An Investigation of Lecturers' and students' use of ICTs in Nigerian university education as a panacea for national development

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Abstract
The importance of ICT in boosting human capacity development and self realization prompted an investigation into lecturers' and students' use of ICTs in Nigerian university education as a panacea for national development in Rivers State. The study carried out in the two State owned Universities in Rivers State, Nigeria adopted the survey research design. Random sampling technique was employed in the selection of 1154 subjects (i.e. 146 lecturers and 1008 students). A 40 item and 20 item self structured test titled: "Information and communication Technology Usage Scale" (ICTUS) and National Development Inventory (NDI) validated by experts and with a reliability coefficient (r_a) of 0.763 was used to analyze the data using t-test and regression analysis. The study revealed that the gender of university lecturers did not predict their usage of ICT while it also revealed that ICT usage contributed to national development. It was recommended among others that the National universities Commission (NUC) should commence an urgent review of the course content of university education, with a view at compulsorily incorporating ICT usage as a standard for all teaching, learning and examinations.
Keywords: lecturers, students, ICT, university education, national development, Rivers State.

Introduction

The fact that Information Communication Technology has made the world a global village cannot be over emphasized. Development in this global era is now controlled by ICT (Offor 2013). People with the aid of ICTs are now able to interact and send messages across the continent without barriers of distance and time constraints. Information is freely sort and received within the shortest possible time. People now have access to libraries of renowned repute where tangible, current and reliable research information is published, through the aid of visual libraries.

Information Communication technology has as well opened doors for both small and big businesses to be carried across the globe. It has to a great extent helped the technological advancement of many nations of the world. People with the aid of simple telephone could transact business without the stress and risks of travelling from one country to another. Much time resources are no longer wasted in the course of business transactions. In the field of medicine, reliable diagnoses of various illnesses and health conditions are now made, with the aids of computers and other electronic gadgets without specimens like blood samples, urine, swab or semen. Information about possible solutions to illness, diseases, and health problems are now easily gotten from the internet, and various websites. These were not possible in time past when people died of very common illnesses.

This is not different in the field of politics. Today we talk about electronic voting whereby elections are conducted and manipulated electronically. This conducting of elections electronically to very high degree reduces electoral malpractices. Currently, countries are opportune to watch and witness in televisions, other countries conduct elections and electoral processes. This helps these countries to adopt useful and innovative methods in their own electoral process.

In the field of education, the need for ICTs is equally over whelming. Information and Communication Technology (ICT) has been identified worldwide as tool that can accelerate and promote teaching and learning (National Policy for Information Technology, 2001). ICT can aid speedy production, storage, retrieval, communicating, downloading of expensive educational materials scattered all over the world in the internet. Also, the use of Microsoft word for processing documents and telecommunications systems like telephones, e-mail, internet and world wide web, GSM can make students and lecturers to be more active and productive in the classroom (Gusen, Olarinnonve & Garba, 2005) in line with this FRN (2004:17) stated that '' In recognition of the prominent role of Information and communication Technology in advancing knowledge and skills necessary

for effective functioning in the modern world there is urgent need to integrate Information and Communication Technology (ICT) into education in Nigeria. However, despite the position of this official document with regards to the need for ICTs integration into education, there seem to be some degree of lazier-fair attitudes and negligence by school teachers, students, administrators and university lecturers. Also, when recognizing the importance of ICT in every human endeavour, as well as technological development of a country like Nigeria, it is surprising to notice that both students and lecturers, in most Nigerian universities do not have access to these important ICT components. Supporting this view, Esu cited in Esu and Ukpepl (2005:41) opined that '' most of our students who passed through university do not see or practice with the equipment. That is equipment involved in ICT''.

In a study carried out by Mbakwem (2007), about the University of Nsukka, Alvan Ikoku campus undergraduate students' perception of the role of ICTs in national development, it was discovered that generally undergraduate students have positive perception about the role of ICTs. It was also noticed that gender had no influence in their perception. However, it was also seen that these undergraduates were of the view that ICTs have negative effects as in increasing corruption and moral decay among the youths through blue films and other pornographies. In another study carried out by Ibiam (2000) concerning the competences of primary school teachers in the use of information and communication technology in kogi state, it was discovered that ICT facilities were not available in Kogi State of Nigeria and teachers were not computer literate.

