IMPACT OF ICT ON LECTURERS' JOB PERFORMANCE FOR SUSTAINABLE NATIONAL DEVELOPMENT

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Abstract
Information and Communication Technology (ICT) refers to a technology which is being used for collecting, storing, editing and passing on of information. Lecturers' job performance refers to all activities of a lecturer which includes teaching, learning, research and community service. ICT in this 21st century is necessary for teaching and learning process in order to train, equip and produce individuals that can contribute meaningfully in the society and thus help achieve sustainable national development in Nigeria. There are many factors that can limit lecturers' use of ICT in higher institutions such as inadequate infrastructure, inadequate skilled manpower, poor availability of computers and insufficient peripherals. This position paper therefore, recommends provision of adequate infrastructures, recruitment of skilled manpower, provision of adequate computers and provision of sufficient peripherals in higher institutions to significantly improve lecturers' job performance which will in turn leads to sustainable national development in Nigeria.

Keywords: Impact, Information and Communication Technology, Lecturers' Job Performance, Sustainable National Development

Introduction

Education is a veritable tool for national development. It empowers people and strengthens nations. Societies all over the world have used education as an instrument for the achievement of their national interests and objectives. Education is an instrument par excellence for effecting national development. It fosters the worth and development of the individual, for the individual's sake and for the general development of the society (National Policy on Education, 2013). All these call for functional education for the promotion of a progressive and united country. Therefore, school programs need to be relevant, practical and comprehensive, while interest and ability should determine the individual's direction in education. In Nigeria, for example, in order to achieve the goals and objectives of education, the government set up 3 levels of education: primary education, secondary education and tertiary education (National Policy on Education, 2013). For the purpose of this research, the discussion is limited to public secondary education.

Secondary education occupy an important place in the Nigeria education system, it also serves as a link between the primary and tertiary levels. The National Policy on Education, (2013) defined secondary education as the education the learner receives after primary education and before the tertiary stage. Secondary education in Nigerian schools is for a period of 3 years which is part of the Basic 9 education programme and another 3 years for senior secondary education. The secondary school system is however a very crucial level of educational system.

Higher Education in Nigeria

Education in general and higher education in particular in every society is obviously known to be an indispensable tool for nations' economic growth and development. It has been empirically proven and universally acknowledged that unless the citizens of a given country are well educated and appropriately trained, the achievements of rapid economic and social development cannot be guaranteed (Ahmed, 2013). It is a common knowledge that in the world over, higher education is an enterprise that produces

and distributes public good, which is knowledge. The production of knowledge by higher institutions has always focused on teaching, learning and research. Hence, it is believed that higher education is a major investment requiring a huge amount of financial resources, thus funds allocated to higher education are said to be long term investments of immense benefits both to the individual and to the society (Saleh and Kalu, 2017).

Higher education in Nigeria is an education that is acquired after the completion of secondary education. Higher education such as universities, polytechnics, monotechnics and colleges of education produces values that help individuals benefit themselves and contribute meaningfully to the development of the society in various fields of profession. The Federal Government of Nigeria in her National Policy on Education (2013) hopes that these values can be better inculcated through a well designed national system of higher education whose broad objectives were stated as follows:

- the inculcation of national consciousness and national unity;
- the inculcation of the right type of values and attitudes for the survival of the individual and the Nigerian Society;
- the training of the mind in the understanding of the world around; and
- the acquisition of appropriate skills, abilities and competences both mental and physical as equipment for the individual to live in and contribute to the development of this society

The strength and survival of any higher education depends largely on her academic staff and they are instrumental to effective learning and quality education in Nigeria.

Lecturers' Job Performance

Lecturers known as academic staff guide individual learners towards acquisition of knowledge, skills, abilities, information, ideas and competences needed for purposeful living in the society (Ojo, 2012). Imaobong (2010) sees an academic staff as an individual who lays the moral foundation on which good citizenship is built. An academic staff according to Ojo (2012) is a person who works as a researcher and who teaches at a University, Polytechnics, Colleges of Education, or similar

institution in post secondary (tertiary) education and whose duties or job performance include: teaching, learning, research and community services. Specifically, academic staff job performance involves teaching with or without the aid of electronic media, research, assisting students to source for teaching-learning materials, conducting examinations, monitoring students' progress and collaborating with other staff in teaching and research. Therefore, job performance of academic staff could be described as low, moderate, high, etc, depending on the extent of his commitment to work in order to achieve set objectives and goals of the institution (Adeyemi, 2010). To this end, the effective use of Information and Communication Technology (ICT) by academic staff becomes a sine-qua-non towards high job performance.

