Status of Open and Distance Learning in Nigeria
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Section 4: The Way Forward for Nigerian ODL .......................................................... 39
  Integrating Employability into the Curriculum ......................................................... 39
  Rethinking Assessments .......................................................................................... 42
  Micro-credentials and Lifelong Learning ............................................................... 44
  Digitisation of the Sector ....................................................................................... 48
  Gender Equity in Nigerian ODL Provision .............................................................. 49
  Targeting the Marginalised ..................................................................................... 51
  Technical and Vocational Education and Training ............................................... 54
  New Perspectives on Open Schooling Initiatives ................................................... 55

Section Five: Summary and Recommendations ..................................................... 57
  Summary ................................................................................................................. 57
  Recommendations .................................................................................................. 58

References ................................................................................................................. 59

List of Tables

Table 1.1. Earliest distance education initiatives in Nigeria ...................................... 9
Table 1.2. Nigerian universities offering dual-mode ODL (as of October 2021) ........ 18
Table 2.1. Trend in JAMB admissions, 2015–2020 ..................................................... 22
Table 2.2. Courses offered in Nigerian ODL institutions/facilities ............................ 24
Table 2.3. Undergraduate course offerings in NOUN (single-mode institution) ....... 25
Table 3.1. Distribution of respondents by study status .............................................. 30
Table 3.2. Age range of ODL students in Nigeria ...................................................... 31
Table 3.3. Gender parity and ODL in Nigeria ............................................................. 32
Table 3.4. Number of courses being taken ............................................................... 33
Table 3.5. Students’ reasons for choosing ODL ....................................................... 34
Table 3.6. Views on ODL experiences ..................................................................... 35
Table 4.1. Gender and employability focus in NOUN .............................................. 40
Table 4.2. Cheating during remote-proctored examination ..............................................43
Table 4.3. Micro-credentials at NOUN............................................................................46
Table 4.4. NOUN ACETEL cross-border students .......................................................47
Table 4.5. Total enrolment by gender, NOUN, 2021....................................................49
Table 4.6. LAUTECH ODLC enrolment, 2021 ..............................................................50
Table 4.7. MAUTECH enrolment, 2021 .........................................................................50
Table 4.8. Enrolment at the correctional centres, 2021 ....................................................53

List of Abbreviations

ACDE African Council on Distance Education
ACETEL African Centre of Excellence in Technology Enhanced Learning
ASUU Academic Staff Union of Universities
BMAS Benchmark Minimum Academic Standard
CCNA Cisco Certified Network Associate
CHRDC Centre for Human Resource Development
CLE Council for Legal Education
COL Commonwealth of Learning
CVC Committee of Vice-Chancellors
DLI Distance Learning Institute
FaB flexible and blended
FCT Federal Capital Territory
FIRS Federal Inland Revenue Services
FRCN Federal Radio Corporation of Nigeria
FRN Federal Republic of Nigeria
IGNOU Indira Gandhi National Open University
ISWAP Islamic State of West African Province
JABU Joseph Ayo Babalola University
JAMB Joint Admission and Matriculation Board
LAUTECH Ladoke Akintola University of Technology
LAUTECH ODLC Ladoke Akintola University of Technology Open and Distance Learning Centre
LCMS learning content management system
LMS learning management system
MAUTECH Modibbo Adama University of Technology
MIS management information systems
MOOCs massive open online courses
NBC Nigerian Broadcasting Corporation
NCE National Council on Education
NETC National Educational Technology Centre
NOUN National Open University of Nigeria
NTA Nigeria Television Authority
NTI National Teachers' Institute
NUC National Universities Commission
ODE open and distance education
ODL open and distance learning
OER open educational resources
OSP Open Schools Programme
TISEP Teachers In-service Education Programme
TVET technical and vocational education and training
U3A University of the Third Age
UBEC Universal Basic Education Commission
UNESCO United Nations Educational, Scientific and Cultural Organization
UNILAG DLI University of Lagos Distance Learning Institute
UPE universal primary education
UTME Unified Tertiary Matriculation Examination
VLE virtual learning environment
Covid-19 caused the closure of campuses, affecting more than 220 million higher education students worldwide. Most institutions had to pivot to emergency remote teaching. Many did not have adequate technology infrastructure. A study has revealed that even in the US and Canada, over 50% of teachers required help with supporting remote students, needed access to digital materials and wanted assistance with technology. Students also suffered in various ways — and half of them felt that their performance had declined. Many faced challenges relating to technology tools and connectivity, and most felt a negative impact on their psychological well-being. The vulnerable are most affected in crisis situations, and existing inequalities were further exacerbated. The pandemic has further deepened the learning crisis.

All of the above highlight the need for alternative and innovative ways of providing access and equity in higher education. The pandemic has forced the global community to embrace distance learning and online delivery. Historically, open distance learning (ODL) was adopted to address issues of access, using a range of technologies, including print, radio and TV. Countries that already had ODL systems in place were better able to respond to institutional closures during lockdown by providing existing distance learning materials and systematic learning support. COL’s experience shows that ODL and technologies can be leveraged to increase access to quality education, skills development and lifelong learning at lower costs.

Distance education in Nigeria dates back to 1887, when several students enrolled as external students for the University of London matriculation examination. The University of Lagos established the Correspondence and Open Studies Unit in 1973, which is now the Distance Learning Institute. This was subsequently followed by other universities, largely for teacher education, and the National Teachers’ Institute was established in 1976 as the dedicated distance education institution for teacher training. The National Open University of Nigeria was established in 1983 and then revived again in 2002.

Status of Open and Distance Learning in Nigeria reviews current policy and practice in relation to issues of access, equity, quality and costs. This was done using a survey of ODL institutions, data from different institutions, and available studies conducted by COL. The report identifies innovations and best practices that institutions adopted as a response to the Covid-19 crisis. The objective of this report is to provide recommendations and concrete actions to enable policy makers and distance education leaders to transform the sector for national development.

In a post-pandemic world, where resources may be limited, the demand for distance and technology-enabled learning will continue. COL will provide support to develop enabling ODL policies, stronger systems, and enhanced human resource capacity for formal, non-formal and informal learning. The role of COL as an intergovernmental organisation established to promote distance education and technologies has become more important than ever before, and it will continue to invest in innovations to leave no one behind.
The importance of distance learning has become apparent to the global community. Distance learning has always been a “disruptive innovation” that can be harnessed to provide lifelong learning for all. As the future of learning is blended, the distinctions between distance and campus learning need to disappear. What matters are the competencies gained rather than the delivery mode. Finally, quality needs to be a priority, with the understanding that there can be no quality without equity and inclusion.

While the report focuses on distance learning in Nigeria, it has wider relevance in the Commonwealth and beyond. I hope policy makers and practitioners will benefit from its insights and take full advantage of the recommendations, which can be adopted and adapted to different contexts.

Professor Asha Kanwar
President and CEO
Commonwealth of Learning
Executive Summary

This report presents a survey of a situation analysis of open and distance learning in Nigeria. It is based on both archival and field data.

Nigeria, with 36 individual states spread in six geopolitical zones and a Federal Capital Territory in Abuja making up the federation, is the most populated country in Africa, with an estimated population of over 206 million people. Nigeria has the most universities in Africa. As of July 2022, Nigeria had 49 federal universities, 57 state universities and 111 private universities, as well as 55 degree-awarding colleges of education, polytechnics and monotechnics affiliated with universities, with a combined student population of about 2.2 million. Besides the universities and affiliated degree-awarding institutions, there are also 205 colleges of education offering the National Certificate of Education, 157 public and private polytechnics, 33 colleges of agriculture, 36 special colleges and 73 public and private colleges of health. In recent years, the country’s regulators forced the closure of 58 fake universities and nine “degree mills.”

The Nigerian National Policy on Education has, right from its inception as a working document in 1969 before becoming a federal policy in 1977, recognised the place of open and distance learning (ODL) in achieving lifelong education and affirmed that lifelong learning shall be the basis of the nation’s education policy. In this regard, ODL is perceived as learning at a distance, facilitated by a number of media, including information technologies and the Internet, CDs, flash drives, printed materials, audio recordings, etc. Institutions that operate exclusively in this mode, without students having in-person class interactions, are considered single-mode service providers. Institutions that operate a mode in which students additionally attend classes in person at designated periods during the course of their studies are dual-mode or blended ODL service providers.

By 2021, Nigeria had a total of 15 universities offering ODL, out of which 11 were federal, two were run by state governments, while the other two were private. The National Open University of Nigeria (NOUN), a federal university, was the only single-mode ODL university in the country. It was also the largest university in West Africa in terms of student population, with a total of 640,942 enrolled students spread over 90 study centres and 15 correctional centres, as of 2021.

The commoditisation of technology in recent years, especially the affordability of smartphones, has opened up for all the universities and other tertiary institutions in Nigeria the opportunity to provide ODL facilities to the public, and thus complement NOUN in ODL service provision. Consequently, 14 Nigerian universities now offer dual-mode, blended ODL services. Further, the country offers dedicated single-mode teacher training through the National Teachers’ Institute (NTI), which provides teaching certification for thousands of elementary and secondary school teachers. Between them, these ODL facilities produce a large number of certified young men and women through accessible, flexible and cost-effective tertiary education and contribute significantly to human resource development in Nigeria.
As part of this situation analysis of ODL provision in Nigeria, a series of requests for engagement on the issue were sent to all 15 vice chancellors of universities that offer ODL in both single and dual modes. The NTI was not included in the sampling because it runs its degree programmes in affiliation with other universities.

Data were sought regarding institutional history, enrolment patterns, ICT infrastructure, funding mechanisms, and services to marginalised populations. Five institutions responded, representing 33.3%. The five that responded channelled the request to their Directors of Distance Learning at designated institutes. Archival data from NOUN, with additional updates, were extensively used, as these contained the most comprehensive picture of ODL operations in Nigeria. The data from NOUN were therefore considered “index” data in the sense of touching all bases, with the data from blended institutions providing additional emphasis where necessary.

Two main instruments were used to collect data. The first was a data sheet aimed at gathering information on all aspects of institutional operations. While some data were provided, financial data on budgets were either absent or highly unrealistic and therefore unreliable; consequently, data on budgets are not included in this report.

The respondents were also sent links to online questionnaires created through both Google Forms and Lime Survey, targeted at students, which they affixed to their portals. A total of 1,251 students fully completed the online questionnaires. The results from the two instruments were combined to provide a seamless integrated visualisation of the returns. The tabulated responses effectively reflect the online questionnaires. Attempts to further engage with the non-responding ODL providers were unsuccessful, and only one accepted a Zoom meeting. The survey therefore focused on assessing ODL “as is,” based on the available data provided.

The following recommendations are provided to guide government and ODL institutions toward addressing issues of quality, equity, access and cost-effectiveness:

*Integrating employability into the curriculum*

- It has become clear to governments, especially in Africa, that university curricula need to have a more functional focus than merely providing civil service and industry labour. ODL institutions are at the point of creating greater relevance to social development through flexible learning that boldly goes where no curriculum developer has gone before.

- The leverage offered by the National Universities Commission in 2022 that it will control only 70% of the university curriculum, while the individual universities have the leeway to create the rest of the 30% based on the peculiarities of their location, gives Nigerian ODL institutions an opportunity to create new forms of usability for the curriculum offered. This enhances the employability of the products of the universities — both conventional and ODL — through a more flexible digital offering of “trending skills” that are immediately acceptable to the labour markets.

*Rethinking assessment*

- The Covid-19 lockdown of 2020 clearly signalled the need for a new mode of curriculum delivery as well as assessment. The idea of continuing assessment in an in-person mode is anachronistic to ODL institutions. New forms of both delivery and assessment are needed. For instance, using audio books to replace course study materials, and employing remote proctoring of examinations are two ways of rethinking delivery and assessment to reach wider audiences within an ODL system.
Micro-credentials and lifelong learning

- ODL institutions provide an opportunity for continuous learning. The rigidity of the curriculum in Nigerian universities could easily be broken by introducing new courses that provide new competencies that enable individuals to understand the modern world, without the baggage associated with fixed curricula and the tedium of examinations. This is reflected in non-examinable competency courses that integrate with modern development. This pathway could prove effective in curing the “diploma disease” inherent in the Nigerian educational system.

Digitalisation

- Digitalisation is a second skin to ODL delivery systems. With podcasts, cloud storage, audio books, a variety of digital handheld devices, and marking scripts all online, it is clear that technology has become a commodity, indicating that the future has already arrived. ODL institutions should intensify efforts in digital literacy and competencies for students so they can explore more diverse modes of delivery.

Targeting women and persons with disabilities

- Lifelong social prejudices have always kept women at the margin of the mainstream. Nigeria, being a traditional and conservative society, is yet to see liberalisation policies that would enable women to achieve their potentials just like anyone else. ODL provides a liberating mechanism for women to achieve their targets while fulfilling the often outdated traditional stereotypes of their social obligations. At the same time, this should not mean that women will be shunted into “soft disciplines.” It is encouraging that NOUN, as an example of ODL at its best, has provided opportunities for women to study “hardcore” sciences and computing — giving them a competitive edge and the respect they deserve.

- People living with disabilities are often also shunted to the margins and, indeed, pushed out. ODL should give them opportunities that campus universities do not, by exploring various modes of digital delivery mechanisms that cater to their needs without being condescending. Already, digital handheld devices provide a series of access options for those with special requirements. These need to be mainstreamed into the conventional delivery systems of ODL institutions.
Section 1: Historical Overview of ODL in Nigeria

The most critical purpose of setting up any open and distance learning (ODL) institution or facility in Nigeria is to provide a range of opportunities for access to higher education to learners who, for one reason or another, prefer to acquire their education in a more flexible manner. Further, the low carrying capacities of Nigerian universities clearly limit the number of students who can be absorbed in any given institution, creating a massive gap between those who desire higher education and the infrastructure available to cater for their needs. Additionally, ODL is a tremendous benefit for women whose working circumstances, especially in African countries, limit their participation in public affairs, and whose burden of domestic responsibilities further restricts their access to higher education.

ODL as both a product and a process seems to have undergone transitions in meaning and emphasis over the years, from correspondence education to distance education and now, to the generally accepted open and distance learning. It is these transitions, coupled with widely differing practices in countries with ODL systems, that make a singular definition of ODL difficult. According to training modules produced by the Commonwealth of Learning (COL) in 2000, there is no one definition of open and distance learning. Rather, there are many approaches to defining the term. For instance, according to UNESCO (2002, p. 22),

- Distance education is any educational process in which all or most of the teaching is conducted by someone removed in space and/or time from the learner, with the effect that all or most of the communication between teachers and learners is through an artificial medium, either electronic or print. By definition, in distance education the normal or principal means of communication is through technology.

This definition acknowledges technology as a principal delivery mechanism for distance education. Massive transformation of the concept and practice over the years led to changes in nomenclature such that in its definition, COL (2020) included two subsets — open learning and distance learning:

- Open and Distance Learning (ODL) is the provision of distance education opportunities in ways that seek to mitigate or remove barriers to access, such as finances, prior learning, age, social, work or family commitments, disability, incarceration or other such barriers. “Open” refers to a commitment that removes any unnecessary barriers to access learning. Distance education refers to teaching and learning that temporarily separates teacher and learner in time and/or place; uses multiple media for delivery of instruction; involves two-way communication and possibly occasional face-to-face meeting for tutorials and learner-learner interaction. Open learning is not the same as distance learning, but both are complementary and hence the two terms are often used together as open and distance learning. (COL, 2020, p. 4)
This definition from COL is remarkable in its attempt to delineate the meaning of open learning. It recognises that certain mediums of distance education can also constitute barriers to access. This shortcoming is amended by the phenomenon of open learning, which has among its goals the elimination of barriers. This constantly challenges practitioners to at all times work toward all-inclusive education.

A critical element in the narrative of ODL in contemporary educational ecosystems is the integration of telecommunication systems as well as other media into the delivery mode, which now goes beyond radio and TV. This became clear with the Covid-19 pandemic, which forced a global lockdown of the planet for some months, beginning in February 2020. This made ODL a true hero in learning systems, thus emphasising the need for and critical role of information and communication technologies (ICT). As Russell (2009, p. 67) pointed out, “ODL usually requires a virtual learning environment (VLE) in which teachers use a range of online tools to teach students or to help them reach their educational goals.”

