RELEVANCE OF INFORMATION TECHNOLOGY (IT) TO THE DEVELOPMENT OF DISTANCE EDUCATION FOR TEACHERS IN NIGERIA

Shuaibu Mohammed[i]

Department of Arts and Social Sciences Education,
Faculty of Education
Northwest University, Kano, Nigeria

Abstract:

Promoting a knowledge society through Information Technology (IT) to the development of Distance Education or open distance learning is beginning to emerge fast over the last decade. Thus, this paper discusses the extent to which IT is relevant to the development of Distance Education for teachers in Nigeria. Literature were reviewed regarding the concepts of Distance Education as a means of enhancing teachers' performance, emergence and transformation of Open-Distance Education, the goals of Distance Education, IT and Distance Education, integration and promotion of IT for teachers. Similarly, adoption of IT in teacher education programme and their problems in Nigeria were also discussed. Relevance of IT to the development of Distance Education for teachers in Nigeria was also discussed which is the key assertion to this paper. Based on the discussion, the paper suggested that teachers should enroll for computer training programmes so as to meet with modern trends in education. All stakeholders in education should accept the reality of the need to adopt IT by integrating it into teacher education programmes, effort should be geared towards making IT products through local sources, remuneration review should be given top priority to enhance teachers' performance, adequate financial backing should be provided for the management of Teachers' Colleges and Universities. Similarly, curriculum of teacher education programme should also be reviewed to include computer training and practice to the development of Distance Education for teachers in Nigeria.

---

[i] Correspondence: email shamjaz16@gmail.com

Keywords: distance education, development, information technology, teachers, teacher education, Nigeria

1. Introduction

Education is the key to development and, for that matter, the success of every nation highly depends on it. Education, therefore, is a major instrument in the development of the human resources of a country. Education brings about economic, political, social as well as cultural development in the world. As such, every nation invests heavily in higher education because it can produce unquantifiable benefits for individuals, organizations and the society as a whole. Education is provided through formal and informal means. In formal settings, the conventional (face-to-face instruction) and distance education (offered with separation in terms of physical location of instructors and students) have been used to provide educational opportunities to recipients. Open and distance education though not new in Nigeria has been given much prominence of recent. Many Nigerians benefited through the open education (correspondence) of Rapid Result College, and Exam Success Correspondence College, among others. It is also a means of providing access to basic information and tertiary education for Nigerians (Ololube, Ubogu & Ossai inYusuf, 2006).

In recognition of the inestimable value of education, the Nigerian government has adopted education as an instrument par excellence for effecting national development. Thus, education is viewed as an instrument for building a free and democratic society, a just and egalitarian society, a united strong and self-reliant nation and a great and dynamic economy (Federal Republic of Nigeria, 2004). In order to attain these national aspirations, schools are expected to provide quality instructions that will be oriented towards inculcating values of respect for the worth and dignity of individuals; ability to make rational decisions; moral and spiritual values in interpersonal relationship and shared responsibility for the common good of society, among others (Federal Republic of Nigeria, 2004).

Distance education, also called open or distance learning is a form of education in which there is normally a separation between teachers and learners. Thus, it includes one which others may refer to as a means of the printed and written word, the telephone, computer conferencing or teleconferencing used to bridge the physical gap between the instructor and the learner. Distance education equally involves the provision of whatever educational opportunities that are needed by anyone, anywhere, at any time for those who otherwise would have been denied. Improving the quality of education through the diversification of contents and methods and promoting

experimentation, innovation, the diffusion and sharing of information and best practices as well as policy dialogue are UNESCO's strategic objectives in Education (UNESCO, 2002, 2005).

However, the teacher is the pivot of the education process. The teacher is the key in the entire education programme and he can make or mar the best educational programme in the world. Education therefore is what teachers make of it. Thus, competent, devoted and professionally-qualified teachers are an essential foundation for a good education system. In other words, the attainment of national objectives for the adequate preparation of students for their examinations and achievement of educational objectives depend largely on teachers (Arinde, 2010).

In view of the above, and in order to improve teacher quality, efforts should be made to provide adequate and functional educational services for teachers. These services include the provision of distance learning programmes, in-service training, teachers' resource centers services, and the promotion of information and communication technology. These services tend to facilitate the implementation of the educational policy, the attainment of policy goals and the promotion of effectiveness of the educational system (Federal Republic of Nigeria, 2004).