Meaning of Information and Communication Technology (ICT)

ICT is a terminology for information and communication technology is a generic term referring to a technology which is being used for collecting, storing, editing and passing on of information in various forms (Nwaomah, 2012). The importance of ICT in virtually all spheres of human endeavor for great productivity cannot be overemphasized. Okafor (2016) argued that the impact of ICT is becoming more and more pronounced worldwide such that rarely is anything mentioned in any area of human endeavor without reference to this technology. Nigeria of today therefore needs to move with the rest of the world in this information age when technologies have advances to remove dexterity and increased efficiency. Omirin (2013) supported by Abe and Adu (2014) argued that there are grounds to believe that ICT will improve education like using it as a substitute for almost anything like pencil, book and the like in the classroom. The use of information technology cannot be ignored if our nation wants to catch up with the rest of the world. The year 2000 has been referred to in many national and educational documents around the world as the transition point for a number of things including education. ICT is the reigning thing in education and Nigeria should not be left behind. The use of ICT in educational institutions is now seen worldwide as both a necessity and an opportunity for institutions to excel greatly. Schools especially higher institutions of learning are already using ICT environments

as success makers. In fact, Omirin (2013) observed that, the use of ICT in schools provides the information required on request, easily, and without burdensome trial-and error searching. From the first steps of designing the system, the queries that will follow are anticipated and accommodated. Similar to an office filing system, the adequacy of a student record system is often judged by how much time and effort are required to find and retrieve information. Therefore, a key part of ICT is its process for access, retrieval, and reporting.

According to Nwaomah (2012), there are six components to any ICT system. They include:

- **People**: This refers to human effort and skills needed in the operation of information and communication technologies.
- **Data**: These refer to raw scores which can be in numeral or alphabetical form that are used in generating information.
- **Hardware**: The physical devices that are needed to enter the data, to process the data, and to display the information in the most appropriate format. The hardware will include a keyboard or scanning device to enter the data, a microprocessor to calculate the readings into the amount due, and a printer to print off bills to send to customers.
- **Software**: These are programmes that are used in the operation of a computer. These programmes includes Microsoft Office Word, Corel Draw, Microsoft Messenger, etc
- **Procedures**: These are the ways in which tasks should be done as directed by the management of an organization. This will include how data is to be used, how systems are developed to suit the required outcome. All administration runs using pre-determined procedures.

The relevance of ICT in education especially higher education is necessary for sustainable national development.

Sustainable National Development

Previously, the attention was basically on the concept "Development". However, the Bruntland Commission shifted the

attention by reshaping and modifying the concept to "Sustainable Development."

The most interesting aspect of sustainable development is the fact that it puts into consideration the present conditions of people as well as not compromising those that come later. Therefore, the concept of Sustainable National Development remains the modern parameter of measuring development.

The Bruntland Commission (1987) defined Sustainable Development as "the development that meets the needs of the present without compromising the ability of the future generations to meet their own needs." In another definition by Munasinghe (2014), Sustainable National Development is a process of improving the range of opportunities that will enable individual humans and communities to achieve their aspirations and full potential over a sustained period of time while maintaining the resilience of economic, social and environmental systems.

Age (2015:85) identified some objectives which sustainable national development is expected to realize: increase capital, income and employment, promoting human welfare satisfying basic needs; protecting the environment.

Considering the path of future generation, achieving equity between rich and poor and participation on a broad basis in development and decision making is important. From the above definitions, there are common features which they all shared, that are prioritizing the development of the present generation without compromising the future generation.

Impact of ICT on Lecturers' Job Performance for Sustainable National Development

Lecturers' use of ICT involves lecturers' access to computer and internet in research to further develop the knowledge of their subject matter while in school before their teaching periods, the use of computers in recording students' classroom information like attendance, result scores, and also setting of continuous assessment test and examination. The advantage of ICT to the lecturer in all of these is to ensure proper documentation of students' information which can ease quick retrieval of assessment scores when needed, retain information of students in a class for a long time even when there is change of another lecturer in a particular course which the information of the students' such as continuous assessment scores and

examination scores can be easily accessed and retrieved by the new lecturer in that course; and which will aid the new lecturer to work with the available information, etc. (Ibukun, 2009).