Still a similar study was conducted by Ezekoka (2007) to evaluate the secondary school teachers' use of ICT for curriculum implementation in Imo state of Nigeria. It was equally found out that ICT facilities were not available in the public secondary schools and consequently the teachers neither utilized nor encouraged their students to use them. This implied that secondary school students in public schools of the State were not exposed to information outside their teachers and the prescribed textbooks.

Furthermore, in Nnamani (2012) investigation on the extent of ICT skills possessed by the undergraduates of Health and Physical Education Department, Enugu University of Science and Technology, Enugu, it was discovered that the students possessed ICT skills to a low extent. The reasons were due to non-availability of computers in the department, and inaccessibility of the internet; based mainly on the financial handicap of the students. Related to this as well is Ejilibe (2013) investigation of the status of Information and Communication Technology (ICT) in teaching and learning Biology in Colleges of education in South- Eastern part of Nigeria. This study revealed that the quality of ICT resources available for the teaching and learning of Biology in the Federal and State owned Colleges of education is still low, even though those of the Federal Colleges of education are slightly higher than the State owned Colleges. Also it was shown that lecturers have low level of ICTs utilization despite the fact that lecturers at the Federal Colleges have better utilization of ICTs than those in the State Colleges of education. Even outside the shores of Nigeria, ICTs usage is still low.

Thus, a study by Hinson, Adika and Buatsi (2005) revealed that internet use is still low amongst the academic staff of the University of Ghana. In the same vain a survey by Jones (2002) on 46 primary schools classrooms in metropolitan Melbourne overa week period on the use of ICT, indicated a very low level of ICT use. The study also shows that even though every classroom surveyed had access to computers, yet their use could best be described as being occasional and that more than 90% of the supervising teachers in the survey used their classroom computers with students once per week or less over a four week teaching practicum.

Watson (2002) supporting the use of ICT and yet regretting the teachers do not use it stated that the use of ICT in education is not only a catalyst for change, but also change in teaching style, change in learning approaches and change in access to information. Yet, research indicates that teachers are both threatened by change, and conversely not impressed by change that appears to focus on what the technology can do rather than learning. Jones (2002) in line with this situation, still declared that too many teachers still lack confidence in using ICT and this often made worse by lack of appropriate software, unreliable computers and internet connections, and insufficient technical support when things go wrong.

Jones (2002) still lamenting, over this condition stated that effective use of ICT for teaching and learning in schools and universities is not widespread even though the technology is now ubiquitous. He however opined that some teachers and lecturers have been able to integrate ICT into their teaching and more importantly engage

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students in making use of ICT as part of the process of learning. However, there are still many barriers and impediments in the way of ICT becoming an integral part of teaching and learning.

It is against this background that this paper is billed to investigate the perceptions of university lecturers and students of IAUE and RSUST towards the application of ICTs to university education.

Statement of problem

The problem this study wants to investigate is despite the importance of ICTs in every aspect of human life including education and national development, many academic staff and students of Nigerian Universities do not seem to appreciate this importance and as such appear not to use them in teaching and learning. Therefore, this study is focused on finding out how lecturers and students of Ignatius Ajuru University of Education (IAUE) and Rivers State university of Science and Technology (RSUST) perceive ICTs integration in University education in Nigeria and its importance in national development.

Purpose of the study

The general purpose of this study was to find out the extent of lecturers and students' use of ICTs in University education as a means of achieving national development. Specifically, the study sought to find out;
- How the gender of lecturers influenced their use of ICT in University education in Nigeria.
- How the gender of students influenced their use of ICT in University education in Nigeria.
- How lecturers and students usage of ICT influenced national development.