Therefore, the relevance of information technology to the development of distance education across the world is beginning to emerge fast over the last decade. In Nigeria, it is acknowledged that more than a few factors affect the integration and approach to successful improvement of distance education programs (Ololube, Ubogu & Ossai, 2006). Since this is the case, it was reasonably impossible to consider all the factors.

However, the purpose of this paper is not to look into such several factors but to address how relevance is information technology to the development of distance education for teachers in Nigeria. Similarly, there is need for teachers to acquire enough skills to make them relevant technologically. Hence, the relevance and adequacy of information technology to the development of distance education or distance learning and their effective utilization to students' academic performance cannot be overemphasized.

It is against this backdrop that this paper discusses the relevance of information technology to the development of distance education for teachers in Nigeria. Similarly, emergence and transformation of distance education, integration and promotion of Information Technology for teachers, adoption of information technology in teacher education programs and their problems in Nigeria were also discussed.

2. Distance Education: An Overview

Distance Education refers to a kind of educational programme in which students are spread all over the country and are taught by the teacher at a designated area through the use of modern communication gadgets. Kehinde (1999) opined that Distance Learning System (DLS) is clearly the most rapidly growing and changing form of education which incorporates a wide range of strategies for learning. According to him, it is a form of education whereby the teacher does not actively need to be present all the time; he only comes occasionally to monitor and solve learners' problems and at times the teacher is not known. UNESCO (2001) defined distance education as any educational process in which all or most of the teaching is conducted by someone removed in space/or time from the learner, with the effect that all or most of the communication between the teacher and the learner is through an artificial medium, either electronic or print materials. Onyejemezi (1996) defined distance education as "*a process that uses a combination of media to teach learners who are removed in space and/or time from their tutors.*" As an offshoot of educational technology, distance education has the extension of knowledge and skill to unlimited number of learners as its hallmark.

One of the characteristics of distance learning is that the teachers are separated in time and space from the learners. This was equally emphasized by Akande (2011) who defined distance learning as the type of education that takes place outside the conventional school system; it is imparted without necessarily having personal interaction with students or learners. Keegan (1999) stated that "*analysis of the definitions leads to the recognitions of certain elements*". The separation of teacher and learner is fundamental to all forms of distance learning whether they are print-based, audio/radio-based, and video/television-based or computer based. This separation differentiates distance learning from all forms of conventional face- to-face direct teaching.

Telecommunication-based distance learning approaches constitute an extension beyond the limits of correspondence study. The teaching-learning experience for both instructor and the students occur simultaneously. It is contiguous in time. When an audio and/or video communication link is employed, the opportunity for live teacher-student exchanges in real time is possible, thereby permitting immediate response to students' inquiries and comments. Like a classroom setting, students can seek on-the-spot clarification from the speaker. However, from the definition highlighted above, it is clear that distance education is any type of instruction in which both learners and teachers are geographically separated and therefore rely on electronic devices and printing materials for instructional delivery. Similarly, distance learning is a formalized

teaching and learning system specifically designed to be carried out remotely by using electronic or non-electronic communication.

2.1 Emergence and Transformation of Distance Education in Nigeria

According to Abifarin (2004), "*Nigeria is not an island as regards development of distance education in the world*". In fact, the genesis of distance education in Nigeria is very similar to the development of distance education in other parts of the world: for instance, Aderinoye and Ojokheta in Celvert (2004) wrote that distance education helps extend the market for education to clientele who have not been previously served. The problem of unsatisfied demand for education versus actual supply of educational services contributed to the acceptance, growth, and implementation of distance education programmes in Nigeria as means to bridge the gap between demand and supply.

The history of distance education in Nigeria dates back to the practice of correspondence education as a means of preparing candidates for the General Certificate in Education, a pre-requisite for the London Matriculation examination. This practice was described by Bell and Tight (1999), and echoed by Tait (2003), who said:

> *…the University of London has been termed the first "Open University," because of this move, students all round the world, but principally within the British Empire and its dominions, were soon looking for tutorial support to supplement the bare syllabus they received on registration wherever they lived.*

In this sense, Nigeria was not left out of the opportunities provided by University of London. Omolewa (1982) reported records that showed a handful of Nigerians, as far back as 1887, enrolled for the first time in the University of London matriculation examination as external students studying through correspondence, and without enjoying any established formal ties to that educational institution. Omolewa also noted that in 1925 several Nigerians, among them Eyo-Ita and H.O. Davies, passed the London Matriculation Examination. Later, E.O. Ajayi and Alvan Ikoku both obtained University of London degrees in philosophy in 1927 and 1929 respectively, and J.S. Ogunlesi obtained a degree in Philosophy in 1933 (Omolewa, 1982). Access to such educational opportunities at a distance contributed immensely to these individual's productivity, which in turn resonated in the innovations they subsequently demonstrated in their teaching methodology at the St Andrew's Teachers College, Oyo (Aderinoye, 1995). Besides these individuals, a significant number of Nigeria's early educated elites were products of the British correspondence distance education system.