Access to university education, considered essential to the political economy of contemporary African societies, is further hampered for persons displaced by natural disasters, climate change, brigandage or insurgency in conflict societies such as Nigeria. In these circumstances, ODL is the equalizer and enabler of opportunities for acquiring higher education in Nigeria. It is for these reasons that governments across the political divide in the country pay significant attention to ODL provision.

Early Distance Education Initiatives in Nigeria

In Nigeria, the term used for “open and distance learning” initially, as in most countries, was “correspondence.” However, this was before “open and distance learning” became the standard internationally accepted referent for this mode of education. The expression became a double-edged sword in Nigeria. On the one hand, it was hailed as providing opportunities for people to acquire quality higher education at a distance. On the other, it was considered (especially much later) derisively as lacking the “human” touch required to enable effective emotional learning, especially with no learner support services in the beginning. Additionally, it was not seen as having any effective quality control mechanism. For a society raised on the conventional mode of education delivery, the idea of “learning on your own” was too much of an aberration. The ambivalence towards ODL was present even in the UK. For instance, Michael Young (1995, p. 4) noted that when the Open University (OU) was started in the UK, Walter Perry (the founding Vice Chancellor of the OU in 1968) recorded the “profound scepticism garnished with ridicule and hostility” with which it was largely received.

Early correspondence education in Nigeria relied on courses provided by foreign correspondence colleges — notably the University Correspondence College, Wolsey Hall and the Rapid Results College — all of which were British. By 1887, some Nigerians were able for the first time to enrol for examination at the University of London as external students studying through correspondence, without assistance from any established institution in Nigeria to prepare them for examination. All of them failed (Omolewa, 1982, cited in Ojokheta, 2010). Not losing hope of gaining higher education, more Nigerians persisted with the correspondence courses, and eventually, a trickle of Nigerians became a flood of students who were sufficiently successful in their courses. This enabled the production of highly valued members of the workforce who contributed to the independence struggle in Nigeria in the 1950s. Examples included Chief Hezekiah Oladipo Davies and Chief Obafemi Awolowo.
The idea of nonresidential higher education gained traction after Nigerian independence from Britain in 1960, when the government enabled national broadcast institutions to provide some form of distance education through radio and television. The trend is shown in Table 1.1.

Table 1.1. Earliest distance education initiatives in Nigeria

| S/N | Distance Education Initiative                      | Location                          | Year |
|-----|---------------------------------------------------|-----------------------------------|------|
| 1   | Distance education course by radio                 | Nigerian Broadcasting Corporation | 1960 |
| 2   | Educational television programmes                  | National Television of Nigeria     | 1966 |
| 3   | University of the Air                              | Ahmadu Bello University            | 1972 |
| 4   | Correspondence and Open University Unit (COSU)*    | University of Lagos                | 1974 |
| 5   | Teachers’ In-Service Education Programme           | Ahmadu Bello University            | 1975 |
| 6   | Teachers’ Training Programme                       | National Teachers’ Institute        | 1976 |
| 7   | Open learning                                     | National Open University           | 1983 |
| 8   | Centre for Distance Learning                       | University of Abuja                | 1990 |

*Later COSIT (the Correspondence and Open Studies Institute), then DLI (the Distance Learning Institute).

The reception of these early ODL prototypes, regarded then as distance education or open and distance education (ODE) services, was ambivalent in Nigeria. While it was seen as an opportunity to acquire higher education — and therefore better-paying jobs — there was also the feeling, fuelled by the conventional mode of learning in all Nigerian communities, regardless of culture or religion, that to learn, one needs to be directly in front of a teacher.

Thus, distance education started with broadcasts from the Nigerian Broadcasting Corporation and the Educational Television Programme of the National Television of Nigeria. At that early stage, ODE delivery gravitated to using normal media channels, mainly television and radio, to broadcast “educational programmes” to viewers. This would seem to be the base evolutionary pattern of ODE. As Jung (2019, p. 2) pointed out:

In the early 1990s, radio and TV were innovative and viable means to reach more learners in the history of ODE. In the USA, since the University of Wisconsin–Extension began to operate the first nationally licensed radio station for its programme, 176 educational institutions obtained licenses for educational broadcasting. . . . In Europe and Latin America, radio was more widely used than in the USA as an inexpensive broadcasting tool targeting a large number of audiences.

While the programme via radio was easily accessible to people in all communities, the radio being a common enough communication medium, the delivery via television tended to pose challenges to thousands of households that had neither television sets nor even the electricity to run them. Right away, then, even this idea of attempting to provide equal access in education did not meet its full objectives, since such access was available to only a certain category of people who could afford it, thus marginalising the rural populace and urban poor. It was therefore ironic that in the 1980s, when the idea of a distance learning university was considered, the fact of its being “correspondence” led to a lack of confidence in its quality assurance mechanisms.
The Single-Mode Evolution

The evolution of ODL in Nigeria has its antecedents in teacher training. In 1962, the government of the Northern Region of Nigeria, then a single geopolitical expression under the Ministry of Education of Northern Nigeria, networked their various teacher training requirements to the Institute of Education in Ahmadu Bello University, Zaria, which provided the Teachers’ In-Service Education Programme (TISEP); this served the training needs of active teachers during “summer breaks,” when the mainstream faculties were devoid of teaching activities. In 1976, the Institute of Education first offered the Nigerian Certificate of Education via correspondence.

Thus, while the attention of analysts and policy makers regarding ODL in Nigeria had always focused on the universities, this often glossed over the fact that the first single-mode ODL institution was introduced in the country in 1977 with the establishment of the National Teachers’ Institute, Kaduna by the federal government of Nigeria. Its aim was to produce the qualified teachers needed to meet the goals of the then Universal Primary Education (UPE) programme, which was also launched in 1976. This was the first segment of a new education system created in the aftermath of the 1969 curriculum conference, which saw the establishment of six years in primary schools, and a two-tier secondary school system comprising three years of junior high school and three years of senior high school.

NTI’s legislation charged it to provide courses of instruction leading to the development, upgrading, and certification of teachers as specified in the relevant course, using distance education techniques. Consequently, NTI was the first institution formally established in Nigeria to offer courses via ODL methods. It remains a key institute in the development of the professional and functional intermediate and lower-level teaching workforce needed for the nation’s educational system.

The difference between ODL in the universities and ODL at NTI is the client base. While ODL provisions in Nigerian universities in the single and dual modes target those who, for one reason or another, do not have sufficient opportunity to study in a university on a regular basis, the NTI provisions are aimed exclusively at teacher training. The lack of a university senate in its structure prohibited NTI from offering a full degree programme on its own, instead providing such programmes in collaboration with other universities in the country.

However, the trajectory of ODL in Nigeria was directly influenced by the evolution of the premier ODL institute in West Africa: the National Open University of Nigeria. It differed in two fundamental aspects. First, it embraced the idea of open and distance learning in its technical sense, i.e., using media technologies, albeit analogue at the time, to deliver content. The NTI, the first single-mode facility to be considered a proper distance education institution, focused on printed materials set by Ministry of Education officials in various states of the Nigerian federation. Further, it was hampered by the lack of a senate structure to validate its degree programmes and had to run these in conjunction with another institution. As Baño and Rumble (1993, p. 203) noted, “the state-examined papers have generally not been moderated by external bodies, an exception being the ten northern states where they are moderated by the Institute of Education, Ahmadu Bello University.” Secondly, NOUN was the first single-mode university in not only Nigeria, but the West African subregion, devoting its programmes exclusively to single-mode delivery; for despite its single-mode status, NTI is not a university.

The idea of an open university in Nigeria has been with the Nigerian Universities Commission (NUC), the Nigerian government regulatory agency for all universities, since 1976, when a commission under Professor Jubril Aminu, NUC Executive Secretary from 1975 to 1979, sent a memo to the federal government
suggesting that an autonomous open university should be established for the country as part of the Fourth National Development Plan (1981–85). This was accepted by the federal government, and the idea subsequently made its appearance in the National Policy on Education in 1977. In Section Five, paragraph 40, section A of the policy, the government declared:

Maximum efforts will be made to enable those who can benefit from higher education to be given access to it. Such access may be through universities or correspondence courses, or open universities, or part-time and work study programmes.

The Higher Education Division of the ministry immediately started planning the process of creating an open university and integrating it with the country’s existing educational system. By 1979, the idea had been incorporated into the political manifesto of the National Party of Nigeria (NPN) and became an electoral promise. The party won the presidential election in 1979, which saw the coming of Alhaji Shehu Usman Shagari as the president. To redeem his campaign promise, the president immediately set up a committee to work out the modalities of the university. Professor Gabriel Afolabi Ojo, then of Obafemi Awolowo University, Ile-Ife, was appointed chairman of the committee on 14 April 1980. A few weeks later, on 1 May 1980, the federal government of Nigeria inaugurated a Presidential Planning Committee on the Open University System in Nigeria. The committee was chaired by Professor Gabriel Afolabi Ojo, with Professor A. E. Afigbo and Dr Aminu Dora as members, and initially Mr. E. C. C. Uzodinna as the Secretary, later replaced by Mr. Olamogoke. The committee’s terms of reference were:

- to work out the educational functions of the university and formulate proposals on the form that they should take
- to draw up guidelines along which it would develop
- to operate a plan of operation so that the university could reach an enrolment target of 100,000 students in five years
- to examine ways in which radio, television, correspondence courses and face-to-face teaching could be used to attain the objectives of the open university and make concrete corrections
- to carry out any other assignments that would facilitate the discharge of these duties

The Presidential Taskforce presented its first report in October 1980. The report, which included a draft bill for the university, was approved by the government, and the National Open University Bill was sent to the National Assembly on 16 July 1981, where it was unreservedly passed by the House of Representatives. The Senate, however, held a fierce debate on the bill. While President Shagari presented it as the Open University of Nigeria Bill, 1981, the debates in the Senate changed the title, especially after a presentation by Senator Onyeabo Obi, then representing Anambra West/Onitsha. In his summation on 2 September 1981, Senator Obi urged that the university be referred to as the National Open University, to make it a national university, as distinct from other universities. This was accepted. However, despite the senators’ many positive views on the university, further discussions were stepped down by the Senate on 16 September 1981 on the grounds that an open university system was not technically feasible, given the erratic and unreliable performance of the country’s postal, telephone, electricity, radio and television services. There was, of course, no Internet in the country, as this was not introduced until 1996.

While the debate was raging on, in July 1981 the committee organised a Course Material Production Workshop. The primary aim of the workshop was to develop each of the topics of the syllabuses in the various courses into instructional materials that could be produced in the form of correspondence texts, audio and video cassette materials, radio and television broadcasts, teaching materials, and student assessment materials.
The main focus, however, was on the production of Foundation Year programmes that were more generally enriching in nature and would be a permanent feature of the university’s educational services to the public.

The workshop provided an opportunity for selected academics and representatives of media houses to interact with contestants in distance teaching from within and outside the country. It paved the way for various aspects of course material creation, spanning design, writing and production as well as the packaging and delivery of the materials for students’ use.

In the course of one year, the staff thus engaged were able to produce the outlines of courses for the Foundation Year Programme in a booklet of 44 pages. The course outlines were grouped into modules and units. Each of the six courses had a description as well as a breakdown of the contents into six modules. In turn, each module showed the breakdown of the syllabus under six units. A module covered a main topic of a course, while a unit — representing approximately the work that an average student was expected to cover in a week — dealt with a segment of a module. A course was made up of correspondence lecture notes, supplemented by radio and television broadcasts, as deemed appropriate, as well as necessary follow-up exercises, and directions for further readings.

Strenuous efforts were made to ensure that some of the best professors and lecturers in the Nigerian university system of the time were selected to write the course texts and to handle the corresponding radio and television presentations. From about the third week of January 1984, each of the first lectures of the six themes was being aired by the Nigeria Television Authority (NTA), one per week, in an unbroken succession. Within a short time, the enrichment lectures of the National Open University filled the air and evoked many appreciative responses. By early 1984, requests were being sent to the National Open University directly, as well as through the Federal Radio Corporation of Nigeria (FRCN) and the NTA, for repeat broadcasts of the lectures, which were at first aired between 1800 h and 2100 h, as advertised by both the FRCN and the NTA.

The university’s method of operation was to be based around study centres, which were identified throughout the country, and study centre managers, later referred to as study centre directors, were appointed to manage the centres in terms of enrolling students, disbursement of study materials, offering facilitation, conducting examinations, and providing library services. Enrichment lectures were initially broadcast on TV and radio stations throughout the Federation using the NTA and the FRCN.

Professor Gabriel Afolabi Ojo, the Chairman of the Presidential Taskforce, was appointed the University’s first Vice Chancellor on 1 September 1981. On 16 December 1981, the National Open University Bill was resubmitted to the National Assembly. During his address to the joint session of the National Assembly, then President Shagari said, on the question of the open university:

If I may say it here, the issue of the open university is still very much in my mind in spite of the initial setback it has suffered. I am convinced that such a university can offer immense opportunities to many of our citizens who may not have direct access to the traditional types of university education. I might remind you that there are many highly placed Nigerians in all walks of life, who have received university education by studying at home. In many developed countries, this system of education is operated and has been found to be extremely beneficial. (quoted in Mailafiya, 1986, p. 174)
Almost two years later, on 23 June 1983, the Senate and the House of Representatives finally ratified the bill, and on 22 July 1983, the act received presidential assent and was gazetted on 27 July 1983 as the National Open University Act, No. 6 of 1983, thus giving the university the legal basis for its existence.

From the very beginning, the university was designed to be based in the Federal Capital Territory to give it centrality for every part of Nigeria. At the time, Abuja was being built up as the new federal capital, with Lagos as the de facto capital. The university was located in the Presidency in Lagos — a fact that cast a pall on its credibility as an independent educational institution, under the control of neither the NUC (which had conceived it) nor the Federal Ministry of Education (which had midwifed it); consequently, it was seen as a political move by the ruling NPN party. Eventually, an operating office was found for it at Adeniran Ogunsanya Street, Surulere, Lagos, in addition to an Abuja operating office.

However, initial teething problems — which included a lack of proper interfaces between responsible agencies, along with political suspicion and rivalry — did not help matters. Subsequently, from October 1981 to August 1983, the pages of the Nigerian press were awash with mainly negative views of the university, offset by only a few editorials, opinions and letters supporting its establishment. To boost confidence, the university decided to introduce inaugural lectures starting in the 1984/85 academic year, to be initiated by Professor Afoloabi Ojo, the Vice Chancellor. The first was delivered on 24 April 1984. The university then had a nascent Senate of ten professors, about 15 other academic staff below the rank of professor, and a few administrative staff. The Chancellor of the university at that time was Alhaji Aliyu Obaje, the Attah of Igala, while the Pro-Chancellor was Alhaji Shuaibu Na‘ibi, the Madakin Suleja. The Acting Registrar was Alhaji H. A. Erubu.

On 31 December 1983, a military coup toppled the presidency of Alhaji Shehu Usman Shagari and ushered in a new military regime, casting further uncertainty on the university. Yet despite its teething problems, according to Mailafiya (1986, p. 185, Vol. 1), between March and April 1984, about 20,000 students paid a nonrefundable fee of NGN 10.00 each for application forms to the university — which attested to Nigerians’ desire for the university.

However, before they were even registered, the Nigerian government suspended the National Open University on 25 April 1984 — barely a day after its first inaugural lecture was delivered. The justification for the suspension was made by the then Military Head of State, Major-General Muhammadu Buhari:

> The Government has given serious consideration to the National Open University programme and found that the infrastructures to make the programme successful are not available and adequate. The Government has decided that in the present financial situation, Nigeria could not afford the Open University programme. Existing universities with schemes for part-time students will be encouraged to expand their programmes to take in more students. This would provide university education for those who would have wished to avail themselves of the opportunity of the Open University programme. (quoted in Mailafiya, 1986, p. 185).

The thirst for higher education in Nigeria remained unfilled, and soon enough, alternative pathways were created, particularly towards university education in the country.
Distance Learning via Satellite Campuses

The open university’s state of suspended animation in 1984 created opportunities for various conventional universities to literally cash in and establish what came to be called “satellite” and “outreach” campuses of these universities in various cities across Nigeria from the mid-1980s.

