



The Need for Technology in Promoting Teacher Education in Nigeria through Open and Distance Learning

Valorisation de la Formation des Enseignants au Nigeria à Travers L'Enseignement à Distance

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Abstract

This paper considers Open and Distance Learning (ODL) as the mode of education delivery where learners and teachers need not be in physical contact. ODL possesses a high range of flexible learning environments, enhancing access to tertiary education. The paper goes further to explore how ODL is made effective in Nigeria through the use of a variety of media and technologies in providing quality education for a large number of learners in the country. Nigeria is a highly populated black nation. This paper further portrays how ODL could be used to enhance teacher education

through technologies. As a result, the government alone cannot provide the basic educational needs of the teeming population within a formal classroom setting. Therefore, there is the recourse that with the help of technology, Open and Distance Learning becomes very essential. Distance education provides programmes for various levels. The paper discusses and concludes by showing how ODL promotes cost-effective pre-service and in-service teacher education in society, thus supporting school-based pre-service and continuing professional development programmes for teachers to upgrade unqualified teachers and enable qualified ones to acquire higher teaching qualifications, especially those in remote areas. This paper also sees the role technologies play in enhancing teacher education, therefore recommends that ODL or ODE institutions should pay more attention to the use of technologies in their mode of delivery than otherwise.

Keywords: ODL, ODE, Teacher Education, NTI, NOUN

Resume

Cet article envisage la formation à distance (FOAD) comme un mode d'enseignement dans lequel les apprenants et les enseignants ne sont pas nécessairement en contact dans un même lieu. L'enseignement ouvert et à distance possède un environnement d'apprentissage très flexible, améliorant l'accès à l'enseignement supérieur. L'article explore ensuite comment l'ODL est rendu efficace au Nigeria par l'utilisation d'une variété de médias et de technologies pour fournir une éducation de qualité à un grand nombre d'apprenants dans le pays. Le Nigeria est une nation africaine très peuplée. Par conséquent, le gouvernement ne peut à lui seul répondre aux besoins éducatifs de base de cette population immense dans le cadre d'une salle de classe formelle. Par conséquent, le recours à l'enseignement à distance devient très essentiel. L'enseignement à distance fournit des programmes pour différents niveaux (Diploma, NCE, BEd, BA, BSc, PGDE, MEd, etc.) à un millier de personnes dans le pays, en utilisant les capacités du matériel, des logiciels et des réseaux, ainsi que la session de contact pour promouvoir l'apprentissage à des milliers de personnes à travers le pays, en utilisant du matériel, des logiciels et des capacités de réseau, ainsi que des sessions de contact pour promouvoir l'apprentissage. L'article se termine en montrant comment l'apprentissage à distance promeut une formation initiale et continue des enseignants rentable dans la société, soutenant ainsi les programmes de formation initiale et continue des enseignants dans les écoles afin de mettre à niveau les enseignants non qualifiés et de permettre aux enseignants qualifiés d'acquérir des qualifications d'enseignement plus élevées, en particulier dans les régions éloignées.

Mots-clés: *ODL, ODE, Formation des enseignants, NTI, NOUN*

Introduction

Learning has been interrupted globally during the COVID-19 pandemic. This development however gave rise to the general acceptability of Open and Distance Education Institutions of higher learning. It could be recalled that before now the government has not paid much attention to the need for Open and Distance Education even though there have been policies in the National Policy on Education which has not been fully implemented. Stakeholders in education also paid lip services to this practice. This shortfall might be attributed to the inadequate knowledge of ODL until the outbreak of the COVID-19 pandemic. It now becomes pertinent to the need to get the meaning of ODL, its benefits, and the way forward using technology for greater advancement. Therefore, Open and Distance Education/Learning (ODE) or (ODL) according to Adeyanju (2019) states that is a form of education that uses hardware, software, and network resources, as well as communication sessions, and invariably face-to-face intermittently to facilitate learning. It is a type of formal education that is centred in an institution and uses interactive telecommunications systems to link learners, services, and instructors (Simonson, Smaldino & Zvacek, 2015). The Sixth Edition of the National Policy on Education (NPE) (2013) defines Open and Distance Education as a mode of education delivery in which learners and teachers do not need to be in physical touch, and which offers a wide range of flexible learning environments that improves access to tertiary education. The National Policy on Education goes on to say that the ODL is capable of teaching a wide range of skills and employs a variety of media and technology to provide high-quality education to a large number of students.