Indeed, in spite of the establishment of a University College in Ibadan in 1948, many of its academic staff still passed through the higher degree programmes of the University of London as distance learners, enabling them to combine work with higher degree programmes. They thus acquired the advanced skills, knowledge needed for teaching, and research at a time when the College was introducing its own higher degree programmes.

With the emergence of many conventional higher institutions in Nigeria, most of which once were based on purely correspondence modalities, distance education still constitutes an integral part of these institution's educational offerings (Aderinoye, 1992). According to Aderinoye and Ojokheta (2004), institutions in Nigeria that offer distance education include:

- Ahmadu Bello University, Zaria which offers a special training programme called: "The Correspondence and Teachers' In-service Programmes (TISEP), established in 1976 to prepare middle level teachers for Nigeria's primary schools.

- The Correspondence and Open Studies Unit (COSU), now called Distance Learning Institute, which was established in 1974 by the University of Lagos to produce university graduates in disciplines necessary to meet national labour needs (e.g., teachers, nurses, etc.)

- The first independent institution dedicated solely to distance education, the National Teachers' Institute (NTI), which was officially established in 1978 to upgrade unqualified teachers working in the nation's primary schools and to accelerate the preparation of qualified teachers needed for the implementation of the Universal Primary Education programme introduced in 1976 and the Universal Basic Education programme introduced in 1999.

- The External Study Programme (ESP), that later became the Centre for External Studies (CES) and today is called the Distance Learning Centre (DLC), was established by the University of Ibadan's Senate in 1988 under the umbrella of the Nigerian Department of Adult Education to provide opportunities for teachers working in the field to improve their skills and knowledge through on-the-job training. This in-service training enabled them to subsequently raise their status from holders of Nigeria Certificate in Education (NCE) to full-fledged university degree holders.

- To offer similar programs, the University of Abuja established its Centre for Distance Learning and Continuing Education in 1992.

- After being closed for 16 years, The National Open University was re-opened in 2001 under a new name, the National Open University of Nigeria (NOUN).

- Private entities also engage in providing distance learning that include professional bodies and governmental institutions some of which offer courses in areas such as law, business administration, accounting, and various sciences along with the more commonly found teacher training.

3. Goals of Distance Education in Nigeria

According to the National Policy on Education (2004), the goals of Distance Education in Nigeria shall be to:

a) provide access to quality education and equity in educational opportunities for those who otherwise would have been denied;

b) meet special needs employers by mounting special certificate courses for their employees at their work place;

c) encourage internationalization especially to tertiary education curricula;

d) ameliorate the effect of internal and external brain drain in tertiary institutions by utilizing Nigerian experts as teachers regardless of their locations or places of work.

In pursuance of these goals, the Federal Government shall:

a) ensure that programmes are equivalent in structure and status to those offered by face-to-face mode of delivery in the appropriate tertiary institution.

b) encourage and regulate Open/Distance Education practice in Nigeria.

c) establish an Open/Distance Education advisory body which shall:

   (i) advise the government on the practice of Open/Distance education

   (ii) promote Open/Distance education nationwide in collaboration with Federal, State and Local Government Education authorities.

   (iii) liaise and collaborate with existing educational regulatory bodies and institutions offering Open-Distance Education programmes to ensure maintenance of standards.

   (iv) liaise with media houses, information and communication technology providers and other relevant bodies in enhancing Open/Distance education.

   (v) encourage private efforts and other non-governmental organizations in the provision of quality education using Open-Distance education.

   (vi) encourage participation in Open/Distance education programme at the local level (pp. 39-40).

4. Information Technology (IT) and Distance Education

In the 1990s, distance education as a valued component of many education systems has proved its worth in areas where traditional schools, colleges and universities have difficulties in meeting demand.

Coombs (1988) asserted that:

"Many countries of the world today need an educational system capable of competently handling very large students totaling 100,000 or 70 more at a time. Governments in both developed and developing countries no longer have the money to build and maintain buildings for 100,000 students a year or if they did they would not put the money into educational buildings because of changed political and developmental priorities" (p.56).