In effect, these satellite campuses were based on the original template of the National Open University and were little more than “study centres” for the universities that licensed them. Being linked to a conventional university made them attractive to thousands of students who had initially hoped to enrol in the now aborted National Open University. However, their proliferation and mode of operation — which included using business centres as study locations — created a lot of concern about the quality of education produced by these satellite campuses. Further, they operated without permission or licence from the regulatory agency, the National Universities Commission. Eventually, the NUC came up with a rash of measures to penalise erring universities and outreach centres through non-recognition of certificates awarded by the satellite campuses, and de-recognition of all courses offered on the main and satellite campuses of affected universities.

The outreach programmes’ proliferation over a large span of time (from 1983 to 2001) and their mode of operation raised some concerns, criticisms and condemnations. As Adeyemi and Osunde (2005, p. 2) noted, such criticisms of Nigeria’s outreach programmes range from awkward lecture times, large number of students, and lack of qualified academics/lecturers needed to teach outreach courses. Such “substandard conditions” are typically tolerated by the public, however, primarily because outreach centres are operated under the umbrella of the parent university, and hence tend to have an aura of legitimacy about them. The fact still remains, however, that outreach centres are typically looked upon as inferior to “real university programmes” by the general public.

Further, none of the outreach programmes offered any quality assurance mechanism or underwent accreditation. The NUC repeatedly asked the universities operating the satellite campuses to close them but were ignored. Eventually, however, the criticism and employers’ refusal to recognize the degree certificates obtained via the outreach satellite campuses of the universities forced the federal Ministry of Education to direct the NUC to close these campuses, after a verification exercise that recommended their closure in August 2001 (Federal Ministry of Education, 2001). The senate of each institution with satellite outreach centres was ordered to devise a means of discharging the students already pursuing various programmes under the system.
Resuscitation of the National Open University of Nigeria

In 1999, Chief Olusegun Obasanjo was elected the 12th President of Nigeria on the platform of the People’s Democratic Party (PDP). He remained president until 2007. This was the first election in 16 years, after a series of changes in the country’s government since 1983.

One of the first focus areas of President Obasanjo’s administration was the issue of open and distance learning. It was clear, of course, that the thirst for higher education, especially among the working class and civil servants, was what had prompted the proliferation of satellite campuses to begin with. To satisfy this thirst, the government set up a committee that recommended the resuscitation of the suspended National Open University.

Thus, by 1 October 2001, the idea of reviving the National Open University had entered the government policy narrative. The idea was given firmer rooting during a summit on higher education held from 11 to 16 March 2002. The federal Ministry of Education, under Professor Abrahim Babalola Borishade, set up a high-powered committee to revisit the resuscitation of the university under the chairmanship of Professor Olugbemiro Jegede. On 12 October 2001, Professor Olugbemiro Jegede, “on loan” to the federal government of Nigeria by the Open University of Hong Kong, was appointed National Co-ordinator of National Open and Distance Education Programmes, as it was then, and was made a member of the initial permanent staff of the National Open University by President Olusegun Obasanjo. By then, the federal Ministry of Education headquarters had moved to Abuja. An office space was allocated for the university in the basement of the federal Ministry of Education Annex along Samuel Adesoji Ademulegun Street, Central Area. The building contained the Education for All project administration and the Federal Scholarship Board.

The government, through the then Education Trust Fund (ETF), which became the Tertiary Education Trust Fund in 2011 (TETFund), approved renovations of the structure. TETFund is an intervention agency set up to provide supplementary support to all levels of public tertiary institutions, with the main objective of using funding alongside project management for the rehabilitation, restoration and consolidation of tertiary education in Nigeria. The main source of income available to the fund is the 2% education tax paid from the assessable profit of companies registered in Nigeria. The Federal Inland Revenue Services (FIRS) assesses and collects the tax on behalf of the fund.

In 2002 the suspended National Open University Act of 1983 was reactivated, providing a firmer legal basis for the university. The nascent management of the university took a strong view that the name of the university should be National Open University of Nigeria to properly identify the National Open University as that of Nigeria, as is the case with the Open University of the United Kingdom. The government bought the idea and started recognising the university as the National Open University of Nigeria (NOUN). This was the name by which the university was officially referenced in the NOUN (Amendment) Act, 2018.

TETFund then sponsored a team of experts from all over Nigeria to converge at the Confluence Beach Hotel, Lokoja, Kogi State in March 2002 to write the study materials for the initial courses to be offered in the university. This was preceded by a workshop facilitated by the Commonwealth of Learning (COL), Canada on course materials development and adaptation in which the expertise of COL was brought to
bear on the new materials to be developed. On 15 July 2003, the federal government ordered the relocation of the university to the then abandoned federal Ministry of Education Building at 14/16 Ahmadu Bello Way, Victoria Island, Lagos. The building was renovated by TETFund. On 20 October 2003, Professor Jegede was confirmed as the substantive Vice Chancellor of NOUN, making him the second after Professor Gabriel Afolabi Ojo, who had started the university in 1983. The university commenced full operation in 2004 with about 9,700 students in 23 study centres across the federation. It held its first convocation on 6 January 2009.

The Federal Executive Council also had transferred ownership of the National Educational Technology Centre (NETC) in Kaduna (and close to NTI), established in 1977, to the National Open University in July 1983 as a startup for educational broadcasting. The NETC is now the Centre for Human Resource Development (CHRD), while its former functions have been subsumed under a new e-learning platform.

During Nigeria’s Third Republic in 1993, two political parties were formed by the government under the military General Ibrahim Babamasi Babangida: the National Republican Convention (NRC) and the Social Democratic Party (SDP). The government created two political party headquarters for the two parties in every state in Nigeria. Eventually, the Third Republic collapsed. When the National Open University was resuscitated, the NRC and SDP party headquarters across the federating states were allocated as study centres for the university. Where these former party headquarters were already in use, office spaces in colleges of education and other buildings were often rented by the university to serve as study centres.

The present permanent site of the university at Kuchigoro village in 91 Cadastral Zone, in Jabi District, Abuja was allocated to the university on 10 March 2006 by the Ministry of Federal Capital Territory. With a completely brand-new campus built on the site, again with funds from TETFund, the university moved from Lagos to Abuja in 2016, converting its Lagos offices to a liaison office as well as an examination centre for Lagos and its environs.

Teaching and Learning Systems

Open and distance learning (ODL) is the mode of teaching and learning in NOUN. The various forms in which NOUN deploys ODL include self-learning materials, face-to-face facilitation of students, online facilitation, and radio facilitation. The other 14 ODL service providers in Nigeria rely on in-person, face-to-face meetings for their students at designated periods and locations in their directorates.

Self-learning materials are regarded as course materials at NOUN. Each course in the university is developed into modules that conform to the Benchmark Minimum Academic Standard (BMAS) prescribed by the NUC. As a rule, NOUN’s self-learning materials are available in print, CD and online formats, although by 2015, they were no longer produced on CDs but instead as PDFs uploaded to the university’s site. A typical self-learning package contains course objectives, course requirements, study units, summaries, self-assessment exercises, and book suggestions for further reading. As is the practice in ODL institutions, NOUN’s self-learning materials are mostly prepared by in-house subject-matter and ODL experts. In cases where these are not available, subject experts are sourced both locally and internationally. Quality assurance of the self-learning materials is in the form of a collaborative approach to their development, which involves a subject expert (also called the course developer), an instructional designer, an ODL expert, a language editor and a content editor.
Some dual-mode centres follow a similar pattern. For instance, at the University of Lagos Distance Learning Institute (UNILAG DLI), study materials for learners must pass through a three-stage editing process for content, language, and ODL instructional design. Clearly specified learning outcomes for each study session, in-text questions and self-assessment questions are designed to ensure learners intermittently evaluate their learning progression.

Despite easy availability of the Internet for students, LAUTECH ODLC (Ladoke Akintola University of Technology Open and Distance Learning Centre) distributes its study materials via a DVD, as well as putting them on a portal. Putting them on DVDs, though requiring a DVD player on a laptop or a separate device, circumvents Internet access challenges.

Face-to-face facilitation is at times deployed in some of courses to aid students’ appreciation of their subjects in their various study centres, in a process referred to as “facilitation.” However, at NOUN there are courses for which face-to-face facilitation is mandatory. They include all law courses, as well as practical science and nursing science courses. The online facilitation platform provides the opportunity for central co-ordination of every course by NOUN faculty. NOUN Radio, an FM station in Lagos, has also been deployed for facilitation purposes. NOUN is the only ODL service provider with a dedicated radio station as a form of reaching students.

NOUN students are assessed in a variety of ways. The first of these comprises self-assessment exercises that check students’ comprehension at the end of every unit of a course. No marks are awarded for these, but students are strongly advised to attempt each self-assessment exercise before proceeding to another unit. Computer-marked assessment is also used, comprising three sets of fill-in-the-blank questions and multiple-choice questions. These are worth 30% of the final grade. The semester examination, which comes at the end of each semester, carries the remaining 70%.

NOUN also deploys learning technologies in various forms: the Web, e-learning, teleconferencing, video, open educational resources (OER), and massive open online courses (MOOCs). These are driven by a strong management information system and the university’s ICT division.

Learner Support Services

Given the spatial separation between learners and tutors in ODL systems, NOUN established a vibrant Directorate of Learner Support Services, offering guidance and counselling services to students on a wide range of issues that include choice of programmes, studying in an ODL system, course and examination registrations, and many others.

Since the study centres bridge the interaction between the university and its students, most of the learner support services are undertaken at the study centres. Libraries, ICT, moot courts, and laboratories are some of the learner support services offered in the study centres. However, the university also has a Visitor Information and Communication Centre that attends to students’ needs at the headquarters.
## Dual-Mode ODL Centres

While NOUN remains the “gold standard” in the provision of ODL experiences — not only in Nigeria but also for the rest of Africa south of the Sahara — university management committees across Nigeria felt the need to supplement NOUN’s efforts through the provision of similar modes of instruction to their local communities. This, in spite of the fact that NOUN has 105 study centres across the nation with a combined population of 640,942 enrolled students.

However, as comprehensive as NOUN’s programmes are, they nevertheless do not cover some areas that many students want; being an online university means it can offer students in some disciplines few chances for hands-on interactive learning. Further, courses such as engineering, medicine and pharmacy are more easily handled in dual-mode institutions affiliated with mainstream universities that can share their specialised facilities with dual-mode students.

As a result of these observations, the NUC granted permission to universities in Nigeria wishing to offer ODL but in a limited way. Thus, by December 2021, the NUC had granted permission to 14 universities across Nigeria to offer a blended mode of ODL. These institutions are indicated in Table 1.2. NOUN is excluded from the list, as it remains a single-mode ODL university.

### Table 1.2. Nigerian universities offering dual-mode ODL (as of October 2021)

|   | Institution Name                                                                 | Status       |
|---|----------------------------------------------------------------------------------|--------------|
| 2 | Distance Learning Centre, Ahmadu Bello University, Zaria                          | Federal      |
| 3 | Distance Learning Centre, University of Ibadan                                    | Federal      |
| 4 | Federal University of Technology Minna, Centre for Open Distance and eLearning    | Federal      |
| 5 | Modibbo Adama University of Technology, Yola, Centre for Distance Learning         | Federal      |
| 6 | Obafemi Awolowo University, Ile-Ife, Centre for Distance Learning                 | Federal      |
| 7 | University of Abuja, Centre for Distance Learning and Continuing Education        | Federal      |
| 8 | University of Ilorin, Centre for Open and Distance Learning                       | Federal      |
| 9 | University of Lagos, Distance Learning Institute                                  | Federal      |
| 10| University of Maiduguri, Centre for Distance Learning                            | Federal      |
| 11| University of Nigeria, Nsukka Centre for Distance and eLearning                   | Federal      |
| 12| Babcock University Iliana-Remo, Centre for Open Distance and eLearning            | Private      |
| 13| Joseph Ayo Babalola University Centre for Distance Learning                       | Private      |
| 14| Ladoke Akintola University of Technology Open and Distance Learning Centre        | State        |
| 15| Lagos State University Open and Distance Learning and Research Institute           | State        |

Source: National Universities Commission (2022)
It is interesting to note that the university ODL centres in Nigeria are predominantly in the South West part of the country (Figure 1) — a section that also has the largest number of private and public universities. If anything, this clearly shows the inequality of educational opportunities across the Nigerian geopolitical zones and further emphasises the desirability of open and distance learning, even in regions with high densities of universities.
Section 2:
Access, Quality and Equity in Nigerian ODL Provision

General Access to Higher Education in Nigeria

Access to higher education is a topic of concern, with direct consequences for national educational policies, the development of the labour market, and quality of life. Nigeria prides itself as being able to provide equitable access to education, regardless of religion, gender and ethnicity, and this is clearly stated in the country’s National Policy on Education (1971). However, consistent surveys by both government and independent researchers have indicated a massive gap between the population eligible for education in all sectors and those enrolled in the various levels of education. As Prodan et al. (2015) pointed out, discussions on access to higher education reveal interesting trends and patterns. For instance, Finnie et al. (2008), Forsyth and Furlong (2000) and Heller (2001) identified barriers that restrict access, while Vukasović and Sarrico (2010) analysed access on the basis of inequalities.

Challenges of access to education pose human resource problems for the development agenda in any country. This is more so in current globalised transnational economies requiring a diversity of skills and competencies to achieve and retain competitive advantages in the workplace. At a higher risk level in gaining access to education are women who, for one reason or another, were either edged out, pushed out, or disenfranchised by cultural or policy forces from fully participating in education at both lower and higher levels.

By 2021, there were 202 universities in Nigeria, of which 49 were federal, 57 belonged to the various state governments spread across 36 states of the Nigerian federation, and 111 were private. The large number of private universities — only four fewer than the combined state and federal — shows that the overwhelming demand for university education far exceeds what the federal government can provide. In addition, 14 universities, comprising ten federal, two state and two private universities, have a licence to operate ODL blended-mode instruction.

Access to higher education in Nigeria is negotiated through a battery of examinations whose overall effect is not to eventually select the best candidates for the various segments of schooling, but to create high examination anxiety, reflected in intense fear or panic (Bassey & Iruoj, 2016), often leading to a multitude of examination infractions (Okorodudu, 2013).
The main gateway to higher institutions in Nigeria is the Unified Tertiary Matriculation Examination (UTME). This was introduced in 1978. Prior to its establishment, students wishing to enter universities usually applied directly to the university of their choice, and based on the results of both their high school and their post-high school examination results, they were often admitted. This, however, led to multiple-admissions stress for students, who had to travel to the various cities where the universities of their choice were located, at a time when there were few universities in the country. The federal government of Nigeria felt the need to create a uniform platform that would provide admission to higher education institutions based on the results of a national matriculation examination to be conducted by a new examination board, known as the Joint Admission and Matriculation Board (JAMB).

The establishment of the board was actually the result of an initiative of the Nigerian Committee of Vice Chancellors (CVC), which was worried about multiple applications for admission as well as multiple offers of admission by Nigerian universities to applicants. In such instances, several universities ended up admitting the same students, who individually took admission in just one of the universities while effectively blocking other prospective students from being admitted. Consultants from the Universities Central Council for Admissions (UCCA) in the United Kingdom, and the Ontario Universities Applications Centre, in the Canadian province of Ontario, provided a blueprint for the establishment of the Nigerian board, based on their own institutional structures.

JAMB was established in April 1977, although it became fully operational in February 1978. The primary functions of the board were to determine matriculation requirements for the first degree programmes of Nigerian universities at that time, although its oversight subsequently expanded to include other further education institutions, the establishment of a joint matriculation examination for candidates seeking places in these institutions, and the placement of suitably qualified ones in the available places within the institutions. The first nationwide Joint Matriculation Examination was conducted on 29 April 1978, and candidates were placed in all the universities based on their preferences and level of performance in the examination.

