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## ICT AS AN INSTRUMENT FOR EFFECTIVE CONTENT DELIVERY IN NIGERIAN UNIVERSITIES

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### ABSTRACT

#### Article Info

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*Information Communication Technology (ICT) has great influence in the teaching and learning process in schools. It is virtually needed in all aspect of human endeavours in present day Nigeria. Since University education in Nigeria plays a crucial role in the country's educational system, serving as the highest level of formal education and saddled with the responsibility of producing skilled professionals, researchers, and academics who contribute to various sectors of the economy, it is pertinent for ICT to be incorporated into the teaching and learning process. This paper focused on the need for effective content delivery using ICT in Nigerian Universities, the constraints and as well as the benefits. The concept of ICT, its importance and the constraints of using it for effective content delivery in Nigerian Universities were discussed.*

### 1.0 INTRODUCTION

The role of technology in the learning process cannot be over emphasized, as a result, government all over the world invest heavily in it. As a result, the education sector all over the world is now technologically driven. The teachers who saddled with the responsibility of carrying out instruction and facilitating learning should be technologically inclined when it come to the use of Information Communication Technology ICT. The Federal Republic of Nigeria is not oblivious of this modern trend and seriously recognizes the role of ICT in the advancement of knowledge at the tertiary level of education [4]. The launching in 2004 (through the Federal Ministry of Education) of the ministerial initiative, making e-education one of the initiatives for the attainment of Education for All (EFA) and the Millennium Development Goal (MDG) was a practical demonstration of this fact. ICTs were meant to be used as the mode for instructional delivery. The benefits of ICT include:

- The enhanced mode of communication
- Seamless administration of human and material resources
- Unhindered access to manpower
- Unfettered access/collaboration with sister institutions.
- Easy access to source of materials for research work.
- ICT have also been used to improve access to and the quality of teacher training.

University education in Nigeria plays a crucial role in the country's educational system, serving as the highest level of formal education.

Nigerian universities are responsible for producing skilled professionals, researchers, and academics who contribute to various sectors of the economy.

Despite the establishment of ICT centres in most Nigerian universities to cater for the Information and Communication Technology needs of the staff and student, it has not been fully utilized in the delivery of Instruction to students.

This paper discusses the need for use of ICT in the training of skilled professionals, researchers, and academics, the prospects and constraints. Conclusions were also drawn.

#### Information Communication Technology (ICT)

ICT is the dispensation and preservation of information, and the use of all forms of computer, communication, network and mobile technologies to mediate information.

ICT include all media employed in transmitting audio, video data or multimedia such as cable satellite. Wireless (radio, Infrared, Bluetooth, WiFi) network technologies include Personal Area Networks (PAN), Campus Area Network (CAN), and the Internet computer technologies include all detachable media such as visual disc, disks, flash memories, video book, projectors, interactive electronic boards and continuously emerging state of the art PCS. Mobile technologies comprising mobile phones, palm tops etc. These technologies have information as their material object.

ICT applied to education facilitates delivery and easy access to knowledge, making the curriculum to be rich in content. It brings about robust learning outcomes compared to education without ICT. It gives room to critical thinking and offer boundless means of achieving educational goals. The key thing is not ICT itself, but in understanding ICT and effectively employing it in the teaching and learning process. Most times, the use of ICT in education does not reach expected goals and may likely bring about complications in educational reform.

Students and Teachers of educational institutions can lose focus of the fundamentals and get diverted by rapidly changing technologies. This usually results when students and teachers particularly have not yet understood the technologies. The role ICT plays: Where, how and what technology to use. When the meaning of ICT and its limitless offer to education are understood, then fast changing technologies are not seen as tremendous issues, but facilitators to more critical thinking and problem solving in education. Optimizing the use of ICT in education would depend on understanding ICT, when, how and where to use ICT and what technology to adopt.

In teaching and learning process, the teacher assumes a delicate and unique position as an important factor mediating the effects of educational services, instructions and system. The success of any teaching/learning situation depends on how effectively the teacher manages all the variables that affect the process.

The introduction of ICT into instruction is assumed to mark a paradigm shift marking the end of the teacher being perceived as the sole storehouse of knowledge especially with the accessibility of various amount of information on the Internet and the worldwide web. Gone should be the days of "hypodermic needle" method of teaching when teachers and academic practitioners saw themselves as knowledge oracles and sage of the stage delivering data, information and knowledge to eager learners whose minds are empty vessels that needed to be filled [1].

