



## ROLE OF ICT IN EDUCATION AND ECONOMY IN NIGERIA

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### ABSTRACT

*ICT as a revolution left no area of life untouched. ICTs play a vital role in educational institutions. It improves teaching and learning and contributes meaningfully to an economy. This paper was to examine the influence of ICT in Education in Borno state, Nigeria. In this regard, the study adopted questionnaire method for data collection, where 120 questionnaires were administered to lecturers, administrators and students from randomly selected schools and simple frequency count and charts in MS Excel were used to analyze the collected data from schools. The study found out that ICT's role is very vital in teaching and learning, provides quality education and helps in economy. Also, the study further revealed that ICT facilities are not available in most of the school, most lecturers do not use ICT tools in class and students cannot interact with school activities anywhere.*

**Keywords:** *Economic, Education, ICT, Implementation, Influence, Learning*

### INTRODUCTION

Today's world is a global village that every dealings of our day to day activities has to do with technology. Advanced technology has greatly bestowed a lot to the development of human being in recent years. Information and Communication Technology (ICT) is greatly transforming the activities in our societies on a daily basis, the impacts are felt very much in education. This is because ICT provides more opportunities to both teachers and students in adapting educational activities of their needs.

Nation spends money in education because it can produce unquantifiable benefits for society, individuals or organization in this global age. ICT is very vital in the development of any nation, no nation will aspire to develop without embracing ICT. In respect of this, educational systems need to be nurtured to match these endeavor. With the technological advancement and the need for modernization in a society, there is a system of education to meet up with the trends. Education is the process of imparting or improving knowledge and developing skills.

Education prepares individuals for the challenges in life. Dauda, Michael, Deborah and Safiyanu (2015) opined that citizens who well educated contribute meaningfully to the country/society, they are major determinants of the production of goods and services as well as the standard of living for the successful development of the nation. It is therefore significant to subdue the factors affecting school performances so as to develop and improve the student's learning skills.

Citizens of any nation need quality education to improve in its nations' capacity building. With the technological advancement of the world today, education needs ICT to be more effective in increasing the student's knowledge because its role in incorporating technology into teaching and learning activities cannot be overemphasized. Aarti and Sunita (2016) stated that ICT provides a variety of tools that can open up new possibilities in the classroom. It can particularly assist students to adjust to their individual demands as well as helps in building an individual's economic domain with the essential technological competences. ICT as a revolution left no area of life untouched in this era. It is of tremendous help in all field of life. ICT is increasingly becoming compulsory in nearly all fields of studies, because its accuracy and versatility.

Nigerian Government came up with an educational policy that mandated the need to incorporate computer science discipline in to its curriculum in the respective higher institution of the state because of the growing impart of the essential role of ICT in the building and nurturing of political and socioeconomic life. It further asserted that "*The overall philosophy of education in Nigeria among others should be directed to building a united, strong and self-reliant nation by educational activities being geared towards scientific and technological progress*". (Federal Republic of Nigeria National Policy on Education, 2004).

ICT makes communication among party faster and easier. “It provides the society with a huge range of new communication capabilities in such ways that people can communicate in real time with others, send instant messages, social networking, internet services, and websites accesses like Facebook even when users are nowhere near to each other.” That is to say, ICT assists individual to manipulate data and information as needed.

People have been benefiting globally from Internet as an ICT tool, even at the grass root to make decision on issues involving the entire world that has to do with common interest.

ICT is a broad based electronic technology that aids the collection, storage, processing and transmission of information in different ways.

The relevance of ICT in education cannot be overemphasized. The need to realizes beforehand the vital significant of technology in schools in order to equip the educational system is of great important due to the fact that the technology has taken over most of human functions. The usage of ICT in educational setting will contribute immensely in the production and improvement of human resources, (Lalithbushan, et al, 2014). Peoples’ attitudes towards how they live, work and the way manage the educational affair has changed due to the rate of changes and substantial effect emerged as a result of modern technologies. It is applied in every field of education curriculum. ICT improves learning, provides opportunity for distance learning country-wide with online educational materials, and helps to get more information easily, contribute meaningfully to the society and necessary in most of the activities and human endeavors, Itodo A. & Ojo O. (2018).

According to Rev Canon Chris N, Prof G A and Ike, (2015), below are some of the areas where ICT may interest the educational sector. They are;

- **“Access to variety of learning resources:** ICT helps in a great way in accessing plenty of resources to enhance teaching skills and learning ability. ICT has helped in the provision of audio visual education. It learners are encouraged to regard computers as tools to be used in all aspects of their studies. They make use of the new multimedia technologies to communicate ideas, describe projects and other information in their work.
- **Immediacy of information:** In this time of computers and web networks the rate by which knowledge is imparted is very fast which also enhances

education anywhere at any time. Information and data desired for any study are obtained at will and when needed.