The number of applicants seeking admission into the various Nigerian higher institutions has been on the increase, as reflected in a recent five-year period. While there were more applications from males, there was also a corresponding increase in female applications. However, in both cases, the number of those admitted was far fewer than the number of applicants (See Table 2.1).

| Year | Application | Admission |
|------|-------------|-----------|
|      | Male        | Female    | Total | %F | Male | Female | Total | %F |
| 2015 | 826,429     | 649,171   | 1,475,600 | 44 | 325,152 | 248,885 | 574,037 | 43 |
| 2016 | 895,233     | 697,229   | 1,592,462 | 44 | 336,113 | 266,466 | 602,579 | 44 |
| 2017 | 952,422     | 769,814   | 1,722,236 | 45 | 315,792 | 251,220 | 567,012 | 44 |
| 2018 | 902,176     | 750,951   | 1,653,127 | 45 | 319,541 | 263,057 | 582,598 | 45 |
| 2019 | 1,022,161   | 864,327   | 1,886,488 | 46 | 338,002 | 291,649 | 629,651 | 46 |
| 2020 | 1,063,146   | 886,837   | 1,950,983 | 45 | 277,078 | 250,851 | 527,929 | 48 |

Source: Fieldwork data from JAMB, Abuja, 2021.
Inability to secure admission into the conventional universities has negative consequences for students, causing some to retake the UTME examinations as many as five or more times yearly, further increasing stress levels among students.

Many factors are responsible for the low admission of Nigerian students into the various universities, as reflected by the JAMB statistics in Table 2.1. The first is simple examination attrition — not every student passed every examination, especially in situations where the prior educational levels had not sufficiently prepared students for overcoming the hurdles necessary to go to the next stage.

Second is the issue of carrying capacity; the various higher institutions, particularly universities, impose a limit on their admissions every year, especially to publicly funded institutions at the federal and state levels. The only mainstream alternative, for those who can afford it, are private universities, which are often expensive and as a result never exhaust their carrying capacities. Yet there was, and still is, considerable reluctance on the part of applicants for higher education to consider applying to distance learning institutions, especially students making the immediate transition from secondary school to university.

Modelled after NOUN, the distance learning institutions are mainly targeted at, and certainly appeal to, those who are already gainfully employed and are seeking a flexible mode of learning that will enable them to acquire certification for career progression or even career change. To affirm the open access component of ODL, JAMB exempts applicants for ODL programmes in both NOUN and other universities offering blended ODL from JAMB selection examinations. This has had the overall effect of channelling thousands of applicants to both NOUN and blended ODL facilities — thereby reducing examination stress for some students. It should be understood that the UTME examinations are purely for selection, or more accurately, for reducing the number of students who can gain admission to higher institutions, to cope with carrying capacities.

Access to ODL Provision in Nigeria

As previously described, the historical antecedent of satellite campuses in Nigeria gave rise to the resuscitation of NOUN in 2002. The demand for university education has persisted, especially among civil servants and those who were, in one way or another, edged out of the mainstream education system. While NOUN provides 105 study centres across the country, many Nigerians still have their suspicions about following a self-paced independent course of study and prefer a system that involves elements of in-person tutor interaction. It is for this reason that universities who feel they could offer ODL in a blended form have requested permission to run an ODL mode. This works well for some of the more conservative disciplines in the Nigerian higher education system. Specifically, study towards a law degree is prohibited via ODL by the Council for Legal Education (CLE), which insists there must be elements of tutor–student interaction in degree programmes. Despite the provisions for such interactions in dual-mode institutions, the CLE still has its reservations about ODL that is not pursued in a full-time residential mode.

The instrument for measuring access to higher education has been the gross enrolment ratio (GER). As Mittal et al. (2020, p. 35) pointed out, “typically, GER is the ratio of the number of enrolments in higher education to the total population in the age group of 18–23 years.” However, taking a different stance, Malish (2020) argued against this formula by pointing to other variables, such as sociopolitical elements,
that can affect GER. Available data on higher education in Nigeria show that the GER was about 14% in 2018 (UIS, 2022). Data on the contribution of distance education to GER are not available.

Course Offerings

The aggregated figures for all the undergraduate courses offered in the ODL institutions in Nigeria can be reduced to 26 courses. These are listed in Table 2.2.

Table 2.2. Courses offered in Nigerian ODL institutions/facilities

| Arts and Humanities | Social & Management Sciences | Education |
|---------------------|-----------------------------|-----------|
| BA English          | BSc Accounting              | BA Education |
| BA Communication & Language Arts | BSc Business Administration | BSc Education |
| BA History & Diplomatic Studies | BSc Economics | BEd Educational Management |
| BA Philosophy and Public Affairs | BSc International Studies | BEd Adult Education |
|                     | BSc Marketing               | BEd Guidance & Counselling |
| Health              |                             |           |
| BSc Community Health| BSc Public Administration   |           |
| BNSc Nursing Science| BSc Psychology              |           |
|                     | BSc Sociology               | BSc Agricultural Ext. & Rural Dev. |
| Science             |                             |           |
| BSc Computer Science| BSW Social Work             | BSc Agricultural Economics |
| BSc Statistics      |                             |           |

Source: Fieldwork data returned from responding institutions, 2022.

From Table 2.2, it would appear that ODL subject offerings in the blended institutions in Nigeria are based on a cautious strategy of ensuring that courses are offered in as “soft” a way as possible. For instance, Nursing and Community Health are usually offered by practitioners who have access to their workplaces for laboratory and other competency skills. Computer Science, relying significantly on the study of algorithms and data structures rather than dedicated laboratories, appears “soft” due to its lack of absolute reliance on infrastructural requirements (compared, for instance, with Computer Engineering).

The Education courses are categorised as belonging to general education, although they offer a variety of specialisations, ranging from Early Childhood Care to Islamic Studies and History; similar subject specialisations are offered in the BEd cluster of degrees. Social and Management Sciences courses were subscribed to more by ODL blended students than any other category, principally because of their professional focus, offering the students a certification needed to move along the ladder of success in their workplaces.

Significantly absent were courses in areas such as Law, Medicine and Engineering. The practice of these disciplines in Nigeria is controlled by extremely powerful professional regulatory bodies that take umbrage at the idea of any of these disciplines being taught via ODL, even in a blended mode. NOUN, despite being
a single-mode institution, took about seven years to get the Nigerian Law School — the institution that provides vocational training for graduate lawyers in Nigeria to enable them to be called to the bar — to accept law graduates from NOUN.

However, notwithstanding the powerful sub-regulators of the medical and engineering professions in Nigeria, currently no facility in any Nigerian university can provide effective medical or engineering training via ODL.

The course offerings at NOUN are more diverse. This reflects the national geographical spread of the university as a single-mode institution available in all 36 states of the federation, often with more than two study centres in a state. With a more controlled and centralised management information system, it became easier for NOUN to provide a universal view of its course offerings, as indicated in Table 2.3.

### Table 2.3. Undergraduate course offerings in NOUN (single-mode institution)

| Arts and Humanities                          | Management Sciences                        | Education                              |
|---------------------------------------------|-------------------------------------------|----------------------------------------|
| BA English, BA French, BA Arabic, BA Hausa, BA Yoruba, BA Igbo | BSc Accounting                            | BA Education                           |
| BA Islamic Studies, BA Christian Religious Studies | BSc Business Administration                | BSc Education                          |
| BA Philosophy                               | BSc Economics                             | BEd Educational Management             |
|                                             | BSc Entrepreneurship                      | BEd Adult Education                    |
|                                             | BSc Entrepreneurship                      |                                        |
| Health                                      | BSc Marketing                            | BEd Guidance & Counselling             |
| BSc Public Health                           | BSc Political Science                     | BLIS Library and Information Studies   |
| BNSc Nursing Science                        | BSc Public Administration                 |                                        |
| BSc Environmental Health Science            | BSc Co-operative and Rural Development    |                                        |
| BSc Entrepreneurship                        | BEd Educational Management                | BAgri Agricultural Economics and Agro Business |
| Agriculture                                 | BAgri Ext. & Rural Development            |                                        |
| Science                                     | BSc Mathematics, BSc Biology, BSc Chemistry, BSc Physics |                                        |
| BSc Computer Science                        | BSc Economics                            | BAgri Animal Science                   |
| BSc Information Technology                  | BSc Economics                            | BAgri Soil & Land Resources Management |
| BSc Environmental Management and Toxicology | BSc Peace Studies and Conflict Resolution | BAgri Crop Science                     |
| BSc Mathematics, BSc Biology, BSc Chemistry, BSc Physics | BSc Criminology and Security Studies     |                                        |
|                                             | BSc Broadcast Journalism                  |                                        |
| Law                                         | BSc Tourism Studies                       |                                        |
| LLB                                         | BSc Political Science                     |                                        |
|                                             | BSc Film Production                       |                                        |
|                                             | BSc Mass Communication                    |                                        |
|                                             | BSc Development Studies                   |                                        |

Source: NOUN (2018)
The wider curricular offerings in NOUN, especially at the undergraduate level, as well as the presence of NOUN study centres in every territory of Nigeria, actually lessen the desire to open blended institutions, because NOUN is available everywhere. The problem NOUN faces, however, is the feeling that ODL learning in a “regular” university carries with it the prestige attached to that university. In my discussions with ODL directors, they pointed out that the main prestigious universities in the country (Ahmadu Bello University, University of Lagos, University of Ibadan, Obafemi Awolowo University, University of Nigeria, Nsukka) offer ODL, and students prefer to get their ODL degree certification from these places. Tutors and students further mentioned that these universities are “name-dropped” by students without feeling the need to clarify that they were ODL students.

This indicates a somewhat reluctant acceptance of single-mode ODL institutions because of what both service providers and clients view as an unorthodox method of higher education delivery. This is further based on the evolutionary trajectory of ODL in Nigeria, starting with NOUN in 1983. In the beginning, there was too much reliance on non-digital means of delivery — audio and video cassettes, reel tapes, etc. CDs and then DVDs were considered cutting edge. This development created something of a crisis of confidence in the delivery mode of NOUN — an aftertaste that carried into 2000s. Thus, for many students, it has made sense to subscribe to blended ODL in more conventional universities.

And yet, despite such reservations, NOUN still has the highest population of ODL students, not only in Nigeria, but in all of Africa.
Curriculum Design

Regardless of their ODL delivery system, all ODL institutions in Nigeria offer courses based on Benchmark Minimum Academic Standards (BMAS). This is a series of curricular offerings in the disciplines recognised by the NUC. When NOUN was resuscitated in 2002, the strategy adopted for course design was adaptation of course offerings in similar institutions. Course materials from Indira Gandhi National Open University and the Open University, UK were licensed to NOUN, and a team of curriculum experts was engaged in campus mode for over a month, adapting the various materials to the Nigerian educational structure.

The course materials were therefore not created anew from the ground up but as adaptations based on a system analysis of learner profiles from other learning systems. This was caused by the desire at the time to ensure as rapid implementation of the objectives of the university as possible, coupled with little experience in the development of ODL materials. Indeed, a pre-workshop training of NOUN staff had to be conducted by the Commonwealth of Learning to sensitize the newly re-established university community to the mechanisms of ODL.

Quality Assurance

Assuring quality in ODL programmes was a major challenge. At its earliest developmental stage, in the 1960s up to the 1980s, the question of quality assurance was on the back burner. Institutions offering ODL modes internally assured the quality of their programmes. However, following the resuscitation of NOUN at the turn of the century, the NUC established a dedicated Directorate of Open Distance and eLearning for the accreditation, monitoring and quality assurance of ODL programmes in the universities. The Directorate sends ODL experts, drawn mainly from ODL-offering institutions across the country, for the accreditation of ODL programmes in the dual-mode institutions and all NOUN programmes. Thus, apart from ensuring the adequacy of academic programmes, accreditation of ODL programmes in Nigeria also involves ensuring the suitability of the institutions’ ODL standards.

Further quality assurance, in the form of peer-to-peer review, is also provided by the African Council on Distance Education (ACDE). The ACDE has a quality assurance directorate, domiciled in NOUN. The Directorate developed a toolkit for the further assessment of ODL programmes. In all, the guarantee and perception of quality play a big role in the overall acceptance of ODL programmes in Nigeria and have led to increases in the number of enrolments in programmes.
Section 3: Flexible Learning and Students’ Attitude to ODL in Nigeria

ODL students in Nigeria fall into two categories: enrolled and registered. Registered students are those who continuously pursue their studies, without pausing for a year or a semester. Enrolled students include anyone who was admitted and has started their studies. Sometimes, students pause their studies. The metrics of an institution will always capture these students as having valid registration so long as they are still eligible to return to their studies. Thus, “enrolled students” includes both registered students and those who have paused their studies at a material time.

While governments and institutions provide ODL services in Nigeria, very little research has been conducted to determine the attitude of students towards such educational provisions. The introduction of NOUN in 1983 met with a lot of resistance among law makers in the National Assembly, as well as the general populace, as reflected in the fierce debates in newspapers following the declaration of the university. When ODL became an accepted form of educational delivery in Nigeria, following the success of the only single-mode ODL university, NOUN, thousands of students subscribed to it as a more flexible, cost-effective alternative to conventional university education. This was fuelled by perennial strikes by the academic staff union of universities, which led to work stoppages that often lasted months during industrial disputes with the government. NOUN has no centralised (i.e., nationwide) academic staff union and therefore is immune to industrial action by such unions, unlike the federal and state universities in Nigeria.

Although there are 15 ODL institutions in Nigeria, they provided varying levels of student response concerning their status, with the highest being from Ladoke Akintola University of Technology (LAUTECH) ODLC.

Study Data

To determine the attitude of current students to the ODL instruction they receive, online questionnaires using two web-based survey platforms, LimeSurvey and Google Forms, were administered to students in ODL institutions in Nigeria. A total of 1,251 returned valid responses. The precise population of the students, which kept fluctuating across the institutions due to the flexible nature of the programmes offered, was not determined. It was also not a critical criterion in determining students’ views on the efficacy of the programmes they are studying. The main objective of the survey, as noted earlier, was to determine the extent to which students feel satisfied with ODL as a form of instruction.
The responses were self-selected in the sense that the respondents had the option of either participating or not. There were no particular difficulties reported by the students concerning the questionnaire items. The survey focused on attitudes, motivation for choosing ODL, age distribution, perception of ODL, satisfaction with the ODL experience, and post-ODL expectations. The results were analysed based on simple frequency counts of responses towards the items, and no further quantitative measures were taken in the analysis. The purpose was not to compare between institutions but to determine the individuals’ perceptions about the efficacy of ODL in modern times, and most significantly, how it affects their lives and the contribution ODL makes to human resource development in the country. Subsequently, no attempts were made to compare the attitudes of students across institutions, programmes offered, regional location, equity or gender. Each variable in the online surveys was seen as an independent reflection of a student’s views on the programme offered.

**Demographics**

**Study status**

While technically ODL students in Nigeria are non-residential, 42% of those who responded across the 14 ODL centres indicated they are full-time students, as shown in Table 3.1.

| Category | Frequency | %  |
|----------|-----------|----|
| Full-time| 537       | 43 |
| Part-time| 714       | 57 |
| Total    | 1,251     | 100|

The respondents’ answers to this question could be attributed to their understanding that they are, paradoxically, “full-time” in a “part-time” mode. For while dual-mode students attend classes only on a particular time track, they are categorised as full-time, to distinguish them from regular part-time provision, which has a longer completion period and takes place more regularly (e.g., either on weekends or in the evening after the closing hours of shops and offices). In other words, the delivery mode in the ODL curriculum is structured around the number of years students spend in regular degree programmes, whereas the curriculum of part-time programmes is deliberately structured around a longer delivery period, often being two years more than the conventional degree programme.