Distance education in Nigeria is well-known with four features. First, it is a type of education that is mainly provided by institutions and is not focused on individual or personal research or non-academic learning. The institutions may or may not use a traditional classroom-based learning method, but they are eligible for accreditation from the same agencies as those that use traditional learning methods. Second,

distance learning is dominated by physical separation, and a lack of proximity can cause students and teachers to suffer.

Approachability and convenience are important advantages of this system of education. Well-designed programmes may also make academic, cultural, and social gaps between students more available. Third, through telecommunications contact, teachers and students maintain a direct connection. Electronic means of communication, such as e-mail, zoom, and other e-interactive forums, are used, but traditional methods of communication, such as the postal system, can also be used. Interaction and accessibility are important to distance education, as they are to all education, regardless of the means of communication. As communications systems become more advanced and readily accessible, physical proximity is used less and less to connect learners, teachers, and instructional resources. As a result, the exponential growth of distance education has been aided by the Internet, mobile phones, e-mail, and other types of social interactive modes. Finally, distance education, like any other type of education in Nigeria, creates a learning community, which consists primarily of students, tutors, and instructional materials such as books, audiovisuals, and graphical representations that provide the learner with access to the content of instruction.

The main goals and objectives of ODL or ODE in Nigeria are to provide more access to quality education and greater opportunities in educational systems; meet and nurture the special needs of employers and employees by reeling out special courses for career advancement; encourage global relevance, especially in tertiary education curricula; ameliorate the effect of the internal and external brain in tertiary education curricula, and ameliorate the effect of the internal and external brain in tertiary education curricula. Through technologies in recent times, the aims and objectives of ODL or ODE towards enhancing teacher education could be made quite achievable. Additionally, Adeyanju (2019) argues that ODL is fully recognized as another mode of tertiary education, equal in quality to traditional residential face-to-face university education; and that it is a very viable and cost-effective mode of bridging the gap created by traditional

universities' limited space capacity to absorb all of those are qualified for entry.

The distance education system aims to reduce the distance between teachers and students. In distance education, interactive telecommunication is important (Simonson, Smaldino & Zvacek, 2015). Interaction is essential, but it should not come at the cost of the material. In other words, learners must be able to communicate with one another, with instructional materials, and with their instructor. Interaction, on the other hand, should not be the primary feature of instruction; rather, it should be readily accessible, commonplace, and appropriate. Telecommunications systems refer to electronic media such as television, telephones, and the internet, although the word does not have to be restricted to that. Telecommunications is characterized as "distance communication" (Hope & Guiton, 2006). The more electronic telecommunication technologies advance and spread, the more likely they are to become the backbone of modern distance education systems. Older, less sophisticated telecommunication systems, on the other hand, will continue to be relevant. The concept of connecting learners, tools and facilitators is also investigated. This implies that there are teachers who work with students and that learning opportunities are accessible. Tools that can be visualized, sensed, heard, or completed should be made to follow the instructional design procedures that organize them into learning environments that facilitate learning. These must be ODL's components.

The Evolution of Open and Distance Education in Nigeria

Distance learning in Nigeria dates back to the colonial era when British correspondence colleges offered Nigerian students the opportunity to take ordinary and advanced courses through correspondence. They were called "correspondence" since the students had their studies mailed from England, and they (the students) also had their responses mailed from England to be graded. They were mostly reliant on the postal system, with no radio, television, audio, or video accompaniment. Before Nigeria's independence, the main correspondence courses were championed at the University of Ibadan (Owoeye, 2004). This was followed by the establishment of conventional universities and colleges. Correspondence study is the

foundation of distance education, not just in Nigeria but all over the world. As Simonson, Smaldino, and Zvacek (2015) observe, an advertisement in a Swedish newspaper in 1833 touted the opportunity to study “Composition through the medium of the Post.”