Significance of the study

This study is considered significant for the following reasons;
- Results obtained may reveal the influence of gender on lecturers and students use and integration of ICTs into university education in Nigeria as a means of achieving national development.
- Results obtained may also reveal the extent of lecturers and students of ICT in teaching and learning in the university leads to national development.
- Results of this study may resolve some of the hitches to the proper integration and use of ICTs in the University education in Nigeria
- Results of this study may show the need for government intervention in boosting ICT usage and integration in Nigeria's university education.

Review of related literature

In this section, we are going to discuss, the concept of ICT, the importance of ICT towards national development, students and lecturers' access to ICT components, dearth of ICT technical staff, problems of ICTs application in education, possible solutions to these problems.

The concept of ICT

Originally, information and communication were carried out orally. People collected information, stored it in their memories and transmitted them verbally to their receivers and users. But with the invention of printing technology, there came the first breakthrough in the field of information and communication technology. ICT has led to the globalization of the world. Information and Communication technology is a mixture of information technology and communication technology. ICT is therefore the application of computers and telecommunication gadgets in processing, storing, and sending information of all kinds in whatever form or distance. ICTs encompass all that is involved in modern communication technologies such as communication Satellites, radio, television, video, tape recorders, compact discs, floppy diskettes and personal computers and other related equipment so that the output generated can reach the users at reasonable cost and in good time across the globe (Ezekoka, 2007). Ibenyenwa (2011) sees ICT as all the electronic devices, computer hardware and software and telecommunication gadgets that enable the processing, storage and immediate dissemination of huge amount of information through the computer net works. Obanya (2003) describes information and communication technology as the sole creation of human kind that has thrown off balance the conventional perceptions of time and space that has destroyed geographical barriers to the transmission of knowledge, ideas, and Information.

Furthermore, Etonyeaku (2010) sees ICT as the study, design, development, implementation, support and management of computer based information systems, particularly software applications and computer hardware.

Similarly, Afolabi and Adeyanju (2005) see ICT as the science and activity of processing, storing and sending information through the use of computer. They also defined ICT as the use of hardware and software to enhance communication. Furthermore, Iyehowa and Obueh (2005) more elaborately defined ICT as the handling and processing of information as in instruction, graphs, texts, and image for the use by means of electronics and communication devices such as computer and telephone. As such, they see ICT as the means of accessing or receiving, storing, transferring, processing and sending feelings, ideas, perception or information through electronic gadgets or communication equipment.

According to Mangal and Mangal (2009; 698) some of the advanced technological developments that has helped in the field of ICT include;
- Photography which was invented in1849, by a Frenchman L.G.M.Daguerre and an Englishman W.H.F. Talbot.
- Photostat invented in 1900, by Professor Abbe Graffin of France.
- Xerography in 1938, by Chester F. Carlson of U.S.A.
- Micrography(obtaining copies of the recorded material in highly reduced format) invented in 1940, by an Englishman J.B. Dancer and Trenchman Rene Dagran.
- Laser technology (used for printing and memory device) invented in 1960 by Theodore Maiman of U.S.A.
- Magnetic video camera, video disc and computers that were developed in the 20th century.
  Apart from these the field of telecommunication has currently reached the age of satellite communication. Some of the landmarks in this include;
  -Telegraph invented in 1837 by S.F.B. Morse of U.S.A.
  - Telephone invented in 1876 by Alexander Graham Bell of Scotland.
  - Radio invented in 1895 by G. Marconi of Italy.
  - Television invented in 1925 by J.L. Baird of Scotland
  Cable and facsimile transmission (fax) technologies came into use in the 20th century.
Thus having properly been equipped by the modern instruments of information collection storage,retrieval and transmission, then came the scientific control of the process information and communication in the later part of 19th century.
  In this study ICTs comprises of computers, networks, satellite communications, robotics, videotext, cable television, electronic mail (e-mail) electronic games, CDROMS, radio, televisions, internets.

Theoretical Framework

This study is based on the theory of constructivism which is a learning theory found in psychology. This explains how people learn or acquire knowledge. The theory suggests that human beings construct knowledge and meaning from experiences. This theory does not support the traditional ways of teaching. Constructivism provides for active learning rather than passive learning which traditional method supports. It supports the act of getting knowledge by self. The student does not need the presence of the teacher to learn. He can source knowledge by self. This exactly what ICT does in the field of education. Students with the help of ICT learn independent of the teacher. They source educational materials through the internet, e-library etc.