**Age range**

The flexible nature of ODL is perhaps its most enduring characteristic. By being open to all, and at all times, it offers opportunities for those who “missed out” in the earlier stages of their lives to “catch up” with not only new knowledge but also new delivery systems. This is reflected in the diversity of age ranges in Table 3.2.
Table 3.2. Age range of ODL students in Nigeria

| Years       | No. of Students | %   |
|-------------|-----------------|-----|
| 12–17       | 1               | 0.08|
| 18–24       | 205             | 16  |
| 25–34       | 543             | 43  |
| 35–44       | 335             | 27  |
| 45–54       | 145             | 12  |
| 55–64       | 20              | 2   |
| 65–74       | 1               | 0.08|
| 75 and above| 1               | 0.08|
| Totals      | 1,251           | 100 |

The normal age range for university admission in Nigeria is 16–21 years for a standard four-year degree programme. The essence of ODL provision is to enable those who, for one reason or another, were edged out of mainstream university education and therefore need a late start. With access to university education in Nigeria controlled by the fiercely competitive UTME, it is not surprising that almost 45% of the sampled students who chose to study via ODL in Nigeria were aged 25–34. This was followed by those who were engaged in a particular career and saw ODL provisions as opportunities to gain a higher certification while retaining their career (27% of respondents). Other factors unrelated to the fiercely competitive examination can also account for the preponderance of this population. For instance, females who marry early tend to return to school after childbearing, and ODL provides them opportunities that would not otherwise be there for them. Also, self-sponsoring persons who go into a trade, work, acquire the Nigerian Certificate of Education, or gain vocational education after secondary education will only begin to be financially independent in this age range.

At the same time, it is interesting to note a high number of “senior citizens,” at least by the standards of Nigerian social culture (although they are not retirees): 166 respondents, constituting about 13%, were aged 45 and above. As Morin, Saface and Saade have noted (2019, p. 308), “the online learning student population is becoming more heterogeneous in terms of age, and it is now also composed of adults who are mostly employed, goal-oriented, and self-directed.” This was already observed some decades ago (Dabbagh, 2007), and the phenomenon continues to expand. NOUN reports cases of retired generals from the Nigerian army who have developed interests in furthering their education through its ODL provisions.

Most significantly, a former President of Nigeria who ruled in a military capacity from 1976 to 1979 and later as a civilian from 1999 to 2007, Chief Olusegun Obasanjo, enrolled in NOUN as an MA Christian Theology student and continued on to become a PhD candidate in the same discipline, graduating in 2018 at age 81. His success inspired other senior citizens, including an emir (a traditional ruler in a Muslim sultanate), to enrol in NOUN programmes at various entry levels.

However, despite the desire of senior citizens to continue their studies, or in some cases, engage freshly in a new course of study, bureaucratic barriers inherent in the structure of Nigerian education often constitute a problem. In the Nigerian high school exit examination, the acceptable grades range from A1 (excellent) to C6 (credit). This grading was proposed to the Nigerian federal Ministry of Education by the National
Council on Education (NCE), formed in 1993 as a vital advisory educational body that helps the federal Ministry of Education to formulate and harmonise educational policies in Nigeria. The NCE also helps the ministry co-ordinate education practices, and it prescribes and maintains uniform standards of education throughout the country. One of the standards set by the NCE is the universal and compulsory requirement that anyone wishing to study any discipline beyond secondary education must have credit-level passes in English and Mathematics, in addition to three other school subjects judged relevant to the further education programme. The logic behind this policy was never made clear, but the requirement has served as a consistent barrier to millions who wish to further their studies, particularly at a point in their lives when education is being pursued more for its intrinsic value as part of personal empowerment than for jobs or training.

Additional barriers for senior citizens in Nigeria include a curriculum that is not differentiated with respect to their cognitive stages and that contains various inherent assumptions. These could be important factors in their ability to cope with their studies, as the curriculum is structured principally for the cognitive processes of undergraduate learners aged 16–21. Due to longer life expectancies, older workers increasingly value the social, psychological and financial benefits of continued employment, whether it be paid, unpaid, full-time, part-time, flexible or temporary (Hale, 1990; Stein et al., 2000). However, senior citizens in the “third age” of their lives can have difficulties coping with the cognitive expectations of a curriculum targeted at younger learners, particularly in a context requiring interactional-level familiarity with modern learning technologies. Efforts made towards ameliorating the situation for older citizens can yield fruitful learning experiences. For instance, Limone et al. (2018) noted in their study of 106 adult distance education learners at the University of the Third Age (U3A) the efficacy of adapting e-learning content to older adults’ cognitive styles, as well as the roles played by intrinsic motivation, meta-cognition, self-regulated learning, and learning strategies in determining learning outcomes.

Gender equity and ODL

Women in Nigeria, as in other developing countries with predominantly patriarchal social cultures, are under-represented in all spheres of economic activity, including education. It is therefore gratifying to note that a large proportion (66%) of the students participating in the survey were female, while 32% were men, as indicated in Table 3.3.

| Categories | Frequency | (%) |
|------------|-----------|-----|
| Female     | 832       | 66  |
| Male       | 400       | 32  |
| N/A        | 29        | 2   |
| Total      | 1,261     | 100 |

Although women constituted a consistent 45% of conventional university admissions through UTME over a five-year period, 66% of students who willingly shared their personal experiences of learning through the ODL mode identified as female. As Abimbola, Omolara and Tijani (2015) noted in their study of women and ODL in Lagos, ODL is a promising and practical strategy for addressing the challenge of widening access for and increasing the participation of women in higher education. This will, in the long run, improve their status economically and socially, subsequently giving them power to participate equally in public affairs. Studies of women availing themselves of ODL as a form of flexible learning have been reported by other researchers.
(Bhalalusesa, 2001; Kanwar & Taplin 2001; Mapolisa & Chirimuuta 2012; Saikia & Ritimoni 2020). For instance, in summarising 23 cases of women who have succeeded in ODL despite adversity in Asian countries, Kanwar and Taplin (2001, p. 78) concluded their survey of the “brave new women” of Asia thus:

Culturally women have been making sacrifices for various causes — for husbands, children and families. In cultures such as India’s, they have made the supreme sacrifice of sati at the funeral pyre of the dead husband. The sacrifices made in the interest of education have resulted in success. The women featured in the case studies are more confident, more motivated and more determined to succeed than ever before. The only point is to get the right opportunity. Open and distance learning has not just provided the opportunity but has also subverted the myths and stereotypes that have often undermined the processes of awareness and empowerment.

Similarly, in Ghana, statistics from distance learning institutions indicate a higher percentage of women enrolling than men (Kwapong, 2007).

**Programme offerings**

The flexibility of the ODL systems in Nigeria allows students to pick — and register in — as many courses as they wish, without necessarily exceeding the limits of the semester registrations. Students’ responses about their course loads are shown in Table 3.4.

| Number | Frequency | (%) |
|--------|-----------|-----|
| 1–5    | 215       | 17  |
| 6–10   | 819       | 66  |
| 11–15  | 172       | 14  |
| 16–20  | 5         | 0.4 |
| 21–25  | 7         | 0.6 |
| Other  | 29        | 2   |
| Total  | 1,247     | 100 |

The credit load a student can undertake per semester differs among the various Nigerian universities. For ODL institutions, however, students can undertake as many or as few as their individual personal schedules allow, so long as they can register for each programme module. It is for this reason that 66% of the participating students restricted themselves to between six and ten courses per session. Those with higher numbers of courses were most likely trying to clear up accumulated “carry-overs” from courses they had previously failed.

The “carry-over” is an anachronistic feature of Nigerian university education. While the current academic structures are based on American university structures (Berman, 1977; Ojiaku & Ulansky 1972), Nigerian universities still retain remnants of the inherited British system of education. This entailed resitting a failed course. However, when the new American curricular structures replaced the British in the Nigerian education system, starting in 1988, the NUC banned examination resits, so students have to “carry over” a failed course to the next session. This therefore accounts for the relatively large number of courses some students indicated in the survey.
Reasons for ODL preference

Respondents gave a variety of reasons for choosing the ODL mode of education despite having equal access to a regular university education. A summary of their responses is shown in Table 3.5.

Table 3.5. Students’ reasons for choosing ODL

| Responses                                                      | Frequency | Percentage |
|----------------------------------------------------------------|-----------|------------|
| Ability to fund oneself by working                            | 1         | 0.08       |
| Convenience of not having to come to campus as often          | 268       | 21         |
| Flexibility of being able to complete assignments anyplace/anytime | 172       | 14         |
| I am a housewife, and this mode of study is the best for me.  | 20        | 2          |
| I am financially handicapped, so I need to work in order to pay for my studies. | 1         | 0.08       |
| I don’t have to go far to study the courses of my choice, and the conventional universities around me don’t offer those courses. | 1         | 0.08       |
| I have a disability that makes travel inconvenient.          | 4         | 0.3        |
| I have no job.                                               | 1         | 0.08       |
| It was the only available option that fit into my work schedule. | 340       | 27         |
| Job responsibilities make it difficult for me to attend face-to-face classes. | 314       | 25         |
| Other (please specify)                                        | 21        | 2          |
| The reputation of the university with regards to ODL         | 108       | 9          |
| With conventional university and having no job, I would have no ability to support my studies. | 1         | 0.08       |
| Total                                                        | 1,252     | 100        |

Perhaps expectedly, 73% of the responses alluded to job-related reasons for studying in an ODL institution. Of these, 27% said it fits into their job schedule, 25% were, for one reason or another, unable to attend regular in-person classes, and 21% did not relish the idea of coming to the campus all the time. It is interesting that despite the allusion to ODL and female domestic responsibilities, only 20% indicated, as housewives, that ODL is the best mode of learning for them. This was an opportunity wholeheartedly taken by “brave women of Asia” in various difficult circumstances (Kanwar & Taplin 2001).

A further look at respondents’ views of their ODL experiences was gained from the responses to a Likert-scale questionnaire item that was aimed at determining what might be called a “physiological” reaction. Table 3.6 shows the views of the 147 participants who responded to statements targeted at eliciting their ODL experiences.
Table 3.6. Views on ODL experiences

| Question                                                                 | Strongly Disagree | Disagree | Not Sure | Agree | Strongly Agree |
|--------------------------------------------------------------------------|-------------------|----------|----------|-------|----------------|
| ODL courses are sufficiently identified and expectations made clear in the university calendar. | 2                 | 6        | 22       | 66    | 51             |
| I have total confidence in my ODL courses.                               | 1                 | 3        | 16       | 69    | 58             |
| Given the opportunity, I would take another course via ODL in the future. | 4                 | 11       | 23       | 47    | 62             |
| Overall, I am satisfied with this ODL course.                            | 4                 | 5        | 17       | 63    | 58             |
| I am not satisfied with the learner support structure of the university. | 11                | 19       | 35       | 52    | 30             |
| I have access to all the learning materials for my course.               | 7                 | 20       | 26       | 40    | 54             |
| As a woman, I feel this course takes care of my educational needs.       | 6                 | 6        | 52       | 51    | 32             |
| The ODL course makes adequate provisions for disabled persons.          | 6                 | 4        | 43       | 49    | 45             |
| The university has an excellent open educational resources (OER) depository. | 5                 | 10       | 30       | 53    | 49             |
| The university has given us access to massive open online courses (MOOCs). | 7                 | 5        | 20       | 55    | 60             |

The statements cut across a range of services and perspectives, with respondents agreeing to most of the statements concerning their experiences. It would appear, from the responses, that the provision of ODL in Nigerian institutions providing such services is adequately and satisfactorily handled by the service providers. This is reflected by the 82% who stated their satisfaction with their ODL course.

Although 64% claimed that the course they were following made adequate provisions for disabled persons, institutional data returns did not indicate the specific ways in which courses were adapted to disabled persons or the degree of disability. NOUN, however, reported special provisions for blind students, whose scripts are read for them during examinations. NOUN also plans to create audio versions of printed course materials, targeted at blind students but to be made available to everyone. The only factor hindering the project, according to the Director of the Learning Content Management System, is deciding what accent to use during the voice-overs. The political culture in Nigeria is particularly sensitive to regionalisation for almost every aspect of social services, in whatever form.

It is surprising that 44% of the respondents felt that as women, their current ODL experience did not take care of their needs. This reveals the limitations of the instrument, as it lacked a drill-down follow-up question that would have unravelled the reason(s) for such a response. However, the equally low percentage of responses from women in Table 3.5 indicating that ODL suits their lifestyles seems to corroborate the 44% of gender-based responses in Table 3.6.
These findings about the general acceptability of distance learning tally with what other researchers have reported (Ebabhi & Adewoyin 2019; Fozdar et al., 2006; Musingafi et al. 2015; Yiong, 2008).

Recourse to online resources in the form of OER and MOOCs is one of the most enduring features of ODL (Jemni & Khribi, 2007; Stracke et al., 2019). However, very few responded to the question of whether the respondents engaged with the university’s OER or MOOCs centre. Documentary data from all the ODL centres did reveal a dearth of these online resources, perhaps due to budget costs, as the focus has been more on what can be quantified through procurement, rather than on gathering online resources.

When asked about the adequacy of the course materials offered in their courses, 69% of the respondents described them as “very adequate,” with 53% responding that they were “fair.” Only 25% indicated that the course materials were “not adequate.” At the beginning of ODL provision in Nigeria, course materials were distributed as booklets, video cassettes and audio tapes. By 2020, with the commoditisation of data services and technology, online provision of the course materials is increasingly becoming the norm. Thus, it was not surprising that the respondents found the provision of course materials adequate, since they are all available online.

Various studies have confirmed the Nigerian study. For instance, a meta-analysis of ODL students and their perceptions by Fidalgo et al. (2020) across three countries showed interesting variations. For instance, Portuguese and Ukrainian students rated their ODL experiences more favourably than United Arab Emirates students. Half of the Ukrainian students had experience with ODL, which might account for their favourable attitude. Yet in Portugal, only a very small percentage of the students had prior experience, but this did not seem to have negatively influenced their attitude towards ODL.

Measurement of students’ attitudes in an ODL context has been an ongoing process, with many studies finding that attitude can influence learning (Alomyan & Au, 2004; Çiftcia et al., 2010; Sanders & Morrison-Shetlar, 2001). Considering that a lot of computer competencies are expected of an ODL learner (Lung-Yu & Lee, 2016), it is quite important to consider students’ attitudes when designing and delivering ODL programmes (Daniels et al., 2000), as well as the extent of their computer literacy for coping with their studies.

Considering the limitations of the current survey (being general, rather than specific), a follow-up survey about learner attitudes in relation to specific variables that focuses on comparative responses (e.g., gender, region, access, opportunities) would provide critical feedback to policy makers concerning specific efforts needed to maximise the potential of ODL as an equitable instrument of national development. This is in line with what other researchers have suggested (Berge, 1997; Kurubacak, 2000; Manzanares, 2004; Stocks & Freddolino, 1998).

It is also important that the attitudes of ODL programme providers, i.e., tutors, be measured to assess the degree of synchronization between their attitudes and those of their students. The tutors’ attitudes could be affected by a whole range of organisational expectations, such as individual competency in developing course materials. As Bashir (1998, p. 44) noted,

if materials used under the didactic approach are adopted for open learning, such materials will require a huge amount of effort to work well in a self-paced, student-centred learning environment.
While students were not asked for their views about the policy regulation of ODL — as they were not in a position to provide any fact-based answers about procurement and resource verification within the context of their learning — these sampled opinions clearly indicated the acceptance of ODL as a legitimate alternative mode of higher education delivery. The fact that the higher education regulator, NUC, allows conventional universities with the necessary technical capabilities to operate in an ODL mode indicates its policy acceptance.

Further, the flexibility and ready availability of instructors and materials all year round in ODL facilities has attracted students to these institutions, creating generally positive attitudes to the institutions and, consequently, their sustainability.

**Resilience amidst challenges**

In light of the lockdown around the world in 2020, many universities adopted strategies to sustain learning using various technologies. For instance, in India, Rajhans, Memon, Patil and Goyal (2020) reported a seamless transition to online learning in optometry education among 78 optometry educators using multiple devices to ensure that learning was sustained during the lockdown.