The coming of ICT into teaching and learning have necessitated a paradigm shift from the traditional method that was teacher centred to the modern method which is learner centred [7]. The gains of such a new approach have been extolled by [1] who affirms the great capabilities of ICT in the spreading of knowledge, making education more real and the development of more efficient educational service. [9] posit that information and communication technologies are essential tools in any educational system with the possibilities of being used to meet the learning needs of individual learners, support equality of educational opportunities; offer high quality learning materials, increase self-efficacy and independence of learning among students, and enhance teachers' professional development. The integration of ICT in the classroom creates a more inclusive learning platform which kindles interaction there by removing passivity [10]. Similarly, [9] assert that ICT is important in teaching and learning as it guarantees unrestricted access of teachers to relevant

information and development in subject area as well as the provision of efficient and effective tools to take care of students' individual differences.

### **Importance of ICT in Nigerian Universities**

The importance for ICT in Nigerian Universities cannot be overemphasized, due to the fact that ICT is indispensable in the present day Nigeria, if one must survive. The effect of ICT on the teaching and learning process is gaining more grounds globally at all levels of education, as a result, the Nigerian system of education must not be left out. The knowledge of ICT is very necessary if one must survive the present reality on ground where the world is now a global village. Organizations are finding it very necessary to train and re-train their employees to establish or increase their knowledge of computers and other ICT facilities [8].

There has been a growing concern in recent times, to know how computers and internet can best be utilized to improve effectiveness and efficiency of education at all levels. Due to the fact that there is a shift of theories explaining learning processes, ICTs become handmaiden for learning activities.

The usage of ICT has brought about a remarkable difference in the teaching and learning process. Given the role education plays in the development of any nation, [2] notes the indispensability of the school in the growth of an ICT learning culture of any country. She maintains that the school should offer competent leadership in ICT incorporation through research, modeling of effective assimilation of ICT and provision of opportunities for professional development of citizens of a country. The teachers in the faculty of education in Nigerian universities should play a leading role in this regard.

The capability to use computers successfully has become an essential part of everyone's education. Skills such as bookkeeping, clerical and administrative work, stocktaking, and so forth, now constitute a set of computerized practices that form the core IT skills package: spreadsheets, word processors, and databases [3]. Notwithstanding the so much emphasis on the need for ICT in education, in government policies [4], the state of infrastructure on ground is not commensurate to the media attention generated. There seem to be lack of research information as to the actual effect of ICTs in instructional delivery in the Nigerian Higher institutions especially at the Universities level.

In a study carried out by [5] on availability and utilization of information communication technology ICT facilities for effective teaching and learning in higher institutions in Niger state, it showed that majority of the respondents make use of ICT facilities for presentation during their lectures and also, obtaining relevant information for their lectures. However, some of the respondents do not often use ICT facilities. [15] were of the view that the utilization of ICT facilities in the institutions of learning in Nigeria would bring about quality standard of education to the graduates.

It is a fact that most lecturers in the universities did not make use of ICT during their training, which makes it

a bit difficult for them to put it into use because you cannot give what you do not have. The capability and readiness of any teacher educator to infuse ICTs into his/her teaching will largely be determined by the professional training and development which such a lecturer receive [14][13].

### **Constraints of the use ICT in Instructional Delivery**

Despite the benefits of ICT in instructional delivery, many factors constitute constraints to its use in Nigerian universities. Such factors include:

- Inadequate ICT facilities in Nigerian universities: In most of the universities in Nigeria, ICT facilities are inadequate for both lecturers and students use. Desktop and laptop are still very expensive in Nigeria such that most students and even lecturers cannot afford one for their academic utilization.
- Lack of stable electricity supply: This is a major problem in Nigeria, as the nation cannot guaranty twenty four hours electricity supply to its citizens. Most worrisome is the inability of some of the schools and departments to provide alternative source of energy that can power the available ICT facilities Lack of ICT manpower in Nigerian universities: The hunger for information and communication technology in Nigeria today is on the high side with inadequate teaching manpower. In as much as most students want to acquire ICT knowledge, there are very few manpower to train them.
- Lack of / limited knowledge of ICT among lecturers: Most older lecturers in the universities are afraid of acquiring information and communication technology skills, due to the fact that they are finding it difficult to cope with it and also afraid that they may be rendered redundant as a result of ICT.
- Lack of maintenance culture: This is a very big problem in Nigeria most of the computers are not maintained. The lack of knowledgeable hands for the services and repairs of the computers is another major challenge. As most engineers damage the computers when taken for repairs.
- Lack of ICT manpower in Nigerian universities: The hunger for information and communication technology in Nigeria today is on the high side with inadequate teaching manpower. In as much as most students want to acquire ICT knowledge, there are very few manpower to train them.
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another major challenge. As most engineers damage the computers when taken for repairs.