The importance of ICT application to education in Nigeria

The traditional fare-to-fare method of teaching is fast changing especially in the western world as a result of explosion of knowledge and students population. Thus, according to Dike (1999) the changing nature of the learner and the emergence of new resources for teaching and learning process have changed the traditional role of a teacher. New facts and information are being discovered everyday as a result of research and development activities. This makes it impossible for a single teacher, no matter how versatile, to keep pace with. Agreeing with this, Ely and Plomp cited in Ezekoka (2007) opined that the teacher's role is shifting from sole information giver to a facilitator of learning. There is emergence of new instruction resources such as projectors, television, computers etc. which can aid large and small group teaching as well as individualized instruction. It is therefore obvious that the emergence of ICT has played a vital role in the management of explosion of information and helping of the teacher in facilitating learning. With the aid of ICT learners are able to get millions of information stored in the internet. Expensive and vital information are retrieved from the internet at a very minimal cost. One can communicate with anybody in the world simply by logging on (Nwankwoala, 2010).

In order to join the global trend where by most advanced countries of the world have made ICT components as vital tools of teaching and learning, Jubril Aminu in 1987 as the then Minister of education set up the Computer Education Committee. The report of that committee gave rise to the National Policy on Computer Education. The Computer Education policy aimed at making students have the;

1) Ability to use and programme computer
2) Knowledge and ability to use and develop software package
3) Understanding of the structure and operation of the computer
4) Knowledge about the history of the computer
5) Appreciation of the economic, social and psychological impact of the computer
6) Knowledge of using computer in problem solving (FME, 1988).

Furthermore, the internet as a component of ICT is capable of connecting places all over the world. As such, students as well as teachers are taking advantage of E-mail (electronic mail) systems and telecommunication networks to connect and tap educational information from experts in different fields of education (Nwankwoala, 2010). Supporting this Levin and Thurston cited in Audu (2005) stated that students who engage in network communications produce better quality writings that build on more diverse realm of problem- solving and thinking strategy compared to traditional methods of paper-writing. ICT no doubt also help students to become effective independent learners. It enables even disabled students to achieve the same degree of academic success as anyone else.

Also supporting the importance of ICT in education, Adamu (2004) opined that ICT mediated instruction using environmental teaching methods is as good as traditional fare-to-face instruction and also computer based instruction improve students' learning and attitude towards learning. Following all these importance of ICT in education, Weinraub (1998) warns that if classroom teaching methodology continues to follow the traditional pathway, Nigeria Is likely to see a continued decline in the academic progress of our children, because the current technology-based learning style of today's students differ from the out-of-date teaching style of the instructors. ICTs are teaching tools for the development of intellectual and thinking skills and teaching tools for computer use itself-these include word processing, spread sheet analysis, database as well as graphics (audio and video) presentation and application (Guardian, Tuesday 18, 2004 pp.37 and 39).

Furthermore, Mbakwem (2007) sees ICT as a vital innovation in the world today that has dramatically revolutionized business patterns and structure, work habits, interpersonal relationships and has brought about the new forms of business. It has moved nations that adapt it forward in their development thrust. No nation can exist without information. To this effect the modern means of relating information in the world today which is ICT is a prerequisite for progress. For instance, technologies like internet, electronic mail device (e-mail) etc. are linked to the computer for their functions. Thus, the internet is the global computer networks that accelerate information transfer. Computers are almost indispensable in our present day educational practices, going by the world's advancement in technology. This calls for computers in the application of ICTs in all the levels of education in Nigeria. Supporting this view Agbo (2001: 183) states that;

> The degree of sophistication in numeracy through the use of computer has become very pronounced all over the world. Nigeria in a bid not to be left behind has resolved to introduce Computer Education to secondary schools. For meaningful use of computers in our secondary schools there is therefore a need to produce professional teachers in the discipline…

This however does not only apply to secondary education. It equally applies to university education which is the culmination of secondary education. It is obvious that managements of Nigerian universities and other institutions of higher learning, currently from time to time organize ICTs training for academic and non-academic staff. This however is not enough. The most important move towards the complete integration of ICTs to university education would be when the needed ICTs are provided in lecture halls for use by lecturers and students.

