

Information and Communication Technology (ICT): An Effective Tool and Resource for Quality Learning Enhancement in National Open University of Nigeria (NOUN)

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Abstract:

The study focused on Information and Communication Technology (ICT) as an effective tool and resource for quality learning enhancement in National Open University of Nigeria (NOUN) in Nigeria. The study is an opinion paper and adopted literature analysis technique. It looked at the relevance and importance of ICT in teaching and learning, how ICT media can be utilized and appraised to the level in which ICT has an effect in teaching and learning in NOUN. Some challenges that militate against the effective use of ICT in NOUN were also identified, and recommendations proffered .

Keywords: *Information and communication technology, effective tool and resource, quality learning enhancement, open and distance learning university.*

Introduction:

The current era known as the information and internet age is one where information and its management is critical in understanding an increasingly changing complex and dynamic world. The application of information and communication Technology (ICT) in education is one of the most concerns of educational authorities around the world. In Nigeria today, there has been promising effort of various governments in partnership with ICT inclined private sectors in the training of both students and teachers in the use of ICT gadgets. In fact, all tertiary institutions in the country are struggling to be ICT compliance that is to adopt the ICT for classroom instruction, students learning and for administrative convenience (Sayed, 2001 in Oduma & Ituma, 2013).

The influence of ICT worldwide has certainly affected the field of education positively. In like manner and as a developing nation, Nigeria educational system is witnessing an optimistic transformation in this age of knowledge explosion (Aworante, 2016),

Information and Communication Technology is the main factor upon which Open and Distance Learning (ODL) including NOUN bases its development as an alternative way of learning mainly for adults. It enables the educational Institutions adapt to the constantly changing environment and

aligns the learning procedure with the demands of the international market and the needs of the adults who want to keep up with current knowledge of society and world markets (Trivella, 2017).

Information and communication technologies (ICTs) have generally had a controlling power and effect on education. The National Open University of Nigeria as an Open and Distance Learning institution provides unique opportunities to those who cannot afford conventional university education due to their social, economic, cultural and demographic obligations or requirements.

Distance education programs worldwide use a variety of technologies that include print media, audio and video teleconferencing, one-way and two-way communication, computer – mediated communications (e.g Electronic mail, computer conferencing) and more recently the Internet. Technologies that deliver instructions to distance learners are often classified as two- way interactive or one-way non-interactive (Bates, 1995 in Shah & Saliumullah, 2009). Information and communication technologies enable interaction between the facilitators/resource persons and students or among the students. With ICT, educational programmes can be delivered anywhere and anytime in the world and can help individuals to learn throughout their lifetime (Iwu & Anulobi, 2010).

An Overview of National Open University of Nigeria (NOUN):

The National Open University of Nigeria is a Federal Open Distance Learning Institution known for providing functional, flexible accessible cost effective education, adequate for flourishing in the 21st Century and beyond. It was initiated in July, 1983 with the mandate to deliver higher education to the doorsteps of every interested Nigerian. It is the first of its kind in the West African sub- region.

Despite its suspension in 1984 by the then Federal Military Government of Nigeria, its resuscitation in 2002 by the then civilian administration of Chief Olusegun Obasanjo went side by side with the awakening of the vision that informed the initial establishment of the university.

It utilizes Information and Communication Technologies to deliver an education tailored toward the globalized economy in the Arts, Health, Law, Physical Sciences, Social Sciences, Agricultural and Management Sciences.

The following objectives necessitated the establishment of the Open and Distance Education in Nigeria:

- Provision of education for all and promotion of lifelong learning.
- Filling the gap created by the compulsory closure of the outreached satellite campuses
- Cost effectiveness.
- Improved economies of scale.
- Flexibility of delivery system.
- Maximum utilization of academic personnel.
- On the job teacher training opportunities
- Poverty eradication, vocational and lifelong education.
- Provision of non-formal education.

- Reaching the unreached.
- Propagation of national orientation.

Following the above mandate, the National Open University of Nigeria in its effort to take education to the doorstep of every Nigeria populace irrespective of their social status and developing economy of Nigeria has deployed and implemented iLearn portal technology to enhance students learning experiences. The iLearn platform was created to ease access to excellent quality education. The platform provides an online class discussion organized by NOUN facilitations thereby creating a virtual classroom environment (NOUN official websites).

Information and Communication Technology Media Utilization:

Information and Communication Technology is an umbrella term that includes any communication device or application encompassing, radio, television, cellular phones, computer network, hardware, software, electronic mail, facsimile, satellite system as well as the various services and applications associated with them. This includes but not limited to video conferencing, distance learning, Internet technologies, audio conferencing and multimedia utilization (Iwu & Anulobi, 2010).

Ojo (1981) in Osat and Nsereka (2012) recognized that distance learning utilizes a wide range of teaching techniques. He added that apart from using prints, radio, television, there are other supportive services like post, telegraph and computer facilities. They all come together and are branded as Information and Communication Technology Media.

Information and Communication Technology media technologies in education can be grouped into two categories, namely synchronous and asynchronous media. The print media comes in various forms including newspapers, magazines, correspondence courses, courseware, flipcharts etc.