- Lack of awareness in ICT application for academic use on the part of students: Most students prefer to use the internet for deceitful acts, pornography, cyber bullying and other anti social behaviors that affects them negatively, instead of carrying out academic research work with it.
- High cost of ICT resources: The cost of ICT resources is not within the reach of the average Nigerian citizen. Airtime is very expensive which limits the use of ICT by students to download materials.
- None availability of internet in the classrooms: Most classrooms in Nigerian universities do not have internet facilities. This has makes it difficult for lecturers/students to access the internet when the need arises.

### **CONCLUSION**

ICT plays a very important role in the educational sector through enhancement of knowledge and skills through access to information. The adoption and use of ICTs in schools influence teaching, learning and research positively. Despite the benefits of ICT to education, it is yet to be harnessed positively by the teacher educators in the universities who are saddled with the responsibility of producing teaching manpower and researchers.

ICT tool is needed in all aspect of human endeavours in present day Nigeria, education inclusive. A time frame should be given to teachers in service to acquire ICT skills and let it also be a condition for employing the services of teachers in our universities.

### **REFERENCES**

- [1]. Damkor .M, Irinyang D.J. & Haruna M.(2019) The Role of Information Communication Technology in Nigeria Educational System, International Journal of Research in Humanities and Social Studies Volume 2, Issue 2, February 2019, PP 64-68.
- [2]. Eniekebi R. E. (2021) Introduction of ICT in Nigerian Secondary Schools, Library Philosophy and practice (e-journal) 4863.
- [3]. Eze B.N, Mgboji C, Chiamogu C, Asogwa A. N. and Chilaka E.A,(2020) Information and Communications Technology Skills needs of Administrative officer in Colleges of Education in southeastern, Nigeria, Journal of Engineering and Applied Sciences.
- [4]. Federal Republic of Nigeria (2004). National policy on education. 4th ed. Lagos: Nigerian Educational Research and Development Council.
- [5]. Gambari A.I and Chike-Okoli . A. (2020) Availability and Utilization of Information and Communication Technology (ICT) facilities in higher institutions in Niger state, Nigeria, International journal of information and communication technology 4(1), 34-46.
- [6]. Gladys U. J.(2021) Availability, adequacy and

effective utilization of ICT resources by practicing pre-service science teachers in Jalingo metropolis, Taraba state, Nigeria, UNIJERPS Unizik Journal of Educational Research and Policy Studies VOL.9.

- [7]. Hillary W, Mercy J. & Tamunokubie G. (2022) Availability of Information and Communication Technology Resources for Enhancing Teachers' Instructional Delivery in Port-Harcourt Metropolis. *International Journal of Education, Teaching, and Social Science* e-ISSN: 2809-0489 Vol. 2.
- [8]. Ibiene .E. & Ugochukwu .K.A.(2020) Information and Communication Technology (ICT) skills and efficient management of educational resources, *JISTE*, Vol.24.
- [9]. Mark T. I. & Benedicta O. I. (2020) Information and Communication Technology (ICT) in 21st Century Nigerian Educational System: Prospects and Challenges, *Prestige Journal of Education*, Vol. 3, No. 2
- [10]. Onwunara C.C (2020) The Use of ICTS in the Teaching and Learning of Basic Science and Technology in Public Junior Secondary Schools in Owerri Educational Zone1, *Current Science International* EISSN:2706-7920 ISSN: 2077-4435 DOI: 10.36632/csi/2020.9.4.54 Volume : 09.
- [11]. Onyekaba, M. N. (2021) Assessment of Utilization of Information and Communications Technology (ICT) Facilities in Colleges of Education in North-West Geo-Political Zone, Nigeria, *African Journal of Science, Technology & Mathematics Education (AJSTME)* ISSN: 2251-0141 Vol. 6, (1).
- [12]. Oyedokun . G. E. and Adeolu-Akande .M. (2022) An Appraisal of the Role of Information Communication Technology (ICT) for Quality Education in Nigerian Tertiary Institutions, Conference proceedings of the First Conference of the National Institute of Office Administrators and Information Managers (NIOAIM) between 7th and 10th February, 2022 at the International Conference Centre, Lead City University, Ibadan, Oyo State, Nigeria.
- [13]. Philani B.M, Mogale S.A, Samuel D.K. (2023) Teachers' Readiness towards the integration of information and Communications Technology in teaching and learning, research in social sciences and technology, vol. 8, pp. 176-195.
- [14]. Rea .A.C, Dewi .R, Diah .K, (2019) Teacher's Readiness Indicators on ICT Integration into their teaching, *Budapest international Research and Critics in linguistics and Education Journal*, Vol.2, page 195-203.
- [15]. Rowell U. and Innocent O.O (2023) The Availabilty and Utilization of information and Communication Technology (ICT) equipment on the teaching and learning of students in delta senatorial district, Delta state, Nigeria, *World Journal of Advanced Research and Reviews*.