The answer must, therefore, come from distance education.

There were, in 1995, ten distance systems competently handling at least 100,000 students at a time. See (table 1) all of these are national institutions of great prestige and excellent quality. None is new or experimental.

Table 1: Large Distance System

Country	Name of Institution	Enrolment	Foundation
China	CCT.VU Network	852,000	1979
Turkey	Anadolu University	600,000	1982
France	CNED	350,000	1939
Indonesia	Universitas Terbuka	353,000	1984
Thailand	Sukothai Thamatirat	350,000	1978
India	Indira Ghandhi NOU	242,000	1985
Korea	Open University	200,000	1972
United Kingdom	Open University	200,000	1969
Spain	UNED	140,000	1972
South Africa	UNISA	130,000	1949
Total		**3,417,000**	

Source: Institutional Statistics, 1995.

In the years 1996 to 2000, information technology played a very crucial role in the distance education programmes in different parts of the world. For instance, in the United States of America, about 250,000 students were enrolled in independent study courses for over seventy American Universities. College-level television courses (known as telecourses), teleconferencing (provided either by two-way video or one-way video

with two-way audio), audio conferencing, audio graphics, cable and computer networking have all contributed to an explosion of interest in distance education.

In the 1900s, distance education in China was through correspondence courses. But in the early 1960s, TV-based university level programmes were started but disbanded during the network comprising a central Open University in Beijing which develops courses, and forty-three Open Universities in each province and major municipality (Wei and Tong, 1994). In the developing countries of the world, India and South Africa are in the forefront in the development of information technology for distance education. There are other Open Universities in Africa for instance, the Open University of Tanzania. Similarly, in Nigeria there is National Open and Distance Education University of Nigeria (NODEUN) which began in 1983 but was suspended in 1985 by the then military government. The resuscitation of NODEUN is part of the commitment of the present government towards Universal Basic Education. The university currently has more than 18 study centers and plans to have at least one study center in each of the 774 local governments of Nigeria. It runs programs in education, arts and humanities, business and human resource management and science and technology (Mac Ikemenjima, 2005).

`   Agyeman (2007) maintains that the National Open University of Nigeria (NOUN), established in 2001, has created across the country several study centres in the form of computer laboratories or cybercafés equipped with computers in a Local Area Network (LAN) connected through a Wide Area Network (WAN) to deliver distance learning courses to all study centres. National Open University of Nigeria Information Technology (IT) applications presently cover: management of student records, learner management system, communication and delivery of the human resource and finance courses. There is also an Open University in Bangladesh. But South Africa is leading other African countries which began in 1949 in the development of information technology for distance education programme.

4.1 Relevance of Information Technology to the Development of Distance Education for Teachers in Nigeria

The success of teaching and learning rests heavily on the level of interaction that exists between the teacher and the learners. It is no gainsaying that educational media with high-level interactive television and radio programmes will definitely enhance an efficient teaching and learning process, especially the distance learning programme. The current democratic government, with its unflinching commitment, undeterred focus, determination and energetic pursuit of government conviction to be responsive to the educational demands of the greater majority of Nigerians, has continued to direct

its attention to the gigantic and daunting task of revamping and invigorating Open and Distance Learning (ODL) systems in Nigeria. It is a major way of making education openly accessible, affordable and equitable to all Nigerians (Arinde, 2010).

However, it is known that no nation can afford to provide education to all citizens through the traditional classroom based on face-to-face instructional delivery mode. In the Nigerian situation, access to education is quite literally a matter of life and death. Educational deprivation is a passport to poverty, unemployment and low income. The right to education is as much about economic nationality as it is about morality and social justice (Jegede, 2002). The Nigerian educational system has been witnessing a lot of crises in recent past. Most notable is the issue of population explosion in schools and inadequate placement for qualified students in our tertiary institutions. Due to very limited vacancies in these institutions, many qualified Nigerians are looking for placements, especially in Nigerian tertiary institutions. To curb this problem, open and distance learning systems have been found worldwide to be cost-effective and comparatively cheaper than face-to-face mode (Jegede, 2000 and Fafunwa, 2002). Distance learning provides a way for massive manpower development, re-orientation and tailoring the production of human resources to appropriate areas where their expertise is most needed.