The radio has potentials to cover and reach isolated large audiences and impermiabile coastal settlements around the deltaic communities. It can be used for tutorial broadcast for correspondence students. With the television, additional information is given using visual elements.

Computers are electronic machines that collect data, process them and produce results as output. Its advent has revolutionalized printing and academic activities. The arrival of computers in classroom has astonishingly alter the way knowledge is accessed, packaged and delivered. It has changed the face of distance education from its analogue-based correspondence institutions or part time outreach programmes to virtual universities (Dike, 2018). The Internet is considered as the hub of modern Information and Communication Technology.

National Open University of Nigeria uses the WAN (Wide Area Network) to deliver distance learning coursework modules to all the study centres. Each study centre has facilitators (instructional and tutorial) and students counselors responsible for guidance and counselling services to the learners. The facilitators and counsellors are drawn from within the community or nearby communities.

National Open University of Nigeria's ICT application presently covers;

- Management of students database (online application, admission, registration and exam procedures).
- Learners management system (e-learning and the virtual library).
- Communication (E-mail, SMS, video- conferencing and Internet).
- Delivery of the human resources and finance courses. The PDF files of those two courses are already available online.

The goal of NOUN is to use the REPRODAhq (Repository, Reproduction, Distribution and Administration headquarters) to eventually reproduce all course materials in electronic form. (Agyeman, 2007).

Appraisal of the Effect of ICT in NOUN:

Information and Communication Technology has tremendously been effective in all sphere of human endeavors including the educational sector. In the education sector, ICT has majorly been used to present and disseminate information.

Librero (2006) in Omotosho, Lateef, Amusa & Bello (2015) observed that conventional universities and other educational institutions are now using ICT to achieve blended learning environments which according to its name blends traditional face-to-face mode of classroom delivery with distance delivery.

With the advent of the Internet, the jobs of distance education educators have become easier. As the world becomes globally a village, communication and information can now be both accessed and shared through the information super highway (Osaat and Nsereka, 2012).

According to the NOUN Vice Chancellor, Prof. Vincent Ado Tenebe at a conference, Information and Communication Technology is an effective tool for transforming the economy and improving the lot of the Nigerian population. He said that the rapid development in ICT has given rise to new challenges and opportunities in the way nations, corporate bodies and individuals conduct business in a global world.

Information and Communication Technology effectiveness can be perceived in the following ways:

1. Ability to access information anytime and anywhere. Online course materials can be accessed 24hours per day. Information can be received simultaneously through various media including educational programming broadcast over the radio or television and teleconferencing technologies. With the advent of the Internet and the World Wide Web, teachers and learners can access learning materials in every subjects / topics in a variety of media.
2. Enhancing the quality of education by increasing learners motivation and engagement by facilitating the acquisition of basic skills and enhancing teacher training. They are also transformational tools which when used approximately can promote the shift to a learner centred environment (Yanosky and Harvris, 2010 in Oduma and Ituma, 2013).

3. Ability to offer more flexible access to open distance learners. Better facilities and resources for studying and new opportunities for learning its success does not correspond to a significant change in class pedagogy but to a change in the overall learning experience. (Igwe, 2012).

Constraints to the use of ICT in National Open University of Nigeria:

Taking cognizance of the substantial opportunities that ICT can provide to Open University, there are number of problems and challenges that tend to present themselves. Universities operating at a distance are confronted with outside problems coming from their environment as well as inside problems coming from their own structure and culture (Omosho et al, 2015). Some of these problems with regards to the NOUN are:

- The lack of ICT equipment or infrastructure for office and administrative usage. Modern ICT facilities have not been affordable and where they are available there number are inadequate;
- Shortage of trained personnel in software design and application, operating systems, network administration and local technicians to service, repair and update computer facilities. There are Insufficient training facilities for ICT education;
- Teachers incompetency on ICT skills to fully utilize ICT in curriculum and instructional implementation;
- Inadequate supply of relevant and appropriate software;
- Unavailability of some ICT gadgets in the school and at homes
- Electricity failure and cost and epileptic power supply;
- Internet data cost are expensive and the charges for satellite television are unaffordable; and
- Lack of skilled manpower to manage available systems. There are also the challenge of resistance to change from traditional pedagogical methods by both students and teachers.

Conclusion:

Based on this study, it was concluded that Information and Communication Technology is a vital resource for the achievement of the NOUN. it was also found that such resources, which include infrastructure, skills of the personnel and administrative supports are not readily available in the use of ICT in teaching and learning in NOUN. Therefore the effectiveness of ICT in the National Open University of Nigeria would be significant when some of the challenges identified above in the ICT applications in teaching and learning have been addressed by both government and other stakeholders in the education sector.

Recommendation:

The following recommendations were proffered:

- i. The Federal and state Government should provide the required ICT resources that will be used for teaching and learning in NOUN.
- ii. Training and re-training programme in the integration of ICT in curriculum and instruction should be organized for ICT managers and instructors for the success in teaching and learning in NOUN.
- iii. ICT professionals such as software and computer engineers should be employed to manage and maintain the ICT equipment for teaching and learning in NOUN.
- iv. ICT instructors and administrators should wholly accept rather than reject or resist the use of ICT in their effort to manage open and distance learning.

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