In Nigeria, students who prepared a certain number of lessons in the correspondence school knew more about the subject covered in those lessons, and knew it better, than students who covered the same ground in the classroom. These correspondence colleges have given birth to several colleges and universities in Nigeria today. The National Teachers' Institute (NTI) was established in 1976 by the Federal Government in response to the country's urgent need for trained and skilled teaching staff at all levels of the educational system; and the National Open University of Nigeria (NOUN), which was founded on July 22, 1983. Distance education enabled people to broaden their intellectual horizons as well as develop and upgrade their professional knowledge. It also emphasized the importance of individuality in learning and versatility in terms of study time and place. There were two distinct philosophies of distance education in Nigeria: the full liberalism of ODL institutions in Nigeria stressed the student's ability to pace his or her progress through the programme, while other programmes, such as those offered by the National Open University of Nigeria, presented a more rigid schedule of weekly lessons.

Telecommunications in Nigeria witnessed a steady expansion of distance education, without major structural changes, but with incremental and more advanced methods and media used. Audio recordings were used in training for the blind and language teaching for all students. Electronic and radio engineering courses required the use of laboratory kits. On this note, Ogunbusola (2016) asserts that Open and Distance Learning has been established as an integral part of education to be used for the nation's socioeconomic growth since the NPE's inception in 1977. It recognized ODL as a distinct sector of education that should be organized nationally and afforded individual versatility in human resource development for national development. Advances in electronic communications technology helped determine the dominant distance education medium in Nigeria. At least ten radio stations were built at educational institutions in the early twenty-first

century, but most were decommissioned by the end of the decade. The remaining stations were mainly located at land-grant universities. To this end, Jegede (2016) summarizes ODL's past in Nigerian universities as follows: To this end, Jegede (2016) sums up the history of ODL in Nigerian higher institutions as follows:

- The Oxford University of the United Kingdom's extramural studies at the University College, Ibadan, commenced in 1947 to enable a good number of Nigerians who were thirsty for higher education, but who are unable to get a place in the limited admissions into the University College, Ibadan, to do so through correspondence study.
- Many Nigerians sought admission as students of the Correspondence College in universities and institutions in the United Kingdom while others registered as external candidates for the General Certificate of Education (GCE) both Ordinary and Advanced Level of the University of London and Cambridge.
- The Rapid Results College and Wosley Hall correspondence studies may be cited as the first set of 'organised' Distance Learning Programmes in Africa.
- The Nigeria Broadcasting Corporation's English by Radio Programme, which began shortly after the country's independence in 1960, was the first organized distance learning programme. The Educational Television Programme of Nigeria's National Television was broadcast immediately after. The English by Radio programme was a national broadcast that was relayed during school hours to both primary and secondary schools. The programme was an important part of the school's activities. As a result, school schedules included time for students to listen to and follow instructions while working in their workbooks.

In 1978, in response to the need to fill the massive vacuum of qualified and trained teachers to service the Universal Primary Education programme launched by the Gowon Military administration in 1977, the National Teachers Institute (NTI), located in Kaduna, was established and operated the single-mode programme for upgrading the

qualification of under-qualified teachers as well as the continuing education of teachers using distance learning techniques. The activities of NTI were supervised by the National Commission for Colleges of Education (NCCE) which carried out periodic quality assurance and accreditation exercises of NTI's National Certificate in Education Distance Learning programmes in partnership with The Commonwealth of Learning (COL) on capacity building. The first tertiary institution to use the dual-mode system was the University of Lagos. The National Teachers Institute (NTI), based in Kaduna, was established in 1978 to address the massive shortage of qualified and trained teachers needed to support the Gowon Military administration's Universal Primary Education programme, which began in 1977.

The National Commission for Colleges of Education (NCCE) oversaw NTI's activities, and in partnership with The Commonwealth of Learning (COL) on capacity building, conducted periodic quality assurance and accreditation exercises of NTI's National Certificate in Education Distance Learning programmes. Nigeria decided in 1976 to provide widespread access to higher education by forming a planning committee to advise on the establishment of an open university. A Presidential Planning Committee on the Open University System for Nigeria, chaired by Professor Afolabi Ojo (later Vice-Chancellor of the National Open University of Nigeria), was established and inaugurated on May 1, 1980, by the then Honourable Minister of Education, Dr. I. C. Madubuike, with far-reaching terms of reference, including "to draw up a plan of operation to enable the emergence of an open university system in Nigeria." Despite the Committee's complete dedication to its mission, the National Assembly did not pass the Act establishing the university until April 20, 1983. On July 22, 1983, the President of the Federal Republic of Nigeria, Alhaji Shehu Shagari, assented to the bill. Following that, in 1984, the National Open University of Nigeria (NOUN) began full-scale activities of screening candidates for various courses. However, due to the formation of a new government, the University's activities were halted on April 25, 1984, but resumed on April 12, 2001, with 32,400 pioneer student enrolments. Since then, the University has worked to fulfil its mission of providing practical, cost-effective, and flexible learning that adds value to the lives of all who seek knowledge. NOUN, today, offers a total of 101 undergraduate,