Distance education with the use of information technology is suitable for the work place, training for teachers and raising the economic development of local communities, thereby helping to eradicate poverty and enhancing the penetration of new information and communication technologies within the Nigerian environment. Teachers should learn the act of acquiring basic skills in computing and gaining access to information which may be available to them. Through the use of electronic mail (e-mail) facilities of the internet, they can take the advantage of exchanging textual messages between themselves and with their students who are located outside their vicinity. This provides opportunity for sharing ideas on topical issues. It is pertinent to state that there are other potentials of the internet which can equally be used for qualitative teacher education in Nigeria. These potentials, according to Afolabi (2000) are: television conferencing (interactive conferencing), file transfer protocol (FTP), downloading software distribution, access to information resources, remote access, network computing, telephoning, fax, directories, audio broadcasting, real time audio, imaging, 3-dimensional live voice and audio text, archiving, interactivity (real time calculator's converters), searching, hypertexts linking, online ordering, push technologies for future internet channels, etc. All these make distance teaching and distance learning a reality for teachers to improve their quality.

Another important tool of information technology is the worldwide web (www). The web is a site on the internet which contains various sources of information such as graphics, video, animation, simulation, etc. This tool of information technology can provide personalized learning environment for anyone who can connect (Salisu, 2003). In addition to face-to-face classroom interaction, students from different parts of the world can share ideas and information on the web.

Commenting on the significance of media in teacher education, Agun (1988) asserted that: "*Undoubtedly, the traditional methods of producing teachers have become inadequate in an age of tremendous increase in school enrolments*". This must have prompted him to identify the importance of media in teacher education. What is needed according to him is a method that can be used to produce large number of teachers quickly, effectively and efficiently. The results from the various ways of using media in teacher education programmes seem to be providing answers to this need. Therefore, efforts should continue in maximizing the potentials of media for teacher education.

Also, reflecting to Nigerian situation reveals the high degree of influence distance education initiatives has had a personal, community, and overall national development. Aderinoye and Ojokheta (2004) lamented that Nigeria's distance learning institutions also continue to contribute immensely to the provision and improvement in the quantity, quality, and overall capacity of education managers and administrators necessary to lead the nation's educational system. In addition, more than 300,000 primary school teachers enrolled in the National Teachers Institute (NTI), have gone on to successfully earned their Teacher's Grade II Certificate. NTI has similar registered serving teachers in its National Certificate in Education, and the pivotal Teacher Training programmes, thereby improving the quality of those teachers already working in the field. Having since qualified, these teachers have not only contributed to the increase in school enrollments across Nigeria, they have also increased the quality of education and thus contributed to higher student retention rates (Ojokheta, 2000).

4.2 Integration and Promotion of Information Technology for Teachers

The initial enthusiasm at adapting educational media into the teachers' programme, if sustained, would have called for less emphasis on the adoption of Information Technology (IT) by now. In many first-generation Nigerian Universities and Colleges of Education, such information technology based equipment like closed-circuit television, the language laboratory, radio, television, etc., were used as means of providing the nation with high quality teacher education programme. It is, however, sad to know that most of these charitable legacies, on which modern IT products could be built, are no longer functioning, due to lack of maintenance culture, obsolescence, lack of spare parts

and a host of other reasons. The present move by some Nigerian universities in providing computers is a welcome development. However, there are some precautions that should be taken to avoid the mistakes of the past.

With the recent commitment of the Federal Government to the Open University system, the relevance of IT as a means of making the system work will be felt much more. This will encourage non-contiguous communication, i.e. the learner is at a distance from the teacher for much, most or even all of the time during the teaching-learning process (Holmberg, 1979). Information Technology, if judiciously handled, will expose student-teachers to the practice of teaching across the world.

Network arrangement through the satellite has made this possible. Both students and their lecturers, through IT, can have access to the latest in the world of knowledge in their rooms, offices and/or designated centres. Students' academic performance can be improved upon by making it possible for them to have access to lectures packaged on audio and videocassette tapes.

4.3 Adoption of Information Technology in Teacher Education Programme in Nigeria

The adoption of Information Technology into teachers' curriculum would go a long way in achieving the objectives of teacher education programme as enunciated in the National Policy on Education (2004; 39).