All the ODL service providers in Nigeria have structures in place that met the needs of both single- and dual-mode delivery to students, whether offline or online through a learning content management system (LCMS). The 14 dual-mode providers bonded their LCMS to the main university architecture, thereby not specifically catering for only the blended-mode students. In any event, where there were few students, such as in Babcock University, devoting an LCMS to only dual-mode students would have been overkill. In many other cases, e.g., the University of Lagos, the ODL segment was considered just like a faculty, with no special provision to cater for online learning. The University of Maiduguri was endowed with the massive Alhaji (Dr) Muhammadu Indimi Centre for Distance Learning in December 2021 by the local philanthropist after whom it was named, but the facility is to double as an international conference centre. Features include an exam hall, conference room, e-resources centre, laboratory, staff offices and recreational areas. The centre was still new at the time of writing this report, so the details of its delivery mechanism were not available.
Section 4: The Way Forward for Nigerian ODL

Integrating Employability into the Curriculum

The British colonial orientation of the Nigerian curriculum from 1960, when Nigeria became independent from Britain, to 1976, when a new educational policy was introduced, was based on the image of British grammar education, with a high academic focus. The National Policy on Education in 1977 provided for a total reconstitution of Nigerian education and a virtually complete departure from its British roots. The American comprehensive educational framework was adopted in a 6-3-3-4 formation, which saw six years of primary school, two-stage comprehensive secondary schooling divided into three years of junior secondary school and three years of senior secondary school, and four years of university. The new secondary schools were to provide *general education*, marketable vocational skills, as well as advanced academic electives for those students who wished to continue their education beyond high school.

As a federal government policy, the new structure started off with a distinctly vocationally oriented junior secondary school model, with a focus on Introductory Technology, Local Crafts, Home Economics, and Business Studies as the main subjects, in which students were required to choose two, in addition to ten core subjects. Soon enough, however, a series of problems started manifesting themselves. First, parents saw the pre-vocational orientation of the schools — which were necessary pathways to university — as offering inferior education. Even the government expected only about 30% of each junior secondary school cohort to transit to senior secondary school and eventually universities. The remaining 70% were expected to terminate their education after three years of junior secondary school; having been equipped with vocational skills, they were to find their way into the labour market at all levels. Parents disliked this idea of “downgrading” their children’s abilities and ambitions. Adesina (1984) commented that “the stubborn adherence to the traditional grammar school type of education made it difficult for the junior high school to spread and eventually accounted for its eclipse” (p. 13).

Secondly, the provision of technical equipment to sustain the pre-vocational orientation of the junior secondary schools was too capital intensive; this was long before “entrepreneurship” became educationally fashionable. As Nwana (1994, p. 14) pointed out:

> The pre-vocational subjects in the curriculum are equipment-intensive. Most of the equipment ([t]ype-writers, workshop tools, laboratory instruments etc.) are not made in the country. They are imported and are very expensive. In practice, the schools lack the equipment in quantity and quality to enable the pupils acquire the much needed practical skills. Though these subjects are listed on the timetable, they are hardly taught.
Eventually, in a process of continued revision of the National Policy on Education to take into consideration contemporary sustainable development issues, the Nigerian government revised the policy in 2013 to introduce technical and vocational education and training (TVET) instead of vocational education. The Federal Republic of Nigeria (FRN, 2013) defined TVET as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. TVET is understood to be:

- an integral part of general education
- a means of preparing for occupational fields and for effective participation in the world of work
- an aspect of lifelong learning
- a preparation for responsible citizenship
- an instrument for promoting environmentally sound sustainable development
- a method of facilitating poverty alleviation

However, as indicated earlier, TVET was not offered via any ODL delivery mechanism in Nigeria, nor was it part of any open schooling initiative in Nigeria, of which there is currently none in operation, due to its technical requirements.

However, the government shifted the employability component of education to universities, which are expected to train workforces for different sectors of the Nigerian economy. While this initiative was embraced by all Nigerian universities, especially those with interdepartmental linkages, ODL service providers in these universities focused attention on mainstream subject offerings as a way of meeting the requirements. The typical trend is shown in Table 4.1, using data from NOUN.

### Table 4.1. Gender and employability focus in NOUN

| Programme                  | Male | Female | Total  | % Female |
|---------------------------|------|--------|--------|----------|
| BNSc Nursing Science      | 1,870| 15,596 | 17,466 | 89       |
| BSc Mass Communication    | 9,861| 19,980 | 29,841 | 67       |
| BSc Public Health         | 5,069| 8,227  | 13,296 | 62       |
| BSc Bus. Admin            | 8,189| 9,516  | 17,705 | 54       |
| BSc Env. Science          | 9,298| 8,809  | 18,107 | 49       |
| BSc Entrepreneurship      | 30,335| 28,513 | 58,848 | 48       |
| BSc Accounting            | 18,132| 16,747 | 34,879 | 48       |
| BSc Political Science     | 22,209| 11,267 | 33,476 | 34       |
| BSc Computer Science      | 35,712| 13,883 | 49,595 | 28       |
| BSc Criminology           | 31,833| 9,025  | 40,858 | 22       |
| **Totals**                | 172,508| 141,563| 314,071| 45       |

Figures from NOUN querying the 11 most preferred courses and sorted by gender indicated the employability orientation of students’ choices. Indeed, with a total of 314,071 students, the top ten employability programmes constitute almost half of the total of 640,945 students enrolled in the university.
Interestingly, women seem to favour employability-oriented programmes more than men, as the top four programmes (Nursing, Mass Communications, Public Health, and Business Administration) contained more women than men. Only in Criminology and Computer Science were women less represented, but even then, the two programmes each had average enrolments of more than 10,000.

Similar data from participating ODL institutions link the choices of programmes of study to employability factors. Nursing, Computer Science, and Accountancy, for instance, account for the highest number of subscriptions, especially by female students.

In 2006, the Nigerian federal government directed higher education institutions, especially universities, to include a compulsory entrepreneurship course for all students. This was to provide graduates with skills necessary for driving the country’s economy and to shift the emphasis away from employability to business ownership and self-employment, thereby curtailing the rate of unemployment. The curricula of all academic programmes had to contain courses in entrepreneurship. Universities were mandated by the NUC to establish a Directorate of Entrepreneurship whose duty was to drive this curricular addition. The Directorate of Entrepreneurship in NOUN established Incubation Centres in the university’s six geopolitical zones. These centres go beyond theorising about entrepreneurship by providing hands-on, practical skills in business idea generation, experimentation, management, niche creation, brand advertising and brand marketing. The centres place premium value on innovation, though training is also provided in a number of everyday skills, such as tailoring, welding, hairdressing, and others. The TETFund provides equipment for training in these skill sets. Products of the university’s Innovation Centres have been showcased in national trade fairs, and some of the innovative students have won awards and grants to pursue their dreams.

Thus, it is important to note that the role of higher education in Nigeria is changing, and institutions are being forced to reinvent themselves to remain relevant to the needs of 21st-century learners, who are far more aware of digital technology than their predecessors. Entrepreneurship education solves part of the problem. Infusing the university education curricula with relevant trending employability-focused subject offerings supports the concept of self-reliance after graduation. For employability to be effective, however, it must encompass the capacity to acquire initial employment, keep it and acquire new work, if required (Hillage & Pollard, 1998).

Mohee (2019) addressed the issue of employability being part of students’ curriculum offering by arguing that employability assesses students’ readiness for labour markets in meaningful and practical ways. At the same time, it shows how institutions can prepare their products when transitioning from theory to practice. Mohee (2019) further suggested institutions review their curricula to determine whether they are meeting the current needs of both employers and society in general. This was indicated, for instance, in Nigerian higher education with the endorsement of an undergraduate degree programme in Cybersecurity in 2021, which was initially suggested by the Nigerian Defence Academy. This was a result of resurgent cybercrimes in Nigeria, which require new competencies (as documented by Iorlaiam, 2019). Focusing on emerging employment trends like cybersecurity, blockchain, Internet of Things, etc. ensures a focus on future societal needs and ongoing curricular relevance.

Additionally, COL has created a higher education employability model based on a matrix of four components: assessment and sensitisation; planning; implementation; and evaluation, reflection and planning. This cyclical approach allows institutions to comprehensively examine the facets needed to develop their employability framework using components embedded in their curricula. To this end, COL
supported a sensitisation workshop on employability for NOUN in September 2021, and this culminated in a draft employability framework that NOUN approved at its Senate meeting held on 16 February 2022. Faculties and departments were encouraged to develop modalities for implementing the recommendations within the system to improve students’ employability.

**Rethinking Assessments**

NOUN, having been founded exclusively as a single-mode institution, was the first among the country’s universities and ODL providers to establish a fully functioning Directorate of Learning Content Management System, in 2019, which experimented with a new way of rethinking assessment in the face of the Covid-19 lockdown. Only LAUTECH followed in NOUN’s footsteps by providing a dedicated LCMS, although the institution was shut down during the pandemic lockdown. Other ODL providers in the country also shut down, as advised by the country’s health authorities.

Already attuned to online delivery of instruction and video facilitation since its resurrection in 2002, NOUN was poised to cope with the challenges of access to higher education delivery in a pandemic situation. Indeed, the pandemic motivated NOUN to engage in a university-wide digital transformation agenda aimed at boosting the quality of course delivery, expanding access to learning opportunities and improving the digital infrastructure base of its centres and functional units, particularly in the “new normal” lockdown or irregular open circumstances. When, in January 2020, the university scheduled its first semester examinations to begin on 3 June 2020, it had not seen the pandemic lockdown coming — no one had. As it became clear that in-person examination was not going to be possible, the university decided to experiment with the idea of remote examination online, using proctoring software, with additional artificial intelligence plugins that were internally developed by NOUN’s team of software engineers. As Draaijer, Jeffries and Somers (2018, p. 96) have explained,

> [o]nline proctoring involves technologies and procedures to allow students to take exams securely in a remote location away from a physical exam room. In the US, the term proctoring is used to describe the oversight and checking of students and their credentials for an examination. In the UK and other English-speaking countries, this is referred to as invigilation.

NOUN decided to experiment with a virtual proctored examination strategy in July 2020, the first of its kind in the country’s education system, to meet students’ expectations of taking their examinations as scheduled. Online testing of students in a distance learning matrix has been well documented (e.g., Conrad & Openo, 2018; Palloff & Pratt 2009). As Alession et al. (2017, p. 3) noted, online examination proctoring involves two critical elements:

First, it activates the camera on a computer, and records the student taking the exam. This enables faculty to observe the students’ behavior and identify activities that may indicate cheating such as talking to others or looking up information in books. Second, it either limits the students’ ability to use their computers for other tasks by eliminating the ability to engage in activities such as copy-pasting, printing and searching the internet, or it records everything that students do on their computers, or both.
Proctoring, though not fool-proof, as will soon be shown, does help in establishing the authenticity of the examination. Such a process also has basic minimum requirements for students. This was why NOUN made taking a virtual proctored examination optional.

The administration of proctored examinations was based on a simple non-structured survey instrument administered to all registered students in the NOUN network via their own individual MyLearningSpace portal allocation, which was part of the DCLMS learning ecosystem. The instrument sought only three affirmatives: willingness to register for the remote examination (internally referred to as Exam on Demand), ability to conduct the examination in an isolated room (with the artificial intelligence motion and face monitor remotely controlled), and a laptop with a minimum of 1 GB memory, as well as continuous Internet access.

The proctoring software deployed did not consider the possibility of taking the examination via handheld devices. Those that could not meet the requirements simply opted out and waited for the lockdown to ease so they could take traditional examinations. This, perhaps, underscores the challenges faced in remote learning in developing countries, where few students have the resources to fully engage in the process. A total of 10,065 students indicated interest in the remote examination, but in the end, only 5,271 took the examination — others were probably affected by stress and other associated challenges relating to the lockdown.

The software used was a reverse-engineered Moodle learning management system with the MPass proctoring tool. The Moodle system supports essay, multiple-choice, short-answer and many other question types. Students’ responses were saved automatically. The essay questions were marked online on the system after the examinations. The MPass proctoring software uses AI to flag when students look away from the exam window.

Interestingly enough, students’ perception of the remote examination was that it was not monitored, since it was remotely administered. This was reflected in the 919 cases of examination malpractice recorded, in which students displayed all sorts of ingenious devices to cheat — until they were made aware that they were being monitored visually and aurally. The specific cases of examination misconduct captured are indicated in Table 4.2.

| Misconduct Type                                           | Cases | %  |
|-----------------------------------------------------------|-------|----|
| Additional/multiple person detection                      | 181   | 20 |
| Consulting external material                              | 54    | 6  |
| Impersonation cases                                       | 97    | 11 |
| Using mobile phone to cheat                               | 144   | 15 |
| Blocking camera to darken screen, leaving seat while exam in progress, face not clearly visible | 443   | 48 |
| **Total**                                                 | **919** | **100** |

The most common type of reported misconduct (48%) in the remote examination was blocking the camera, followed by bringing non-students close to the examinee to assist them, while unaware they were being monitored remotely. For the most part, though, the remote examination worked, and faculty marked the virtual scripts from their comfort zones under lockdown. However, the incessant cheating and costs to
students made the university discontinue the remote examination facility. By October 2020, the lockdown had been partially lifted and the university simply rolled into the first semester of the next session, starting with physical in-person e-examination (computer-based testing).

The virtual examination facility was not sustained by NOUN due to the difficulties in maintaining its integrity. Further, faculty found it difficult to mark the examinations from their devices, insisting on being paid “data allowance” for them to effectively mark the scripts on their own devices at home. The most significant outcome, however, was that faculty were not well prepared for remote invigilation as well as remote marking of the virtual scripts. This prompted the university to move to a second stage of its transformation agenda: mass capacity-building training of faculty in the management of virtual learning environments.

Outside “pandemic situations,” however, the main mode of assessment has remained traditional computer-based testing for some years, and pencil-on-paper for others in all the ODL situations in Nigeria. It is clear, however, that as ODL is becoming mainstream in educational offerings following the vivid impact of the 2020 lockdown on educational delivery systems, new forms of engagement in ODL delivery will have to be fashioned. In this regard, Conrad and Openo (2018, p. 56), quoting Herrington, Oliver and Reeves (2006) have pointed out that “authentic assessments are based in real-world relevance and include activities that closely match real-world tasks undertaken by practitioners.” Thus, as Conrad and Openo (2018, p. 57) themselves noted:

authentic assessments serve the interests of students by encouraging them to play a more active role in the assessment of their own learning through activities such as reflective exercises, self-evaluations in tandem with peer assessments, collaborative projects, semantic mapping, and e-portfolios.

Working actively on enabling the acceptance and mainstreaming of authentic assessment practices in institutions in Nigeria, COL in 2022 began supporting six dual-mode institutions in Nigeria as they move toward mainstreaming authentic assessment into their assessment processes, including by developing an authentic assessment framework to guide these processes. The institutions are Babcock University, Ahmadu Bello University, Modibbo Adama University, University of Abuja, University of Ibadan and LAUTECH.

Micro-credentials and Lifelong Learning

Despite Ron Dore’s criticism of “education for certification,” which he presented in his Diploma Disease treatise (Dore 1976), the need to have accredited competency is still strong in developing countries. While not every learner will have the credentials to move on and acquire higher education, public cultures in developing countries nevertheless have created a need for certifications, which, if properly delivered, bring enhanced competencies. It therefore has become necessary to devise ways of delivering lifelong learning that is not necessarily a link in a chain towards bureaucratised education, while at the same time conferring skills and competencies that enable survival in a contemporary world.

The Covid-19 pandemic lockdown of 2020 had profound effects not only on the human population, but also on education. It led to the narrative of a “new normal.” The lockdown reinvented teleconferencing in a new terrain and commoditised online learning and interactions. However, even prior to the reprioritisation of higher education delivery systems, many universities with an online orientation had open-source materials for micro-credentials and lifelong learning. MOOCs are offered by various learning institutions, such as the Massachusetts Institute of Technology, Harvard and Stanford. Learners across the globe attend these courses.
Also, the Internet is full of skill-based micro-courses that help professionals to learn specific skills. It facilitates collaborations between educators and students as well as institutions. As Lewis and Lodge (2016, p. 43) pointed out, “declarative knowledge is now readily available via myriad devices with the trend towards integration of these devices into every facet of daily life.”

Thus, the democratic model of the Internet means that gender and location barriers can be overcome through the existence of digital knowledge and infrastructure (Castells, 2004). Other transformations include the existence of digital books and other scholarly resources and online tutorials. With the commoditization of both information and technology, online learning is no longer a mystery (Castells, 2000).

Of the 15 ODL providers in Nigeria, based on the programme listings on their websites, only NOUN provides micro-credentials and lifelong learning opportunities outside the mainstream undergraduate and postgraduate course offerings. NOUN developed and administered MOOCs targeting certain skills. The other 14 providers, not being dedicated to online learning, have no specific courses for micro-credentials or lifelong learning within their blended learning curricula. What some of them do have, however, are postgraduate diplomas in the undergraduate courses they offer. NOUN also offers these but does not categorise them as part of the micro-credential and lifelong learning subsystem.