sub-degree certificate, diploma, and postgraduate (PGD, Bachelor, Masters, Ph.D.) programmes in Arts and Social Sciences, Business and Human Resource Management, Education, Law, Science and Technology; and has two special Units: The Centre for Lifelong Learning and Workplace Training and The Regional Training & Research Institute for Distance and Open Learning (RETRIDOL) jointly established by NOUN and the Commonwealth of Learning in 2003 to identify and meet the needs of ODL-related research and capacity building in the West African sub-region.

It should be recalled that the National Teachers' Institute in Kaduna is a single-mode distance education institution that specializes in teacher education. The Federal Government developed it in 1976 in response to the country's urgent need for skilled and qualified teaching staff at all levels of the educational system. The Institute was founded by Act No. 7 of April 10, 1978, which charged it with some responsibilities, including *providing courses of instruction leading to the development, upgrading, and certification of teachers as specified in the relevant syllabus using distance education techniques.*

The Institute's mission is to improve the technical skills of serving teachers to provide high-quality education at the primary and secondary levels and to increase the country's educational standards.

Between 2006 and 2015, the NTI successfully trained 749,158 teachers through the Millenium Development Goals (MG). As the country transitions from the MDGs to the Sustainable Development Goals (SDGs), the National Teachers' Institute will play an even bigger role.

In the last 28 years, 375, 256 students have earned their Nigeria Certificate in Education (NCE) from the NTI (Azaure, 2019). The National Teachers' Institute, as a parastatal of the Federal Ministry of Education, is always ready to participate in the Ministry's plans and programs. It is therefore heartening to learn that the NTI is well-positioned to play a key role in the implementation of the FME Ministerial Strategic Plan Draft 2016-2019. The Plan is based on nine pillars, each of which is related to the NTI mandate. Four of them, in

particular, are directly relevant: More specifically, four are directly relevant, namely:

- Strengthening basic and secondary school education;
- Teacher education, capacity building, and professional development;
- Quality and access to higher education; and
- E-learning (Culled from <http://www.nti.edu.ng/programmes/>)

On the other hand, NOUN is a federal government-owned university that has become Nigeria's first dedicated university to offer distance learning courses. The university's mission statement is to be known as the leading provider of highly accessible and enhanced quality education anchored by social justice, fairness, equality, and national cohesion across a broad scope that cuts through all barriers (Ajadi, Salawu & Adeoye, 2008). The mission of the NOUN is to provide practical, cost-effective, scalable learning that adds life-long value to quality education for those who pursue knowledge, according to the mission statement.

Planning and Developing ODL Course Outlines for Teacher Education

In planning the ODL for teacher education, three important principles need to be taken into account in designing any development process. First, the process adopted should provide you with a logical means of *translating your vision of what students need into reality*. Secondly, the process in itself should go a long way toward “*ensuring the quality of the ultimate products*”. Third, within the process emphasis should be placed on *supporting creative thinking and meaningful exchange of views* (Melton, 2015).

There are five critical stages in preparing and designing ODL courses, according to Adeyanju (2019) and Melton (2015). The first step in the process is to create a course outline. It is the most innovative stage of the development process, so members of the team should be able to openly share ideas in a comfortable and encouraging atmosphere. If you can afford it, you might consider arranging for a ‘retreat’ away from campus stresses at this time, where the team can focus in peace

on the issues at hand without being distracted by day-to-day activities. You should know who is responsible for the creation of each unit within the course by the end of this stage, and you should have decided on a schedule outlining the dates on which the items from each stage will be tested.