- **Anytime learning:** ICT aids one to study whenever he/she wills irrespective of whether it is day or night and whether the teacher is available or not.
- **Multimedia approach to education:** These are audio-visual education, planning, preparation and use of devices and materials that involve sight, sound or both for educational purposes. These include; TV, audio tapes, records, computers, video discs. Information taken through multimedia are received simultaneously either by vision or hearing or both.
- **Distance learning:** This enhances learning at a distance rather in a classroom. This replaces the home study, external study or correspondence study by mail of old. This type reduces costs per student. They save by studying at home on time and travel and other costs. This helps the students who wants to learn at the comfort of their zones”.

Furthermore, Dauda, Michael, Deborah and Safiyanu opined that, “If government at all levels can adequately fund Adult Education programmes by incorporating ICT technologies, the issue of barriers to access education and learning would be a foregone conclusion. This would bring and enhance the principle of learner centeredness, lifelong learning, flexibility of learning provision, the recognition for credit of prior learning experience as we as the supply of learners’ backup among others. The provision of educational computer studies and information technology in adult education learning centers would bring solid foundation for the development of our society”.

Economy of every nation is of great concern and quality education is the key to success.

*“Adult education is expected to address the socio-economic, cultural, political and environmental problems besieging humanity in their various societies. This is so because adults are the major occupants of the production sectors of the economy”, (Victoria and Ewelum, 2016). They further maintained that “in this era of global technology, adult educators and adult learners are expected to be at least computer literate, adults in the community to be ICT compliant as well as adult learners”.*

Adults are those who are matured, working and participating in nation's development, therefore, there is need to develop the skills of the adults who are capable of understanding nations' needs and predicament and are able to channel their endeavors towards the achievement of national goals.

### **STATEMENT OF THE PROBLEM**

Every aspects of our life deals with Information and Communication Technology, hence it demands to incorporate ICT in Education is essential so as to expose citizens to the efficiency and effectiveness of modern technological tools.

Educational methodology is having a revolutionary impact with ICT. Hence, there is a need for ICT development and training to boost the manpower general workforce development, improve the people's wellbeing and sustain the economy. Governments, private and non-governmental institutions are striving to assist in the provision of ICT training programmes at all levels including work environments. There is a call for ICT policies in Nigeria to allow individual citizens, including adults' access the training and services connected to ICT because technological development may be a pipe dream for the country. In this regard, "the Nigerian National ICT for Development (ICT4D)" committee was set up by the government to establish insurance regarding ICT for growth and for all education sectors. But this could not be well actualized due to some factors hindering the commencement of ICT in education across all sectors. Some of the factors are, lack of provision and call for teachers to use ICT facilities for instruction, deficiency in financing the buying of some of the ICT instruments, inadequate workshop and training of the teachers, etc.

### **OBJECTIVES OF THE STUDY**

This study essay to investigate the usefulness of ICT in education and how much it helps or contributes to economy in a community, society or country at large, also to checkmate some of the challenges of implementing ICT in Education.

This paper is to determine;

1. The Benefits of ICT in Education.
2. How it can contribute to an economy.
3. The Implementation of ICT in Education system.
4. How it facilitate teaching/learning process.
5. The availability of ICT facilities.

### **SIGNIFICANCE OF THE STUDY**

There is no qualm about education as a fundamental determinant of the achievement of any country/society, and ICT is a trending issue that contribute immensely to quality education. It is therefore necessary to dig into the vital role of modern technology in educational field to encourage government/private institutions to intensify the use of ICT in schools for quality education and the build of strong economy for its state.

### RESEARCH QUESTIONS

The following research questions will be considered:

1. What are the benefits of ICT in education?
2. Has ICT been implemented in to the education system?
3. How ICT in education contributing to economy?

### METHODOLOGY

This study is evaluative and descriptive. The population used for the study consisted of selected lecturers, administrators and students in Maiduguri. The sample size of 120 was randomly selected.

A self-designed questionnaire was used to collect the data for the study. The questionnaires were administered and collected by the researcher. Personal contacts of the researcher with the respondents enhanced good and prompt response from the respondents. Data collected were analyzed using frequency counts and chart in MS Excel.

