruction contained in materials</td>
<td>Instruction based on access, materials and interactions—all can be cumulative</td>
</tr>
<tr>
<td>Located in time, place and with fixed groups of people</td>
<td>Time and place more flexible</td>
<td>Flexible personal access, not limited in time or space</td>
</tr>
<tr>
<td>People are scheduled</td>
<td>Materials are scheduled</td>
<td>Asynchronous opportunities, choice determines</td>
</tr>
<tr>
<td>Ephemeral experience</td>
<td>Lasting resources</td>
<td>Ephemeral or lasting</td>
</tr>
<tr>
<td>High marginal cost limits scalability</td>
<td>High fixed cost requires large scale operation</td>
<td>Variable fixed and marginal costs</td>
</tr>
<tr>
<td>Materials support teacher</td>
<td>Materials support learner</td>
<td>WWW—based resources produced just-in-time by (and for) teachers and learners</td>
</tr>
</tbody>
</table>

Reproduced from Nunan, Reid and McCausland 2002 ibid: 10
Table 2: Flexible Delivery Technologies—A Conceptual Framework

| Models of Distance Education and Associated Flexible Delivery Technologies | Characteristics of Delivery Technologies |
|---|---|---|---|---|
|  | Flexibility | Highly Refined Materials | Advanced Interactive Delivery | Institutional Variable Costs Approaching Zero |
|  | Time | Place | Pace |
| **First Generation** — The Correspondance Model  
  • Print | Yes | Yes | Yes | Yes | No | No |
| **Second Generation** — The Multi-media Model  
  • Print | Yes | Yes | Yes | Yes | No | No |
|  | Audiotape | Yes | Yes | Yes | No | No |
|  | Videotape | Yes | Yes | Yes | No | No |
|  | Computer-based learning (eg CML/CAL) | Yes | Yes | Yes | Yes | No |
|  | Interactive video (disk and tape) | Yes | Yes | Yes | Yes | No |
| **Third Generation** — The Telelearning Model  
  • Audioteleconferencing | No | No | No | No | Yes | No |
|  | Videoconferencing | No | No | No | No | Yes | No |
|  | Audiographic Communication | No | No | No | Yes | Yes | No |
|  | Broadcast TV/Radio and Audioteleconferencing | No | No | No | Yes | Yes | No |
| **Fourth Generation** — The Flexible Learning Model  
  • Interactive multimedia (IMM) | Yes | Yes | Yes | Yes | Yes | Yes |
|  | Internet-Based access to WWW resources | Yes | Yes | Yes | Yes | Yes | Yes |
|  | Computer mediated communication (CMC) | Yes | Yes | Yes | No | Yes | No |
| **Fifth Generation** — The Intelligent Flexible Learning Model  
  • Interactive multimedia | Yes | Yes | Yes | Yes | Yes | Yes |
|  | Internet-based access to WWW resources | Yes | Yes | Yes | Yes | Yes | Yes |
|  | CMC, using automated response systems | Yes | Yes | Yes | Yes | Yes | Yes |
|  | Campus portal access to institutional processes and resources | Yes | Yes | Yes | Yes | Yes | Yes |
4. **Critical Issues in DUAL and Mixed mode deliveries**

- Excessive workload for academic staff
- Difficulty of scaling up the model to handle large numbers, which defeats the philosophy of DE
- Inappropriate management structure which affect the quality of management
- Unsuitable regulatory environment which limit openness and flexibility
- Issues relating to parity of esteem and equity
- Resistance of academic staff (due to workload, technology environment, perception of the status of external students vis a vis full time ones, design and development of learning materials do not contribute to career development, inadequate parameters for remuneration creating a sense of inadequate compensation)
- Perceived loss of authority and control arising from the use of self- instructional materials
- Skills and knowledge gap in technology and curriculum development
- Lack of institutional support
Figure 4: Examples of Administrative models in Dual Mode Institutions
Figure 5: Distance Learning Centre, University of Ibadan—Organisational Structure
Figure 6: The Organisational Structure of University of Fort Hare DE B. Ed Programme

The Organizational Structure of the University of Fort Hare
DE B. Ed Programme in 2000

Dean

Central Office

Interim Manager
Also Academic Co-ordinator

Lead Academic Co-ordinator:
Academic Co-ordinators:
Maths, Science and Technology
Literacy
Core Education

Interim Administrator
and Financial Manager

Graphics and Newsletter Staff

Regional Co-ordinator (3)

Centre Co-ordinators (8)

Librarian

Abakhwezeli (≤75)