The development of self-study materials is the second step. If you are one of the authors in charge of creating self-study materials for a specific unit, you will need to create an outline for it. You will need to communicate with other experts about the creation of relevant resources (audio cassettes, home experiment kits, computer conferencing, and so on), and you can meet with your co-authors regularly to discuss both your unit and theirs. The outline you create for your unit should be a collaborative project with all parties involved. You might find it helpful to use the same techniques for creating the outline as you did for creating the course outline. As a result, it makes sense to start by defining and analysing the unit's broad goals and objectives and then indicating how the unit's components could be designed to help students achieve those goals. You'll need to explain how the unit will be divided into sections/study sessions and how each will contribute to the achievement of the objectives. You will need to figure out what teaching methods to use and why, and you will almost certainly want to think about what kinds of activities/projects to include in the different sections of the unit, as well as how to make the best use of the media available (Santosh 2005). You should also consider the type of assistance students will need the services that will need to be made available to them, and how you will monitor and measure their progress.

The third stage is developing the core content for the unit study guide. Before reviewing what you will need to do at this stage in the process, a few principles are underlying the approach which must be adopted. You may have noted the position of advance organizers in helping to define the layout of first the course and then the unit when you developed the outline for the course and then for the unit. In reality, you can create advance organizers for each section/study session within a unit, as well as any further subdivisions of these sections, using the same procedures. In other words, the advanced organiser may be used

to gradually explain the structure of the materials being produced. And when the advance organizer is forced to look ahead a very short distance into the material the process ceases to make sense. The procedure might not be as straightforward as it appears here. As you work on the materials, your reasoning will possibly become clearer, and you'll want to make changes to the advance organizers to represent your new perspectives.

However, keep in mind that if the structure of an advance organiser is changed, the structure of the associated self-study materials will need to be changed as well. There are many benefits of using advance organizers in the manner mentioned. They provide a logical connection in the creation process from the author's perspective. We have already seen how analysing objectives will help us figure out what kind of structure we'll need to achieve them, and using advanced organisers is a rational way of communicating that structure. As a result, the advanced organiser can provide a structure in which more comprehensive materials can be created. When used in this way, the advance organiser becomes a part of the self-study materials provided to the student, providing a structure for the assimilation of the more comprehensive learning to proceed in the way Moore (2012) prescribed in his original formulation of the term. Some would claim that the approach mentioned results in the over-structuring of the material and that students should be granted even more flexibility – as recommended by Major (2015) – to choose their own goals and methods for achieving them. However, if courses are organised around the skills to be learned, it is possible to give students a great deal of freedom to follow their interests within the framework described. For example, a course may be designed to help students do the following, as prescribed by Melton (2002), within a given discipline:

- Search the literature
- make judgements on the quality of related studies. • Apply newly acquired knowledge and skills to new situations
- test hypotheses through related studies/experiments
- collect, analyse and interpret data
- draw appropriate conclusions from studies/experiments

One of the major benefits of project-based learning is that it allows students to focus on the development of those skills while also allowing them to choose the topics that will be discussed in their projects (Adeyanju, 2019; Melton 2002).

The fourth stage entails fully designing the self-study materials. You will already have notes in your core text outlining all of the tasks you need to do at this point in the process, and it will be up to you, with the help of your colleagues, to see that they are completed. Seeking or creating examples, case studies, and tasks are likely to consume a significant portion of your time at this point in the process. The latter is likely to take a significant amount of time, as this is when you will need to incorporate resource materials (articles, audio-visual, audio and video clips, computer-based materials, and so on) into the unit through the creation of relevant activities and accurate referencing. When your materials come together, you will probably want to spend some time looking for insightful quotes and photos to help illustrate their importance.

Editing and layout in whatever media are being used is the final stage of the process, which is normally done by relevant professionals. Have a final conversation on how you want the materials packaged before handing over all of your materials for design work and editing. For example:

- Do you want to put all of the information students need in one Study Guide (the introduction to the course, comprehensive instructions for students during the course, and evaluation details)?
- Would you prefer the 'Introduction to the Course' be included in a separate brochure that can be sent to students ahead of time? If so, would you like to have evaluation information in a separate "Assessment Booklet" that can be consulted at any time during the course?
- Alternatively, would you prefer to put the course introduction and evaluation information in a separate "Course Guide" that students can refer to at various points in their studies

Relevance of Technologies in Teacher Education through ODL

Teacher Education as we know can only be measured through the quality of education being delivered. Most importantly quality education cannot be achieved without a sound teacher who has the technological know-how to deliver effective teaching and learning in the 21st century. Little wonder, Oparaduru (2021) stated that a teacher must be very knowledgeable on whatever topic; he/she wants to teach. Therefore, quality education is gotten from a quality teacher. This quality education focuses on the whole child-the social, emotional, mental, physical, and cognitive development of each student regardless of gender, race, ethnicity, socioeconomic status, or geographic location (Oparaduru, 2021). It then implies that teacher education in ODL cannot set aside its necessity in the involvement of technologies to achieve quality education in its delivery.