A model of guideline to be followed is hereby presented in Figure 1 below;

Figure 1
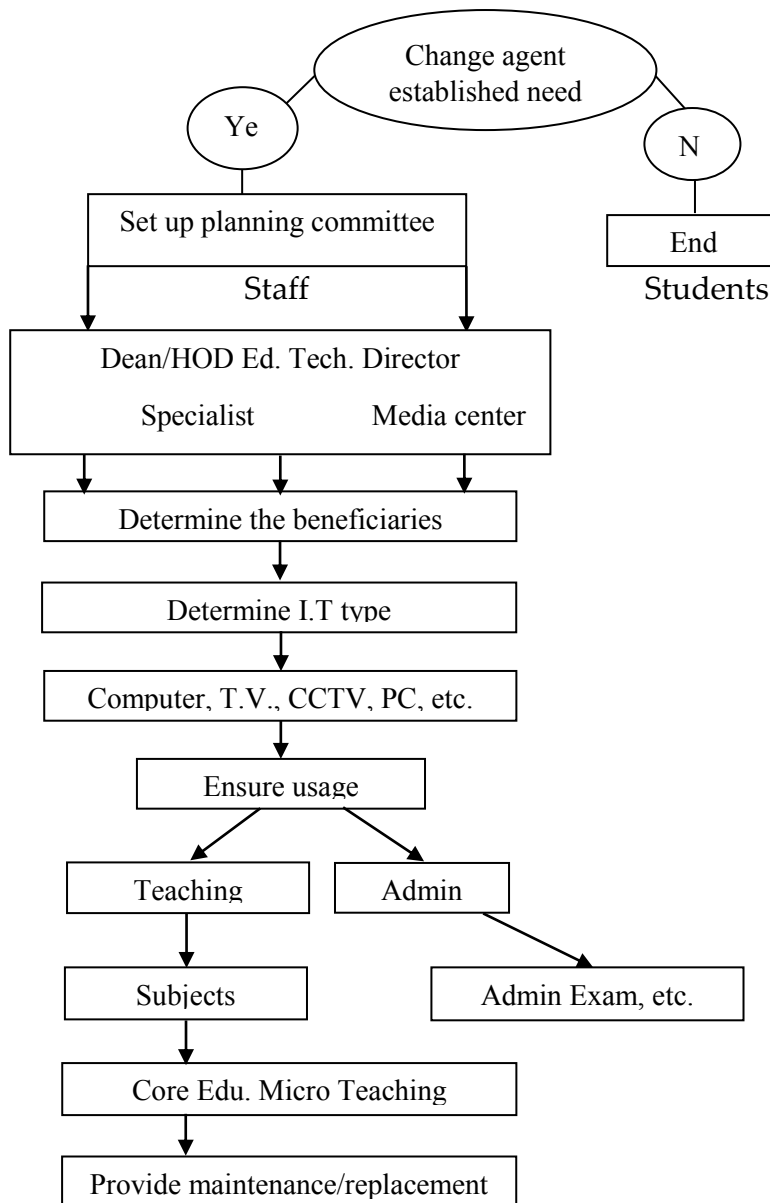
A model of guideline to be followed in the adoption of Information Technology in Teacher Education Programme in Nigeria (Adopted from Salawu, 2003).

If our educational system is launched into the information technology age, teacher-trainees ought to be encouraged to recognize the importance of technological change. If they are motivated to use computer-based multimedia technology, they will realize its numerous advantages. Armstrong (1996) listed some of these advantages which are as follows;

1) That unlike the information on a chalkboard, once information is put in the computer, it is not easily erased.
2) Adding or updating lecture material stored in this medium is quick and easy.

3) Whether the new material is text, video clips or still images, once put into the computer and assigned a file name, it is ready for use in a presentation.

4) It allows for consistent delivery of information "from section-to-section or instructor to-instructor" in courses with multiple sections. This provides the assurance that at the minimum, students receive basic required subject content even though the material is presented by a variety of lecturers across many course sections".

5) It allows for proper record-keeping of students' performances. The administrator can use it to schedule, pay, record and plan academic programmes, facilities and their uses. (p. 127).

4.4 Problems of Adopting Information Technology in Teacher Education Programmes in Nigeria

Professor Emovon one-time Minister of Science and Technology identified some problems that hinder computer application in Africa. Since a computer is the heart of information technology, those problems equally militate against the application of information technology in Teacher Education as quoted by (Arinde, 2010). They include: low level awareness of the potentials of the computer, information Technology is a threat to would-be users, power failure, high cost of equipment, low level income, inadequate number of skilled man-power, problems of spare parts and maintenance, problem of space, problem of large student population. (p. 135).