Obviously, ICTs are becoming increasingly necessary in everyday lives around the globe. The development of nations of the world is currently driven by the verse knowledge of ICT. As such, it is important that educational institutions use ICTs to teach the various skills and knowledge that students need in other to fit into the 21st century technological development of the world. There is urgent need to restructure the educational curricula and instructional facilities at all levels of education, so as to bridge the existing technology gap in teaching and learning processes especially in Africa. This will enable learners to have current knowledge of their specific subject areas and as such enhance their professional productivity.

The use of ICTs is a boost to the economy and as such a factor to reckon with in national development. Since education is a vital instrument for national development, there is the need to have a relevant curriculum whereby ICT is made an important component so that students learn the use of computers and other information technology (IT) skills. In this way, we can ensure that learners are equipped with cognitive, affective and psychomotor skills, social skills, interpersonal competencies, attitudes and values that would develop the human resources and led them to productivity that will result to quick national development.

In the same vein, White (1999); Plleeger (2001); Dellit (2002); Gusen, (2002:82-83) outlined some educational values of ICTs as fellows;
1) Cost effective and increase educational values as they aid in speedy production, storage, retrieving, communicating, downloading expensive educational materials scattered all over the world on the internet.
2) Industrialization of instruction as they complement the teacher in making students to progress according to their own ability, interest, and pace.
3) Learning mastering as it promotes multi-skill activities and productivity.
4) Increases productivity since the use of Microsoft Word for documents and telecommunications systems like telephone, e-mail, Internet and World Wide Web, GSM can make students and lecturers to be more active and productive in the classroom.
5) Decreases cost of oppression in that the use of ICTs like internet, GSM etc. in downloading research works and communicating with people around the world do not cost so much money.
6) Cheap production of educational software and hardware.
7) Reduces work force since fewer people can use ICTs to perform works meant for so many people.
8) Help in accessing accurate information.
9) Enhance teachers' morale since they can quickly use computer screen to process, edit, print and present error-free examinations results.
10) Help in having faster access to learning and teaching materials through e-mail, internet and World Wide Web.
11) Improved /increased job skills and employment opportunities since the use of computers for Word Processing, Database, Desktop Publishing and Networking can increase economic and employment viability.
12) Promotes self-assessment, logical and analytical thinking.

Supporting this, Omojeje and Olusina (2013) opined that the essence of education is to make learners more productive, useful to himself, bold, skillful and confident. These acts are easily achievable with the motivation which the use of ICTs.

Lecturers' and Students access to ICT components
However, it is important to state that the attempt to integrate ICT into Nigerian education system has faced a lot of challenges, such as costs of different ICT Components and financing, dearth in ICT technical staff, unsure prospect of ICT application to education, and problem in the job situation (where there is so much emphasis on computer literacy), poor electricity supply, poor availability of ICTs trained personnel, etc. Although many universities and institutions of higher learning in the country now can boost of ICTs centers, yet the fact remains that some of these ICTs centers are not functional as a result of many obstacles. Supporting this Adejoh and Ozoii (2005) stated that some of the obstacles in the utilization of ICTs in teaching and learning include; low level of ICT literacy among teachers, dearth of technical staff, low level of funding, irregular power supply, high cost of ICT facilities and lack of relevant ICT infrastructures.

Low level of ICT literacy is a serious hitch in the integration of ICTs in lecturing in most Nigerian Universities. Some lecturers feel that these ICTs are not useful or even easy to use. Some are very use to the traditional face-to face method of teaching that they see the use of ICTs in lecturing as a waste of time. The worst is that even when their universities plan programmes that will expose them to ICTs utilization; they hardly find time to attend. Some still feel that ICTs are for younger generation. A situation whereby a professor in a university refuses to own a telephone handset simply because he would not want to be disturbed is a direct example of this mind set. So a professor who refuses to use telephone hand set cannot naturally make himself available for ICTs training.