NOUN provides micro-credential and lifelong learning facilities in two categories. The first is at the Centre for Human Resource Development (CHRD), for artisans without formal school qualifications but already engaged in vocational and skill industries (bricklaying, carpentry and joinery, plumbing, electrical works, welding and fabrication, plastering, and painting and decoration). Created in 2017, it was empowered and mandated by the university to provide executive, administrative, vocational and entrepreneurial training to all categories of people (civil servants, public servant, pensioners, youths, women, etc.), as well as individuals or groups. By 2021, the Centre had trained and certified 1,080 individuals, although data on gender distribution are not yet available. Additionally, and in collaboration with the correctional services of the state where it is located (Kaduna), it had offered inmates skill-acquisition programmes in computer appreciation and Microsoft Office productivity tools. That the Centre’s certifications are issued by a university creates both high visibility and credibility for the programmes, drawing more students, including casual learners, every year.

The second facility for micro-credentials and lifelong learning offered by NOUN was through its Africa Centre of Excellence on Technology Enhanced Learning (ACETEL). This was a World Bank assisted project established in 2019 and supported by the Association of African Universities and the NUC. The World Bank granted extra points (and funds) to the Centre because it was headed by a woman (Professor Grace Jokthan).

ACETEL focuses on developing human capacity in and research on digital solutions that will lead to the utilisation of technology for education and its deployment in other sectors. The Centre aims at bridging the technology knowledge gap by building capacity in ICT, cybersecurity and digital policies to achieve high levels of digital development on the African continent. ACETEL’s main programmes are MSc and PhD courses in Cybersecurity, Artificial Intelligence, and Management Information Systems.

However, for lifelong technology-enabled learning, ACETEL also offers short courses on a wide range of topics covering various themes, such as Artificial Intelligence, Leadership and Project Management, English for Non-English Speakers, Database Management, Networking, Blockchain, Cloud Computing,
Cybersecurity, Entrepreneurship, and Internet of Things. It also offers the Cisco Certified Network Associate (CCNA) certification, which is highly favoured in IT professions in various versions and which trains a network professional in the competencies they need to install, configure and troubleshoot medium-sized networks. The CCNA courses are offered in collaborative partnership with Cisco Academy.

ACETEL’s courses are free, totally online and last for one to 12 weeks, and a certificate is issued at the end of the completion of whatever segment an individual registers for. The level of participation in these courses, with an emphasis on females, is shown in Table 4.3.

Table 4.3. Micro-credentials at NOUN

| Course                        | Males | Females | Total | % Female |
|-------------------------------|-------|---------|-------|----------|
| Machine Learning              | 12    | 34      | 47    | 72       |
| Python Programming            | 22    | 28      | 50    | 56       |
| Online and Blended Learning   | 28    | 25      | 53    | 46       |
| Get Connected (GC)            | 5     | 3       | 8     | 38       |
| Python Programming Essentials | 4     | 2       | 6     | 33       |
| CCNA1                         | 16    | 5       | 21    | 24       |
| IT Essentials (ITE)           | 24    | 5       | 29    | 17       |
| Writing in High Impact Journals | 98    | 19      | 117   | 16       |
| Internet of Things (IoT)      | 44    | 7       | 51    | 14       |
| **Totals**                    | **253** | **128** | **382** | **34**   |

Women’s participation in technology is critical because it can provide a more balanced view on female gender and technology sector issues. As Pot’Vin-Gorman (2019) noted, conscious and unconscious bias, societal pressures, and discomfort with women’s ambition are issues women are confronted with in any male-dominated setting, and technology is no exception. Statistically, women are a disproportionately small percentage of the technology industry. It would appear that gender bias in technology and related areas is a long-standing social equity problem (Azad, 2021; Chari, 1992; Cohoon & Aspray, 2006; Lin et al., 2012; Namrata, 2020; Schiebinger, 2014; Wyer et al., 2014).

The data from ACETEL seem to confirm this exclusion of women from technology. For instance, only 34% of the 382 participants enrolled in the ACETEL micro-credentials short courses were women, with the lowest percentage participation (14%) in the IoT course. Women, however, excelled more than men in machine learning, a branch of artificial intelligence employing a method of data analysis that automates analytical model building based on the idea that systems can learn from data, identify patterns and make decisions with minimal human intervention. Similarly, women excelled more than men in Python programming — a language commonly used for developing websites and software, task automation, data analysis, and data visualisation. Thus, while there are gains in women’s competencies and the testing of their abilities in ACETEL’s micro-credentials courses, the data not only indicate underlying causes for such low participation, but point to the need to emphasise these areas in any programming of micro-credentials training in ICT.
A very important component of ACETEL’s mandate is what the Nigerian university system refers to as “offshore education.” This is a reference to cross-border education, where ODL truly excels itself, at least in West Africa. As UNESCO and the OECD noted (2005, p. 9):

Since the 1980s, cross-border higher education through the mobility of students, academic staff, programmes/institutions and professionals has grown considerably. In parallel, new delivery modes and cross-border providers have appeared, such as campuses abroad, electronic delivery of higher education and for-profit providers. These new forms of cross-border higher education offer increased opportunities for improving the skills and competencies of individual students and the quality of national higher education systems, provided they aim at benefiting the human, social, economic and cultural development of the receiving country.

NOUN’s cross-border education, however, is facilitated by its online mode and does not require a physical movement of staff and students across countries, with the attendant security challenges. This is more so since the programme was initiated in 2021, when the world was still in the grip of the Covid-19 pandemic. However, earlier experimentation with online proctoring examination during the 2020 lockdown led to perfecting of the proctoring process and the extension of ACETEL’s courses to other countries in Africa. ACETEL’s MSc and PhD programmes are now available in Uganda, Ghana and The Gambia in Artificial Intelligence, Computer Science, and Management Information Systems. Table 4.4 shows the distribution of cross-border students in 2022.

Table 4.4. NOUN ACETEL cross-border students

| S/N | Programme | Nigeria | Uganda | Ghana | The Gambia | Total |
|-----|-----------|---------|--------|-------|-----------|-------|
|     |           | Male    | Female | Male  | Female | Male  | Female | Male  | Female |           |
| 1   | MSc AI    | 12      | 3      | 0     | 0      | 13    | 3      | 2     | 0      | 33        |
| 2   | MSc CS    | 28      | 5      | 1     | 1      | 7     | 0      | 1     | 0      | 43        |
| 3   | MSc MIS   | 12      | 5      | 0     | 0      | 6     | 0      | 4     | 1      | 28        |
| 4   | PhD AI    | 14      | 0      | 0     | 0      | 0     | 0      | 1     | 0      | 15        |
| 5   | PhD CS    | 16      | 3      | 0     | 0      | 0     | 0      | 0     | 0      | 19        |
| 6   | PhD MIS   | 6       | 2      | 0     | 0      | 0     | 0      | 1     | 0      | 9         |
| 7   | Totals    | 88      | 18     | 1     | 1      | 26    | 3      | 9     | 1      | 147       |

Note: AI = Artificial Intelligence; CS = Computer Science; MIS = Management Information Systems.

In all the programmes across the four countries, women are severely under-represented, with the highest percentage of women being 17% out of 106 candidates. This could be attributed to the newness of the programme and a lack of familiarity with the proctoring examination process (even though the candidates are computer science students).
It should be pointed out that cross-border provision differs from collaborations with overseas universities where African universities are used as local hubs for more metropolitan universities under the rubric of “collaboration.” In NOUN’s case, students are directly sourced from their home countries, and no collaboration is sought with local universities to run ACETEL’s programmes, as all are run from NOUN in Abuja. As Sum (2005) noted, this sort of development in the higher education sector has several potential benefits. The *exporting* institutions (NOUN) and nations (Nigeria) gain from expanding student enrolment and income through tuition fees, while the *importing* nations benefit by supplementing their domestic supply of higher education.

**Digitisation of the Sector**

The 2020 Covid-19 lockdown forced almost all universities to explore the possibility of shifting their activities online in the spirit of the “new normal.” All 15 ODL providers in Nigeria have structures in place to deliver content online and maintain academic activities during periods of lockdown. This, ironically enough, briefly made the blended-mode centres into single-mode ones, since they did not have in-person classes until the easing of lockdown restrictions. Nevertheless, there were variations in the level of technology utilised in the online delivery of each ODL provider. All used electronic facilitation in the form of video lectures that students could access from any location. The lectures were also recorded as video and audio podcasts and left on the servers for 24/7 access.

The course materials were “digitised” merely as PDF files and made available for download by students. NOUN reported that these materials, having been developed, utilised and revised over a period of 20 years, were actually used by other universities, both in Nigeria and in other parts of Africa. For instance, the Open University of Zimbabwe requested, and was given, every single PDF version of over 700 NOUN course units as part of a Memorandum of Understanding with NOUN. These course materials were written to conform to NUC’s Benchmark Minimum Academic Standards, and they were subjected, as was the university’s ODL unit, to periodic quality assurance by the NUC.

Course materials in 14 of the ODL service providers were developed by faculty members of the mainstream university or adapted from NOUN materials. The latter, being more comprehensive, were developed by a series of course writers engaged by the university from almost every university in the zone, where the presence of the university is felt through its 105 study centres. Examinations for NOUN students are also graded in a conference marking mode at designated zonal centres by both staff of the university and facilitators from other universities. This is not without its occasional danger. In 2019, a truck conveying completed NOUN examination scripts from an examination centre to the marking venue in Nigeria’s turbulent North East was attacked by terrorists. Although the lives of the driver and an academic staff member were spared, the truck was carted away — with the scripts. Another examination had to be administered to the affected students at a later time. Generally, the terrorist/insurgency areas in the north of Nigeria tended to pose challenges for administering effective education services due to fear of attacks, which can be quite random.

Equally challenging to many students across Nigeria are data access and connectivity. While there is a telecom service provider in every community in Nigeria, service can often be erratic, especially in rural areas, and it can limit access to the ODL hub. Again, this is more of a challenge in the north of Nigeria than other parts of the country. For instance, as part of counterterrorism measures by the Nigerian government, some states in the north shut down all telecommunication services in their territories to curtail the communication networks of terrorists. For weeks and often months, with no communication pathways, students could not
communicate with their ODL provider, which completely disrupted the rhythm of their education. The flexible nature of ODL, however, made it possible for the affected students to continue from where they had stopped once services were restored.

Another infrastructural advantage of the ODL systems has been their circumvention of the disruption of academic activities brought about by the incessant strike actions of the Academic Staff Union of Nigerian Universities (ASUU). While 14 of the 15 ODL providers in Nigeria operate within the control of conventional universities, and hence virtually all the academic staff are members of ASUU, NOUN does not have a union, a process deliberately embedded in the operational principles of the institution precisely to prevent disruption of academic activities for students who are not resident on a campus. This has the advantage of ensuring NOUN maintains its academic activities while other universities are closed. For instance, in 2020, ASUU embarked on a strike in March and only ended it in November of the same year. During the period, which incidentally coincided with the Covid-19 lockdown in Nigeria, NOUN continued its academic activities online, including administering online examinations. In March 2022, ASUU embarked on another strike, crippling all the universities in Nigeria except private universities and NOUN. The latter even held a successful convocation ceremony in the last week of March 2022, while other universities had to suspend theirs. This again underscores the critical importance of NOUN as an ODL institution in an unstable economy.

Gender Equity in Nigerian ODL Provision

Gender equity is another critical area in which ODL offers the opportunity to balance access to higher education. Figures available from NOUN on students enrolled in 2020 are shown in Table 4.5.

| Programme                | Male | Female | Total  | % Female |
|--------------------------|------|--------|--------|----------|
| Health Sciences          | 11,089 | 35,636  | 46,725  | 76       |
| Education                | 29,135 | 43,953  | 73,088  | 60       |
| Arts and Humanities      | 6,356  | 5,852   | 12,208  | 48       |
| Management Sciences      | 97,497 | 86,950  | 184,447 | 47       |
| Social Sciences          | 98,473 | 64,707  | 163,180 | 40       |
| Agricultural Sciences    | 3,510  | 1,905   | 5,415   | 35       |
| Sciences                 | 86,052 | 40,742  | 126,795 | 32       |
| Law                      | 20,005 | 8,946   | 28,951  | 31       |
| PhD                      | 88     | 44      | 133     | 33       |
| **Totals**               | **352,205** | **288,735** | **640,942** | **45** |

NOUN classified its student population into two categories — enrolled and active, the latter being a subset of those enrolled. Of those enrolled in 2021, 45% were female. This shows the level of accessibility of ODL to the female gender in the university. The courses most subscribed to by NOUN female students, and in which they outnumbered male students, were Health Sciences (76%) and Education (60%). Despite NOUN lacking a teaching hospital, most of the students enrolled in the Nursing programme of Health Sciences
(which attracted the highest number of females in the faculty) were practising nurses (indeed, the admission requirement for the Nursing programme included being a fully registered nurse). Such a high number of female students in Nursing and Education, as well as low numbers in Sciences (32%), confirms societal gender stereotypes whereby women are expected to be in “caring professions.” For instance, according to Heppner (2013, p. 198), in 2010, “women in the US were over 97% of preschool and elementary school teachers, 96% of dental hygienists, and less than 2% of carpenters and electricians, 3% of construction workers, 7% of electrical engineers.” Perhaps not surprisingly, considering its practical nature, which makes it challenging in an ODL setting, Agricultural Sciences had the lowest female enrolment.

Statistics from other ODL service providers in Nigeria that provided their data more or less confirm the NOUN trend. For instance, LAUTECH LODLC, which had six programmes in 2021, recorded Nursing as the programme with the highest female enrolment, as shown in Table 4.6.

Table 4.6. LAUTECH ODLC enrolment, 2021

| Programme                              | Male | Female | Total | % Female |
|----------------------------------------|------|--------|-------|----------|
| Nursing Science                        | 227  | 1,412  | 1,639 | 86       |
| Accounting                             | 18   | 27     | 45    | 60       |
| Agricultural Economics                 | 9    | 7      | 16    | 44       |
| Computer Science                       | 62   | 36     | 98    | 38       |
| Agricultural Extension & Rural Development | 9    | 5      | 14    | 36       |
| Marketing                              | 25   | 13     | 38    | 34       |
| **Total**                              | 350  | 1,500  | 1,850 | 81       |

Thus, as in NOUN, the programme most preferred by females was Nursing Science (86%), followed by Accounting (60%). Overall, there were more females at LAUTECH ODLC (81%) than males, which shows an encouraging trend, if maintained. Modibbo Adama University, formerly known as Modibbo Adama University of Technology (MAUTECH), shows an interesting trend of more females studying computer science than males, at 52%, as shown in Table 4.7.

Table 4.7. MAUTECH enrolment, 2021

| Programme                              | Male | Female | Total | % Female |
|----------------------------------------|------|--------|-------|----------|
| Computer Science                       | 11   | 12     | 23    | 52       |
| Agricultural Science Education         | 14   | 14     | 28    | 50       |
| Business Administration                | 111  | 94     | 205   | 46       |
| Business Education                     | 25   | 20     | 45    | 44       |
| Information Technology                 | 40   | 30     | 70    | 43       |
| Accounting                             | 34   | 18     | 52    | 35       |
| Economics                              | 11   | 2      | 13    | 18       |
| **Total**                              | 246  | 190    | 436   | 44       |
Besides Computer Science, a good percentage of women were also enrolled in Information Technology (43%), giving them a combined 45% of the enrolment in the two disciplines at MAUTECH.

Although full details of individual programmes and their enrolments were not made available from ODL centres contacted, there nevertheless seems to be a general pattern. For instance, the University of Lagos DLI reported 50% female enrolment, although no programme details were given. Joseph Ayo Babalola University (JABU) offers only Accounting at the undergraduate level, with 26 students in 2021, of whom six were female. The University of Maiduguri ODL centre reported 33% female enrolment out of 10,454 students. This university is at the epicentre of violent insurgency by Islamic State West African Province (ISWAP), which seeks to establish sharia law in Nigeria as a whole. The violence has displaced thousands of residents in Maiduguri and other parts of the state into Internally Displaced Persons (IDP) camps and has claimed thousands of lives throughout the state and its environs.