To accomplish the responsibility of teaching, learning, research and community service, a lecturer requires managerial ICT skills which are useful and in some cases required as an essential part of teaching and learning which aid the lecturer in putting into consideration the present conditions of students which is the thrust of sustainable national development. Therefore, the following are some of the positive impacts that the use of ICT materials can have on lecturers' job performance:

- **Extending experience:** Gopal (2010) stressed that ICT materials help the lecturer to overcome physical difficulties of presenting subject matter. In essence, with ICT, the barrier of communication and distance is broken. The culture and climatic conditions of other countries can be brought into the classroom with the aid of slides, films, filmstrips and projectors. This is important because, according to Dike (2013) "once the phenomenon is visualized, the picture and knowledge becomes very clear and permanent to the students".
- **Stimulating interest:** In the words of Katherine (2009, p.27), "learning takes place effectively when the lecturer sets out to provide learning situation in which a child will learn because of his natural reactions of the provided materials". During the process of learning, the lecturer has to provide the learning situation to satisfy the natural reaction of the learner and this is through the use of instructional aids. The attention of the learner is caught, his interest won and he is ready to learn.
- **Individualize instruction:** Lestage (2009) opined that ICT materials provide a means of individualizing instruction. This he said is possible through programmed learning and tapes which enable the learner to learn at his pace and also to work on his own. Moreover, according to Dike (2013) the machine frees the teacher to work with individual students, since he or she is not now required to carry out routine drills.

Challenges that limit lecturers' use of ICT in higher institutions

The following constitutes challenges that limit lecturers' use of ICT in higher institutions in achieving sustainable developmental goals:

1) **Inadequate Infrastructures:** In Nigeria, a formidable obstacle to the use of Management Information System (MIS) is infrastructure deficiencies. Computer equipment was made to function with other infrastructure such as electricity under "controlled conditions". For the past fifteen years Nigeria has been having difficulty providing stable and reliable electricity supply to every nook and cranny of the country without success (Lestage, 2009). Currently, there is no part of the country, which can boast of electricity supply for 24 hours a day except probably areas where government officials live.
2) **Inadequate Skilled Manpower:** There is acute shortage of trained personnel in application software, operating systems, network administration and local technicians to service and repair computer facilities. Most persons who are designated to use computers in Nigeria do not receive adequate training, and in some cases, do not receive any training at all (Katherine, 2009).
3) **Poor Availability of Computers:** In most higher institutions, computers are in short supply which then limits most departmental use of computers and other technological instruments which can aid lecturers' job performance (Gopal, 2010).
4) **Insufficient Peripherals:** Computers peripherals like software, hardware, etc are in short supply which then limits lecturers' use of ICTs in performing their job and play their roles in higher institutions of learning (Dike, 2013).

Conclusion

ICT has many benefits which enhance mode of delivery of knowledge; easy and regular administration of individual and group assessments; awareness of the institution; unhindered interaction among teachers and students; collaboration with other institutions like Polytechnics and universities. Learning with ICT, needless to say, makes learning self-paced for the student, and

puts the student on the driving seat on the highway of learning. The student also has a better control over the learning method. Learning is personalized. Learning when it is online or distance learning removes the geographical barriers of learning for the students and teachers.

Recommendations

Based on the challenges that limit lecturers' use of ICT in higher institutions in achieving sustainable developmental goals, the following recommendations are made as the way forward:

- Federal and State government should ensure that its social infrastructures such as electricity is improve significantly especially in educational institutions which will in turn encourage and strengthen the academic activities in the school; including the use of technologies which will aid lecturers' job performance.
- Management and administrators of higher institutions should ensure that credible and qualified ICT trained personnel are recruited to perform ICT related activities either in administrative or academic functions.
- Federal government, State government and individuals that own higher institutions in Nigeria should make provision of sufficient funds in the acquisition and maintenance of ICTs materials which will in turn aids lecturers' job performance.
- Federal government, State government and individuals that own higher institutions in Nigeria should make provision of sufficient funds in the acquisition and maintenance of computers and its peripherals like software's, hardware's, etc which will in turn aids lecturers' job performance.

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