Irregular power supply is another hitch to students and lecturers access to ICTs integration in education. Nigeria is presently suffering from acute epileptic power supply. Virtually all the sector of this country is affected by the

cankerworm. Naturally, going by the level of technological development round the globe, electricity is a key factor in the operation of most gadgets and appliances, ICTs inclusive. So when availability of electricity is not assured, there is no way ICTs can effectively be utilized in educational institutions.

Again, it is important to point out the obvious fact that most of the ICT components are expensive to acquire. For example, computers, laptops, electronic boards etc. are not cheap to purchase. Internet connections are equally expensive to maintain. Even when certain handsets can be used to browse, yet not all the needed information can freely be downloaded without much cost. These definitely limit students' and lecturers' access to ICTs. ICT internet is a valuable resource that makes students and lecturers have online access to data without making a trip to the library and in many cases data will be up to date than the library printed materials   (Campbell & Campbell, 1995). However in the absence of electricity, students and lecturers are left with the option of using textbooks, journals, magazines and newspapers on library bookshelf that are more or less obsolete as their only sources of information.

The low level of funding the education sector in Nigeria is also what is affecting the ICTs funding in Nigerian universities. Poor funding of education sector in Nigeria has so far resulted in incessant industrial actions which is one of the causes of students' poor academic performance. If ICT integration into university education is properly funded by the government, students will have the opportunities of owning personnel computers, laptops and other necessary ICTs which will definitely help them in their learning.

Dearth of ICTs trained staff is also a great hitch to ICTs proper utilization in our universities. Most university lecturers are unable to use ICTs probably because they don't currently have the required training.

It is indeed true that when the educational progress of the Nigerian students is declining and unable to meet with the world standard due to poor access to the use of ICTs, there will be decline in the national development which is highly dependent on nations' education system. Thus, Mbangwu and Ochai (2012) stated that the aim of education in the nation's economy is to produce a workforce that would be self-reliant entrepreneurs who would help to alleviate poverty and facilitate national development.

It is on these bases that this paper would want to investigate the extent of the use of ICTs by IAUE and UST lecturers and students in education.

Research Questions

1) To what extent does the gender of lecturers affect their usage of ICT in university education in Nigeria?
2) To what extent does the gender of students affect their usage of ICT in university education in Nigeria?
3) What is the contribution of lecturers and students usage of ICT in university education to national development?

Research Method

The study was an analytical study that adopted the descriptive survey design. The study was carried out in Ignatius Ajuru University of Education and Rivers State University of Science and Technology. The study was aimed at finding out the perceptions of lecturers' and students' on use of ICTs in university teaching and learning in these Universities.

Population of the study

All the lecturers and students in the two state owned universities in Rivers State constitute the population of the study.

Sample population

By random sampling of 146 lecturers and 1008 students were selected from the two universities to respond to the questionnaire. Therefore the total sample is 1154 persons.

Instrument for data collection

The instrument for this study was a 40-item and 20 item instrument for the Informational Communication Technology Scale (ICTS) and National Development Inventory (NDI) respectively. All the items were structured

on a four point Likert scale ranging from SA, A, D, SD. The questionnaires were given to experts in this field for criticism and validation. After which corrections were made.

RESULTS

Research Question 1: To what extent does the gender of lecturers affect their usage of ICT in university education in Nigeria?

Table 1: Summary of t-test analysis on the difference between the mean rating on the influence of gender on lecturers use of ICT in university education.

Gender	N	Mean	SD	T	Df	p-value	Decision
Male	66	124.6061	8.39025	1.300	144	0.177	NS
Female	80	122.6875	9.25393				

Decision rule: if $p<.05$ reject H_o, else retain H_o. NS= Significant, $p>.05$, * significant, $p<.05$

Table 1 shows that gender of lecturers has no significant influence on their use of ICT in universities ($t_{(362, .025)}=1.300$, $p=0.177$). The mean difference though relatively close was in favour of the female lecturers.

Research Question 2: To what extent does the gender of students affect their usage of ICT in university education in Nigeria?