Targeting the Marginalised

Women and persons with both social and physical disabilities have always been at the margin or completely disenfranchised from mainstream services in the public culture of all societies. Consequently, no provisions had been made for increased participation of these marginalised groups in 14 of the ODL providers in Nigeria. Only NOUN has a concrete policy that offers scholarships to girls who graduated from high school with excellent grades but could not access higher education due to their economic situation. The university also provides scholarships for indigent students who, due to either physical disability or living conditions, are unable to afford full course fees at the university. These scholarships are often at the discretion of the Chief Executive and approved by the university management as part of the university’s corporate social responsibility. In 2021, a blind male student was offered a scholarship to study a BSc in Political Science at the university. He was featured in media interviews in the city of Kano, northern Nigeria. The student explained how his mother single-handedly raised him, encouraging him to attend school instead of begging on the streets, despite abject poverty, including living in a rented accommodation. This attracted the attention of a local philanthropist who was moved by the student’s desire to better himself, and particularly the mother’s efforts to raise him on a path to education; as a result, the philanthropist purchased a house for the student and his mother. The Kano State government then offered him a job as a teacher at the special education school where he had graduated years earlier. This shows one of the impacts that management strategies can have in striving toward social equity through distance education.

Also in Kano State, a philanthropist paid the fees for four-year degree programmes for 86 indigent students from two communities. A politician similarly paid for 150 students for four years from 13 communities, in addition to building a fully equipped study centre in each community.

In further attempts to address marginalised groups, NOUN offered scholarships to 15 girls selected by their schools in both the northern and southern parts of Nigeria. In the north, five of the girls were from nomadic camps whose males often join part of the brigandage that is the scourge of northern Nigeria. The nomadic girls were from semi-settled thatch-roofed camps, tending to their cattle and yet attending school at the same time. With the uncertainties of their residency — they can move out at any time — they faced unknown futures, despite their high school education. NOUN, in conjunction with community leaders, provided scholarships to five of them in the first instance in 2019, with the hope of evaluating the outcome of their studies in due course. The other girls were from settled (i.e., non-nomadic) communities in the north. In the South East, it is girls who stay in school, while boys prefer to become traders (Gabriel, 2001). Given the
apprenticeship system, it is difficult getting boys to commit to higher education due to the anticipated clash between studies and apprentice trading.

However, the most successful NOUN intervention for marginalised members of society is its correctional centre inmates’ programme. In pursuit of its mandate to provide functional, flexible, accessible, quality and inclusive education, the university established study centres in ten correctional centre formations across the country. These centres concretely actualise the university’s long-term vision of anchoring its mandate in social justice, equity, equality and national cohesion in ways that transcend all barriers. In 2018, the Nigerian Prisons Service was one of the winners of the UNESCO Confucius Prize for Literacy for its provision of educational programmes to prisoners.

Initially named the NOUN Prisoner Education Project, the nomenclature was changed in 2019 when the Nigerian government began referring to all prisons as correctional centres. The NOUN project is a human development programme aimed at solving the challenges associated with incarceration and post-release reabsorption into society. It is also a form of remedial justice, since the education it provides is not only reformatory but also compensatory, taking into account delays in the justice system.

NOUN first established a prison study centre at the maximum-security prison Kirikiri, Apapa, Lagos in 2006. The centre would later provide the initial template for the establishment and running of the other prison study centres across the country. In 2016, the university’s administration reassessed the modalities of operation of its prisoner education programme. The administration reasoned that the university’s motto is “work and learn”; however, by reason of their incarceration, inmates were not in a position to work and earn income while in Nigerian correctional settings.

Consequently, NOUN introduced a 100% fee waiver for all correctional centre inmates, and this was eventually extended into post-release periods if they had not finished their studies. Further, they are allowed opportunities to continue their studies in NOUN up to the doctoral level if they so wish and are qualified. Besides the fee waiver, the university’s commitment also extends to equipping correctional centres to make them suitable for studies. By 2021, a total of 2,270 inmates were enrolled in various programmes in correctional centres across the country. One ex-convict student even wrote a book on peace and conflict resolution and was eventually admitted to a doctoral programme at the University of Nigeria, Nsukka.

Also, as part of its learner support services programme for the inmates, the university has dedicated members of staff, including professional counsellors and psychologists, who provided counselling services to the inmates. These staff members are also responsible for examination administration and supervision in the correctional centres. However, grading of student inmates is undertaken by the faculty, who assess them in a conference marking setting with other students, without any form of discrimination. By 2021, there were 15 correctional centre inmate populations, as shown in Table 4.8.
Table 4.8. Enrolment at the correctional centres, 2021

| Correctional Centre                                      | Male | Female | Total |
|---------------------------------------------------------|------|--------|-------|
| Abeokuta Correctional Service Study Centre (Ogun State) | 55   | 10     | 65    |
| Ilesha Correctional Service Study Centre (Osun State)   | 18   | 0      | 18    |
| Kuje Correctional Service Study Centre (FCT)            | 147  | 5      | 152   |
| Lafia Correctional Service Study Centre (Nasarawa)       | 14   | 0      | 14    |
| Correctional Service Study Centre Awka (Anambra)        | 12   | 0      | 12    |
| Correctional Service Study Centre Ikoyi (Lagos)         | 62   | 27     | 89    |
| Correctional Service Study Centre Keffi (Nasarawa)       | 114  | 34     | 148   |
| Correctional Service Study Centre Enugu (Enugu)         | 231  | 25     | 256   |
| Correctional Service Study Centre Port Harcourt (Rivers)| 187  | 138    | 325   |
| Female Correctional Service Study Centre Kirikiri (Lagos)| 0   | 12     | 12    |
| Max. Security Correctional Service Study Centre Kirikiri (Lagos)| 172 | 23     | 195   |
| Med. Security Correctional Service Study Centre Kirikiri (Lagos)| 24  | 3      | 27    |
| Correctional Service National Headquarters (FCT)        | 463  | 411    | 874   |
| Umuahia Correctional Service Study Centre (Abia)        | 16   | 4      | 20    |
| Kaduna Correctional Service Study Centre (Kaduna)       | 62   | 1      | 63    |
| Totals                                                  | 1,577| 693    | 2,270 |

Inmates generally have embraced the offer of free education from NOUN. Although the available data have not been disaggregated by discipline, the figures show that in 2021, 31% of the 2,270 enrolled correctional centre inmates in the NOUN system were female. Interestingly, this was in consonance with almost similar averages of female representation in other study centres. Another factor to take into account is the disproportionate representations of males and females in correctional centres, where males far outnumber females.

Omazu (2018), who carried out the first comprehensive fieldwork on NOUN’s correctional centre population, pointed out that in being able to influence their end-of-prison-term lives while still inside the prison, the inmates are exercising their ability to self-govern and to dictate their lives’ directions in ways that their present life circumstances permit. He quotes from an interview he held with a female student inmate studying Entrepreneurial and Business Management, who noted the suitability of the course to her incarcerated circumstances and projected life experience outside the correctional centre. According to her:

I enrolled in this course because I want to contribute to the development of Nigeria. You know the way Nigeria is, ex-convicts are not to be employed by anybody till after about ten years of end of imprisonment. I chose this course because it will teach me how to establish and run my business without depending on anybody. . . . It will also help me to assess business opportunities and guard against bad choices. (Omazu, 2018, p. 157)
Inmates who remained unconvinced of their crimes showed a different pattern in their choice of courses. The majority of them preferred a degree programme in Law. However, when the university suspended admission into its Law programme, such students substituted their choice of Law with Peace Studies and Conflict Resolution, and Political Science. They view these courses as connected to the broad questions of justice, rights and their ability to defend themselves. This is because such students regard their incarceration as due to their inability to fight their own case or to defend themselves in the cases brought against them by more formidable adversaries. Omazu (2018, p. 159) noted how a death row inmate student of Law viewed his education:

> If there is anything like justice, I hope to be free from this prison one day. If this ever happens, I want to ensure that no man possesses the power to intimidate me and even to cause me to be sentenced for life imprisonment for [an] offence I did not commit because of my lack of knowledge of legal procedures.

Generally, therefore, student inmates express a feeling of self-fulfilment that is consequent upon their enrolment as students. This not only has contributed to the rehabilitation of some inmates but also has brought them closer to their families, who initially shunned them due to their incarcerated status. For instance, one student explained thus:

> Initially my family did not want to have anything to do with me. My father, particularly, abandoned me here and had never visited me until he received a letter from me narrating my enrolment for a postgraduate degree in NOUN. My sister told me that he was so happy that day. He called his friends and extended family members and told them about my enrolment. After this, my father paid me the first visit in prison. He told me he is now ready to take me back as his son upon my release. He has never visited again but he has always inquired. (Omazu, 2018, p. 158)

Like NOUN, Indira Gandhi National Open University, in India, also provides “free education to prisoners . . . a welcome initiative for those inmates who cannot afford the programme fee but are interested in pursuing their education despite being in prison” (Singh, 2013, p. 36). Similar education services are provided for inmates at open universities in Tanzania (Msoroka, 2018), Malaysia (Hassan, 2014), Saudi Arabia (Al-Saif, 2007), Australia (Farley et al., 2015), Turkey (Ataizi et al. 2011) and the United Kingdom (Earle & Michigan, 2019).

**Technical and Vocational Education and Training**

Despite the potential and promise of TVET as an enabler of sustainable self-reliance, the overwhelming attitude of parents and students themselves is to largely shun any technical education in favour of university education. This ostracism goes back all the way to the beginnings of education in Nigeria’s British colonial history. Even the National Policy on Education places preference on grammar education and relegates technical education to academically less-able students.

TVET in Nigeria is not delivered by ODL in any form, due to the technical equipment necessary for hands-on practical training. The assumption in Nigeria that TVET is almost impossible in an ODL mode has been challenged by the Commonwealth of Learning, which has established a flexible and blended (FaB) TVET network that connects TVET practitioners around the world in a learning environment. However, the low prestige given to TVET makes this pathway difficult to implement in Nigeria.
New Perspectives on Open Schooling Initiatives

The children who fall into the out-of-school category belong to fishing communities, nomadic herders and Islamic almuhajir from madrassa schools. None of the programmes and initiatives so far have succeeded in providing sustainable education to these groups of children.

But then, the very concept of “out-of-school” seems to have been misunderstood — for it need not necessarily mean out of lifelong skills; the children of these communities do engage in trades, crafts and indeed structured community education that provides them with functional lives. Al-Muhajir (corrupted to Almajiri) are madrassa pupils in northern Nigeria who camp at a location for Qur’anic school lessons and perform minor tasks to earn extra money. The fact that they mostly wander on the streets gives the impression that they are “out-of-school.” Yet they do attend an extremely linguistically complex schooling system (Hoechner, 2020). Fulani nomadic herders, for instance, know how to look after cattle, what quality of food the cattle need, as well as the quality of milk they produce (Krätli & Dyer, 2009). The same is true of children of migrant fishermen from riverine communities of the Niger Delta basin in southern Nigeria, who are experts in fish ecology (Fatunla, 1997).

The ODL mechanism, coupled with cheap smartphones, might be the best way to reach out to them. Indeed, this was part of the strategies of the Universal Basic Education Commission (UBEC) in March 2020, when a series of policy dialogues were held with both national and international stakeholders to generate modalities for implementing an out-of-school programme.

The policy assumption that these targets must acquire “modern” education — something many of their parents are not willing to subject them to — has created resistance in these communities because, for them, education goes beyond the acquisition of white-collar knowledge for an uncertain job market.

Under these circumstances, open schooling, relying as it does on technology and innovative delivery systems, faces major challenges with respect to conceptualisation, system analysis, implementation, ownership and sustainability. Thus, timing, location, teaching roles, instructional methods, modes of access, and other factors related to learning processes have to be carefully worked out if the concept of open schooling is to achieve a measure of success in Nigeria.

The Covid-19 pandemic lockdown of 2020 brought to the fore the vulnerabilities of out-of-school children in the acquisition of education. While government agencies in the country were scrambling to come up with an articulated open school policy, which hitherto did not exist, private entrepreneurs seized the moment to launch websites targeted at providing secondary school students with open school resources to sustain their studies at home, in the clear absence of any distance learning initiative for secondary schools.

Open Schools Nigeria was one such initiative. It provided the entire spectrum of secondary education materials, which had to be downloaded on a subscription basis. This disadvantaged the very targets the open school initiative was aimed at. This was because the Open Schools Nigeria commercial enterprise was meant either as a stopgap until the lockdown was over or as a sustainable reinforcement of learning for those already in a structured learning stream. Yet the philosophy of open schooling as originally intended was to target out-of-school children and meet their needs.

In 2020, the Nigerian government, with technical assistance from COL through UBEC, launched a pilot Open Schools Programme (OSP). The programme is currently being implemented by UBEC in six states — Kaduna, Kano, Katsina, Kebbi, Adamawa and Niger — mainly in the north of Nigeria, which has the largest number of out-of-school children.
Section Five:
Summary and Recommendations

Summary

• Enrolment in ODL provisions in Nigeria is tilted against female participation, with an average of 45% female enrolment across all areas.
• The responses from the participating ODL service providers in Nigeria indicated a slow but steady investment in ODL provisions. The Covid-19 lockdown suddenly opened up some of the universities to the need to invest in online provision as a means of reaching out to students — and thus generating more return on investment while at the same time contributing to human capital growth in the country. However, only one university, NOUN, had policy provisions for scholarships for marginalised persons — specifically, incarcerated individuals in correctional centres, as well as indigent girls and persons with disabilities.
• As in conventional non-ODL universities, all the ODL programmes in Nigeria are subject to regulations and checks for quality assurance, based on approved Benchmark Minimum Academic Standards established by the country’s higher education regulator, the National Universities Commission. An accreditation visit by NUC every two to five years ensures ODL service providers meet the standards for providing online instruction.
• Further, with a combined output of over 85,000 students in a five-year period, the university ODL service providers in Nigeria have contributed considerably to human resources production in the country.
• The Covid-19 lockdown, activated to limit the spread of the coronavirus pathogen, forced a “new normal” in the delivery of instruction worldwide. In Nigeria, ODL providers intensified efforts to acquire the technology needed to easily reach their students. These included introducing remote examinations through proctoring software. There were also renewed efforts at strengthening the various learning management systems. However, online OER and MOOCs were rarely used or widely available, although free online micro-credential courses were introduced in an effort to improve participants’ capacity for lifelong learning.
• Technical and vocational education, as well as open schools, desirable though they are, both face challenges with respect to effective implementation and sustainability.
Recommendations

1. The ODL service providers should intensify efforts to attract women to the various courses available, because clearly the women engaged in the various programmes have seen the benefits of effectively combining the acquisition of higher certification while also meeting domestic responsibilities.

2. Considering the commoditisation of technology, especially with increasing ownership of affordable smartphones by all population categories in the country, ODL service producers should increase their services to correctional centres so that more incarcerated individuals have access to higher education. The existing dual-mode ODL centres currently have restricted programme offerings. To reduce recidivism among released incarcerated individuals, NOUN’s current efforts should be complemented by dual-mode ODL service providers in programmes targeted at justice dispensation and conflict resolution.

3. Poverty and the pressures of daily survival have consistently been identified as barriers to further education among Nigerians. With non-residential university education available through ODL, ODL providers must intensify their efforts to source scholarships for marginalised populations in Nigeria, especially girls in the South East region of the country and boys in terrorist insurgency and brigandage areas of the northern territories.

4. More micro-credential and lifelong learning free online courses should be diversified and introduced by all ODL service providers in the country.

5. More efforts should be put into thinking of new ways of assessing students engaged in ODL delivery in Nigeria. There should be a move away from anachronistic evaluation mechanisms.

6. Effective integration of ODL delivery systems and employability should be aggressively pursued to provide ODL graduates with digital skills and competencies associated with digital learning, and at the same time, enable them to have a competitive edge in the labour market.

7. While ODL is seen as a saviour for Nigerian students, government efforts must be intensified to ensure universities have sufficient carrying capacities to absorb more entrants.
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