### RESULT/ DISCUSSION

The data collected were analyzed and discussed below. There are three categories with items each;

- A. The benefits of ICT in education: it has four items
- B. ICT's benefit on economy: it has four items, which are;
- C. ICT implementation into schools: this contains three items, they are;

**Table 1. The benefits of ICT in education**

s/no	Items	Yes	No	Not Decided
1	ICT improves student learning	99	18	3
2	ICT makes teaching easier	90	21	9
3	ICT facilitates easy access to variety of educational materials	101	17	2
4	ICT improves quality of education	115	5	0

It can be seen in table 1, item 1 above that, the majority of the respondents agreed that ICT supports learning. Mahisa and Anju (2014) in their study, revealed that ICT play vital role as a strong agent for change among many educational practices. It supports independent learning. Students become immersed in the learning process by using ICT. Habib and Ghulam (2017) study, also revealed that the internet facilitates co-operative learning, encourages dialogue and creates a more engaging classroom. Also, it can be seen from the respondents (item 2) that ICT makes teaching easier. “Education process is not only heavily influenced by means of communication content between teacher and student, but also by types of communication media and instruments/tools used in the education process”, Damir Vuk (2014). Teacher’s quality performance depends on some significant elements among which are the instructional materials at his disposal in passing information across to the students. Teacher shows more commitment to teaching where there is a teaching facility for effective teaching.

Majority of the respondents (items 3 and 4 respectively), also agreed that ICT facilitates easy access to variety of educational materials and improve quality education.

**Table 2. ICT’s benefits in education on economy**

s/no	Items	Yes	No	Not Decided
1	ICT influences career aspiration	75	28	17
2	ICT improves skills	82	30	8
3	ICT provides access to global resources	112	8	0
4	ICT enhances creativity	109	1	5

It is clear from table 2, items 1 and 2 above, that majority of the respondents agreed that ICT influence career aspiration and skills; Incorporating computer education in schools can inspire students to undertake careers in technology and enhance their understanding on how computer technology impacts people’s daily lives. Furthermore, computer education provides students with the basis and activities that have to do with computer software. For example, application of Microsoft office, creating data sheet and also the use of programming languages. Students can later in life, utilize these acquisitions to a variety of jobs.

Furthermore. It can be seen by their responses (items 3 & 4) that ICT enhance creativity and access to global resources. ICT allows students to put their creativity to use. For example, practical class can be organized which will involve how to maintain a computer, thereby dismantling and mantling computer system. This will enable the student to understand and think about how most of these parts operates. Hence, they can utilize their advanced creativities to other endeavors of their lives, including historical information which will help in an economy of a state. Also, ICT provides vast information that can simplify our decision process because of how it has diffuse most of the dealing in our daily activities (work, learning, leisure, business and health).

**Table 3. ICT implementation into schools**

s/no	Items	Yes	No	Not Decided
1	There are ICT facilities in our school	41	74	5
2	Lecturers use ICT tools to deliver lectures	20	98	2
3	There is access to lecture or communication with the school anywhere	5	114	1

From table 3, item 1, shows that there are no ICT facilities in most of the schools. (Onyinloye and Oluwalola, 2014) shows that “availability of educational facilities enhances students’ learning by allowing them to be involved in demonstrations and practice which would increasingly develop their acquisitions”.

Item 2 from table 3 above shows that lecturers do not use ICT tools in delivering their lectures which may be due to many factors, among which are; lack of qualify teachers which may be due to lack of exposure to ICT training, poor practical skills in the use of ICT and perhaps, the readiness of the teacher in ICT usage.

Furthermore, item 3 shows that there is no access to lecture or interaction with the school activities anywhere one find his/herself. The use of ICT today has given the opportunity to distance learning where you can run a program at the comfort of your zone.

## **CONCLUSION**

Technology has engulf our day to day activities, and for a society/country to meet up with the technological challenges needs education. It prepares



individual for the challenges in life. Good educational attainment of citizens will greatly help in developing a nation/society in all ramification, which can be achieved by employing new ideas and technologies. ICTs role in the process of incorporating technology into the educational activities cannot be overemphasized.

For education to tap from the enormous gain of ICT in educational activities, there is the need to train teachers/lecturers on the basic skills of ICT so as to be sure of their competency, and also possess educational institutions well equipped with ICT facilities.

### **RECOMMENDATION**

- ICT integration to education should be emphasized, fully recognized and have affordable physical structures, facilities and resource materials readily available to most educational institutions.
- There is need for good leadership to determine how the new technologies can best be used in the context of cultural needs and economic condition within a country.
- There is need for the government to increase the electricity / power supply situation in Nigeria so that there will be opportunities for significant improvements and increase in ICT awareness among the rural and urban dwellers.
- Teachers and administrators should be given the necessary skills on the how to manage ICT facilities. This will help individual benefits from such training.
- ICT policies in the country should be enforced by the government through her agencies like the National Information and Technology Development, especially as it concerns the education sector. The agency should collaborate with different agencies to build and promote public-private partnership for integration of ICT into education programmes.
- Emphasis should be laid to the learning contents to reflect the needs of the state.
- Government should regularly organize workshop, training and seminar to educate and update the teachers or ICT users on trending issues of ICT.

- There is the need to orient the ICT users to know that the economic development of any nation or community lies in their hands.
- Policy maker and educators should come up with a stronger policy in respect of the use of ICT.

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