Open and Distance Learning ODL is a technology-driven model to enhance teacher education, especially through the following ways:

Technology Provides Teachers with more Tools to Support Students

In addition to resources like textbooks, and worksheets, technology equips educators with various tools to assist students to develop a better understanding of the material.

Since it is obvious that students learn in unique ways, incorporating more learning methods increases the likelihood that all the students will understand the concepts the teacher teaches. Hence, technology accommodates a variety of learning methods. This is to say that whether students learn best through lectures, reading, examples, or video, technology allows teachers to accommodate every learning style.

Students can learn via online video, audiobooks, interactive online games, and others, all at their own pace. Since the online content is easily upgraded, the teacher and the students can immediately access the most recent information.

Students in ODL Become Active Participants in Learning Process by Using Technology

The traditional teaching method is for an educator to stand at the front of the classroom and deliver information about a subject. In this classic lecture style, students are passive participants. In other words, they only receive information. Technology in the classroom helps students engage with the material they are learning. From online educational games to immersive virtual reality, Ed. Tech enables students to become active learners. For example, gamification can improve students' performance.

Technological resources frequently used in education include:

- Interactive online quizzes, such as Kahoots or Quizlet
 - Virtual games or simulations where students put knowledge into action
 - A smart board or interactive portable whiteboard, where students can diagram a sentence, solve math equations, and more
 - Access to a computer for online research
 - Online video series that dives deeper into subjects
 - Presentation tools, such as PowerPoint, Canva, and Prezi.
- Technological tools don't have to cost a lot. There are multiple free resources the teacher can use to enhance his/her students' education.

Teachers Who Become Experts at Using Technology in the Classroom Can Advance Their Careers in ODL

In addition to the required standard knowledge and skills, more institutions seek educators with experience using technology in the classroom. The Ed. Tech field offers education professionals incredible opportunities to advance their careers. As more educational institutions adopt technology in the classroom and as technology rapidly expands, new job opportunities in Ed. Tech continue to emerge. Some of these are common Ed. Tech roles in ODL environments.

- a. Academic Operations Manager
- b. Instructional Designer
- c. Innovation Director
- d. Director of Online Learning
- e. Curriculum Design Manager
- f. Classroom Teacher/Facilitator
- g. Chief Learning/Technology Officer

This is to say that the most effective way to become competitive as a teacher in an ODL environment is to advance in Ed. Tech.

Conclusion

This paper focused on promoting teacher education through Open and Distance Learning in Nigeria. The paper also gave room for how to create quality course manuals for the successful dispensing of the ODL through teacher education in Nigeria. This is because, to translate teachers' vision of what is needed into practice, we need to follow a development process that can help the teacher to advance in logical stages from their initial conception of what is required to the final details of the ultimate product. In Nigeria, ODL evolved through correspondence studies. The two main institutions charged with the responsibilities of discharging the ODL Nigeria are the National Teachers' Institute (NTI) and the National Open University of Nigeria. While the former only focuses on training and re-training teachers, the latter provides quality and holistic educational courses to reflect all levels and disciplines. ODL is cost-effective for both learners and the government. Finally, this paper proffers insight into how ODL could be used to enhance teacher education, especially through technologies.

Recommendations

Having taken time to look into ODL regarding promoting teacher education, the following recommendations are made:

- a. ODL is as old as education itself; having evolved through correspondence courses undertaken from as far back as the eighteenth century, more awareness should be created especially for the public, as a way to curb mass illiteracy.

- b. COVID-19 has brought an eye-opener: more attention should be given to ODL than face-to-face teaching.
- c. Teachers at all levels should be trained and re-trained to be ODL compliant since the activities of teaching and learning are going digital.
- d. ODL course manuals should be designed in such a way that will be pedagogically appealing to the learners. Such materials should be written by well-qualified educators; in simple digestible English to suit all levels of learners.
- e. Having seen some of the relevance of technologies in teacher education in an ODL environment, it becomes imperative that teachers should be properly trained on the technological aspect of the delivery mode to enable them to manage all the resources that will make them user-friendly in an ODL system.

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