From the problem highlighted above, it has been observed that Nigerian distance learning is saddled with problems of great magnitude which conventional methods of teaching and learning alone cannot solve. These problems, according to Nakpodia (2010) include lack of electricity and internet connectivity are major barriers to Distance Learning in Nigeria. Most Distance Learning students that reside in cities and towns are faced with the problem of epileptic supply of power to access their course materials and study. He also observed that the biggest problem for distance programs is the lack of support and the course development skills of instructors. Similarly, there are problems with the mode of delivery.

Most of the Distance Learning students have no computer education background; hence they might be afraid of using one. As Jimoh (2013) observed, some of them go to the extent of hiring experts at a cost to fill their admission, registration and other documents meant for them to fill online. Therefore, the very few who have access to the computers do not know how to use it and take full advantage of its usage for learning. He however reported that finance is also a problem in Distance Learning. Due to poor finance, investment in Distance learning is low because the soft and hard-

wares required are costly. It is very expensive to get some of the soft wares because they are not developed locally, they are developed in Europe and other developed countries to suit their own system and make their own living.

5. Conclusion and Suggestions

From the foregoing discussion, it is concluded that promoting a knowledge society through IT to the development of distance education is beginning to emerge fast over the last decade. Because it is very clear that the quality of teacher would be improve if the situation were different. Therefore, the paper discusses the concepts of distance education as a means of enhancing teachers' performance, emergence and transformation of distance education, goals of distance education, IT and distance education, integration and promotion of IT for teachers, adoption of IT in teacher education programme and their problems in Nigeria and as well as the relevance of Information Technology to the development of distance education for teachers in Nigeria which serves as the fulcrum of education reform process in Nigeria.

However, based on the discussion, and for effective distance education delivery in Nigeria, the paper suggested that teachers should enroll for computer training programme so as to meet with modern trends in education and to ensure quality, all stakeholders in education (especially those that run teacher education programme) should accept the reality of the need to adopt IT by integrating it into the teacher education programme, effort should be geared towards making IT products through local sources. Remuneration review should be given top priority to enhance teachers' and students' performance, adequate financial backing should be provided for the management of Teachers' Colleges and Universities. Similarly, a separate tertiary institution, such as the National Open University of Nigeria (NOUN), which was formerly aborted but recently reopened, should be well equipped and maintained. Again, curriculum of teacher education programme should be reviewed to include computer training and practice for the development of Distance Education for teachers in Nigeria.

References

1. Abifarin, M. S. (2004). Information technology and development of distance education of programme in the 21st century. *Nigerian Journal of Educational Studies and Research (NJESR) 1*, 1-11.

2. Aderinoye, R. A. (1992). *Retention and Failure in Distance Education: The Nigeria Teachers Institute experience*. Unpublished PhD Thesis. The Department of Adult Education, University of Ibadan, Nigeria

3. Aderinoye, R. A. (1995). Teacher Training by Distance: The Nigerian Experience. In Daniels, J. (Ed.) *Proceeding of the 1995 ICDE Conference*. Birmingham, UK.

4. Aderinoye, R. and Ojokheta, K. (2004). Open-Distance Education as a Mechanism for Sustainable Development: Reflections on the Nigerian Experience. In Celvert, B. (Ed.). *Facilitating Transfer of Distance Courses*. Paper Presented at the 8th World Conference on Development and Social Opportunity, Delhi, India. *The International Review of Research in Open and Distributed Learning,* 5 (1). Retrieved March 20, 2016 from http://www.irrodl.org/index.php/irrodl/article/view/174/256

5. Afolabi, M. (2000). Intranet and Internet Connectivities, library services and research potentialities. A paper presented at the workshop on communication and information technology, F.C.E. Abeokuta, September 26.

6. Agun, O. A. (1988). Relevance of information technology to distance education in Nigeria. *Forty years of educational technology in Nigeria.1* (1) 25-30

7. Agyeman, O. T. (2007). ICT for education in Nigeria. Survey of ICT and education in Africa: Nigeria country report. Retrieved June 25, 2015 from http://zunia.org/uploads/media/knowledge/Nigeria%20%20ICTed%20Survey1281417594.pdf

8. Akande, S. O. (2011). Computer and Internet Facilities use in Distance Education: A Survey of Sandwich Students of University of Ado-Ekiti, Nigeria. *Library Philosophy and Practice,* 5, (2) 1-11

9. Armstrong, G. (1996). One approach to motivating faculty to use multimedia. *Technological Horizons in Education 23* (10), 69.