Teacher-Learner Representative Council

Teacher-Learner

Asst. Financial Manager
Stores and Distribution Manager
Database Manager
Administration systems and Logistics Manager
Volunteer IT Specialist

ESSO: Educator and School Support Officer
Abakhwezeli (contact support facilitator): those “who keep the fire burning”
5. THE CONTEXT OF ODL IN NIGERIA  
*The context of ODL in Nigeria is defined by the following among many other factors.*

Distance Learning in Nigeria faces the following, among many other problems:

- Poor enrolment capacity due to inappropriate models of ODL, inadequate infrastructure and poor technology outlay.
- Poor understanding of the concept and practice of ODL.
- Poorly trained staff and inadequate technical capacity and skills in e-learning technology, online tutoring, ODL management and delivery.
- Poor quality output of the basic education level of people who constitute the new majority of distance learners.
- Paucity of good quality content.
- Poor internet penetration and low computer literacy skills of learners.
- Rigid and outmoded regulatory environment.
- Lack of collaboration, partnership and synergy between institutions and private sector organisations involved in ODL.
- Inability to conduct continuous assessment at a distance.
- Poor business model.
- Lack of institutional support of centres engaged in ODL in dual mode Universities.
- High cost of access, bandwidth, computers and accessories.
  - Excessive Building Costs
  - Transfer of cost of inefficiencies to students
- High level of poverty of distance learners.
- Impersonation at examinations.
- Delay in marking and processing of results.
- Inconsistent scheduling and academic instability.

Problem of capacity is underscored by the fact that there is already a shortage of capacity in the higher education sector.
6. CHALLENGES

A few challenges may arise from the above. These relate to:

- How to scale up enrolment to a sustainable level in an orderly manner and manage ensuing numbers without compromising quality.
- How to create access to content that is engaging, interactive and qualitative.
- How to provide access in a flexible, cost effective and culturally appropriate manner.
- How to improve computer literacy of applicants and prepare them to engage the distance learning environment.
- How to provide support to students on and offline in order to provide them with a productive and fulfilling learning experience.
- How to ensure that capable and adequately trained tutors and mentors, course developers engage learners.
- How to provide up-to-date and qualitative content for use by learners.
- How to minimise the need to physically displace learners.
- How to ensure equity in access and delivery of programmes.
- How to ensure that learners are treated with dignity.
Table 3: Statistics of Candidates’ Performance at UTME

<table>
<thead>
<tr>
<th>Year</th>
<th>No of Application</th>
<th>No Admitted/Available Space</th>
<th>Percent Admitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>95/1997/1996</td>
<td>512,777</td>
<td>37,498</td>
<td>7.3.</td>
</tr>
<tr>
<td>96/1997/1998</td>
<td>472,362</td>
<td>76,430</td>
<td>16.2</td>
</tr>
<tr>
<td>97/1999</td>
<td>419,807</td>
<td>72,791</td>
<td>17.3</td>
</tr>
<tr>
<td>99/2000</td>
<td>418,928</td>
<td>64,718</td>
<td>15.4</td>
</tr>
<tr>
<td>2000/2001</td>
<td>550,399</td>
<td>60,718</td>
<td>11.0</td>
</tr>
<tr>
<td>2001/2002</td>
<td>749,727</td>
<td>90,769</td>
<td>12.1</td>
</tr>
<tr>
<td>2003/2004</td>
<td>1,046,103</td>
<td>104,991</td>
<td>10.1</td>
</tr>
<tr>
<td>2011/2012</td>
<td>1,493,604</td>
<td>300,000</td>
<td>20%</td>
</tr>
</tbody>
</table>

- How to meet the criteria for accreditation of programmes.
- How to meet the criteria for accreditation of programmes.
- How to ensure parity of esteem between Distance Learners and those of the face to face mode.
- How to provide a suitable regulatory environment and organizational structure that supports the needs of learners.
7. Crisis of Access?

Table 4: Statistics of University Applicants by Application Mode and age Range

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Direct Entry</th>
<th>O. Level</th>
<th>Mature Candidate</th>
<th>Total</th>
<th>Average Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-20</td>
<td>12</td>
<td>516</td>
<td>5</td>
<td>528</td>
<td>19</td>
</tr>
<tr>
<td>21-25</td>
<td>548</td>
<td>1880</td>
<td>5</td>
<td>2433</td>
<td>23</td>
</tr>
<tr>
<td>26-30</td>
<td>846</td>
<td>1346</td>
<td>26</td>
<td>2218</td>
<td>27</td>
</tr>
<tr>
<td>31-35</td>
<td>497</td>
<td>539</td>
<td>26</td>
<td>1062</td>
<td>33</td>
</tr>
<tr>
<td>36-40</td>
<td>259</td>
<td>214</td>
<td>15</td>
<td>488</td>
<td>38</td>
</tr>
<tr>
<td>41-45</td>
<td>139</td>
<td>114</td>
<td>20</td>
<td>273</td>
<td>43</td>
</tr>
<tr>
<td>46-50</td>
<td>50</td>
<td>37</td>
<td>5</td>
<td>92</td>
<td>47</td>
</tr>
<tr>
<td>51-55</td>
<td>17</td>
<td>12</td>
<td>5</td>
<td>34</td>
<td>52</td>
</tr>
<tr>
<td>56-62</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>2371</td>
<td>4660</td>
<td>104</td>
<td>7135</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Growth of the Nigerian University System

<table>
<thead>
<tr>
<th>Period</th>
<th>Federal</th>
<th>State</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948-1975</td>
<td>13</td>
<td>-</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>1976-1995</td>
<td>12</td>
<td>-</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>1996-2008</td>
<td>2</td>
<td>20</td>
<td>34</td>
<td>57</td>
</tr>
<tr>
<td>2009-2012</td>
<td>9</td>
<td>-</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>20</td>
<td>65</td>
<td>122</td>
</tr>
</tbody>
</table>

8. GOVERNMENT'S REACTION TO THE CRISIS OF ACCESS

- Creation of New Universities
- Creation of the National Open University of Nigeria (NOUN)
- Creation of Innovation Institutes
- Licensing of Polytechnics to award Degrees
- Affiliation Programs
- Licensing of Private Universities
- Creation of dual-mode Universities
- Creating Parity between Polytechnics and Universities
Merging of Matriculation examinations into tertiary institutions

**Figure 7: Enrolment in ODL Vs. F2F Programmes**

9. **An Appropriate and Sustainable Model: What does it mean?**

A model that:

- addresses the local realities,
- is based on a clear understanding of the learner profile,
- incorporates elements of the accreditation requirements
- Has a strong student support framework
- Has sound policy and practice for quality assurance
- Deploys programs that are needs driven
- Incorporates enough flexibility to address the needs of diverse clients
- Utilizes existing internal and external resources through partnerships
- Promotes autonomous and lifelong learning
- Has a good business model that minimizes inefficiencies and gives value for money and time
- Utilizes accessible technology and delivery modes that minimize constraints on learners

Below, we provide conceptual frameworks to support the above.
Figure 8: Course Design Model

Course Design Model

- National d/e policy
- National Priorities
- National Standards/qualifications?
- Programmes

Conduct analysis of stakeholder needs
Identify available resources

What do learners need to learn?
- Purpose of Course
- Outcomes of Course?
- Learner Profile

How will we know they have learned it?
- Assessment

How can we help them learn it?
- Learning and teaching strategies
  - Learning Materials
  - Support to Learner

How will we know that the course has achieved its purpose?
- Evaluation
Figure 9: A Cycle of Quality Assurance
Figure 10: Training and Development of Staff in Distance Education
10. **TUTORIAL POLICY**

1. Train and integrate qualified Postgraduate students as tutorial/online e-tutors.
2. Utilize mobile devices to deliver content
3. Partner with reputable Learning centres
4. While radio (online radio), you-tube and social networks for tutorial.
A Long Tail is just culture unfiltered by economic scarcity (Chris Anderson 2006: pg 53)

The theory of the Long Tail can be boiled down to this: our culture and economy are increasingly shifting away from a focus on a relatively small number of hits (mainstream products and markets) at the head of the demand curve, and moving toward a huge number of niches in the tail. In the era without the constraints of physical shelf spree and other bottlenecks of distribution, narrowly targeted goods and services can be as economically attractive as mainstream fare (pg 52)

…and the growth of online universities as the Long Tail of Education” (pg 50)

- Partnerships with Communities, Governments and Private sector.
- Outsourcing
- Integration with Postgraduate school. Competent PG students to serve as Tutorial Assistant and online mentors.
- ODL learning resources will be integrated to the University’s website thereby improving its ranking dramatically.
• Feeding of Pre-degree into ODL. One way to do this is to award a certificate to all Predegree students, recognized by Senate as equivalent to Advance Level or IJMB, which candidates can use to secure admission into ODL programs of the institution.

• Printing press and bookshop alliance for distribution of learning resources in a Printer-Finance policy

• Integration of ODL learning resources with University wide portal for improve Webometric rating

• More efficient programme offering through modularization of programs

**Figure 13: Organised Levels of information sharing**