10. Arinde, M. R. (2010). *Educational Services, Teacher Quality and Students' Academic Performance in Public Senior Secondary Schools, North Central Zone, Nigeria.* PhD. thesis, University of Ilorin, Ilorin.

11. Bell, R., and Tight, M. (1999). Open Universities: A British Tradition? *Society for Research into Higher Education*. Birmingham, UK: Open University Press.

12. Coombs, P. H. (1988). *The world educational crisis: A systems analysis.* New York: Oxford University press.

13. Emovon, E. U. (1989). The role of Information Technology in a Developing Country. *Education Today 2* (3), 5-8).

14. Fafunwa, A. B. (2002). Distance learning requires support. *The Punch*. May 10

15. Federal Republic of Nigeria (2004). *National Policy on Education.* Lagos: NERDC Press.

16. Holmberg, B. (1979). *Distance education: A survey and bibliography.* London: Kogan page.

17. Jegede, O. (2000). *Evolving a National Policy on Distance Education: An Agenda for Implementation.* A paper presented at the National Workshop on Distance Education. Abuja. 27th – 29th September.

18. Jegede, O, (2002). Open and Distance Learning begins. *The Punch.* February 2

19. Jimoh, M. (2013). An appraisal of the Open and Distance Learning Programme in Nigeria. *Journal of Education and Practice,* 4(3), 1-8

20. Keegan, K. (1999). *Foundations of Distance Education* (3rd ed.) London and New York: Routledge and Kegan Paul.

21. Kehinde, A. O. (1999). Education for all before 2010: Distance learning System as an alternative Approach. 21st National Convention of Nigerian Association for Media and Tech held at ARMTI, Ilorin. 30th August – 3rd September 1999.

22. Mac-Ikemenjima, D. (2005). e-Education in Nigeria: Challenges and Prospects. Paper Presentation at the 8th UN ICT Task Force Meeting April 13-15, 2005 Dublin, Ireland.

23. Nakpodia, E. D. (2010). Management of Distance Education in the Development of Nigerians Education. *Kamla-Raj Journal of Social Science,* 23(1), 45-52

24. Ojokheta, K. O. (2000). *Analysis of Selected Predictors for Motivating Distance Learners Towards Effective Learning in some Distance Teaching Institutions in Nigeria.* Unpublished PhD Thesis. Department of Adult Education, University of Ibadan, Nigeria

25. Ololube, N. P., Ubogu, A. E. & Ossai, A. G. (2006). ICT and Distance Education in Nigeria: A Review of Literature and Accounts. *2nd International Open and Distance Learning (IODL) Symposium.* Retrieved July 20, 2015 from http://www.ololube.com/art5.pdf

26. Omolewa, M. (1982). Historical Antecedents of Distance Education in Nigeria, 1887-1960. *Adult Education in Nigeria, 2*(7) 7 – 26.

27. Onyejemezi, E. (1996). Distance Learning System as a Tool for Education Development. A Case of National Teachers' Institute at the Post-Graduate Seminar, Educational Management Department, University of Ilorin on 10th April 2008.

28. Salawu, I. O. (2004). Towards Effective Integration of Information Technology (IT) into Teacher Education Curriculum in Nigeria. *Forty Years of Educational Technology in Nigeria. 1*(1), 131-133.

29. Salisu, S. O. (2003). The role of information technology in teacher education. *Forty years of educational technology in Nigeria 1* (1) 125-129.

30. Tait, A. (2003). *Reflections on Student Support in Open and Distance Learning*. United Nations website. Retrieved March 20, 2016 from www.undp.org/info21/public/distance/pb-dis2.html

31. UNESCO, (2001). Teacher Education through Distance Learning. Retrieved 26th December, 2015 from http://unescodoc.unesco.org/images/.../124208e.pdf

32. UNESCO, (2002). Information and Communication Technologies in Teacher education: A Planning Guide. Paris. UNESCO.

33. UNESCO, (2005). United Nations Decade of Education for Sustainable Development 2005-2014. Retrieved July 10, 2015 from http://portal.unesco.org/education/en/ev.php

34. Wei, R. & Tong, Y. (1994). Radio and TV Universities: The main Stream of China's Adult and Distance Higher Education. Naijing: Jilin Press.

35. Yusuf, M. O. (2006). Problems and Prospects of Open and Distance Education in Nigeria. *Turkish Online Journal of Distance Education,* Vol. 7(1), 22-29.