Table 2: Summary of t-test analysis on the difference between the mean rating on the influence of gender on lecturers use of ICT in university education.

Gender	N	Mean	SD	T	Df	p-value	Decision
Male	455	124.5912	8.35210	3.405	1006	0.000	S
Female	553	122.6872	9.21452				

Decision rule: if $p<.05$ reject H_o, else retain H_o. NS= Significant, $p>.05$, * significant, $p<.05$

Table 2 shows that gender of students significantly influenced their usage of ICT in universities ($t_{(362, .025)}=3.405$, $p=0.000$). The mean difference though relatively close was in favour of the female students.

Research Question 3: What is the contribution of lecturers and students usage of ICT in university education to national development?

Table 3: Summary of Multiple Linear Regression Analysis on the contribution of lecturers and students use of ICT on national development

Analysis of Variance

Source	Sum of Squares (SS)	Df	Mean Square	F. Ratio	P-value	Remark
Regression	1671722.405	1	1671722.405	13822.887	.000[b]	S
Residual	121543.424	1005	120.939			
Total	1793265.829	1006				

Multiple R (r_p) =.966[a]
R. Square (r^2) = .932
Adjusted R^2 = .932
Standard Error of Estimate =10.99721

Table 3 shows that the use of the ICT to predict national development yielded a coefficient of multiple regression R (rp) of 0.966 and multiple regression square (R^2) of 0.932. This also shows that F is 13822.887 which is significant at $P < 0.05$ because the value of P is less than 0.05.

This shows that the use of ICT accounted for 93.2 percent of the variance in lecturers and students human capacity development. In other words, 93.2% of the variance in the change in their capacity can be explained by pulling the different variables together. This means that 6.8% of the variation in lecturers and students capacity

development cannot be explained by their use of ICT in the university alone. Thus, there must be other variables that have an influence also.

Discussion of Findings

Table 1 revealed that gender of lecturers has no significant influence on their use of ICT in universities ($t_{(362, .025)}$=1.300, p=0.177). In other words the study is indicative that the gender of lecturers did not predict their usage of ICT in university education. This finding is in agreement with the work of Mbakwem (2007) which stated that the perception of ICT usage in higher institutions.

The result in Table 2 revealed that gender of students significantly influenced their usage of ICT in universities ($t_{(362, .025)}$=3.405, p=0.000). This means that the gender of university students in Nigeria contributed or influenced their usage of ICT. This finding is consistent with the views of Mbakwem (2007) which stated that both male and female students of Alvan Ikoku College of Education support the use of ICT in higher institutions.

The result in Table 3 shows that university lecturers and students use of the ICT highly contributed to both their human capacity development and national development. This finding is in agreement with Obanya (2003) who describes information and communication technology as the sole creation of human kind that has thrown off balance the conventional perceptions of time and space that has destroyed geographical barriers to the transmission of knowledge, ideas, and Information.

Conclusion

The study concludes that the significant contribution of ICT to the human capacity development of both lecturers and students in universities will undoubtedly aggregate to national development in Nigeria. Based on this premise, some recommendations were made:

1. The government in conjunction with the university administration should run a free and compulsory ICT services in order to provide practical and functional knowledge to university lecturers and students.
2. All lecturers must show proof of ICT competence prior to their promotions.
3. Government and other stakeholders should create special funds to enable universities improve their ICT capacity.
4. The National universities Commission (NUC) should commence an urgent review of the course content of university education, with a view at compulsorily incorporating ICT usage as a standard for all teaching, learning and examinations.

REFERENCES

Adamu, A.U. (2004). ''Computer Application and use of ICT for Teaching and Learning.'' A paper presented at the Train-The- Teacher work-shop for Lecturers in Colleges of Education in Nigeria. Organized by Education Tax Fund (ETF) and the National Commission for Colleges of Education, Abuja.

Adejoh, M. J. and Ozoji, B.E. (2005).'' Towards the effective Utilization of Information and learning of Integrated Science in Secondary Schools For Quality Assurance.'' In Journal of Curriculum Organization of Nigeria (CON). (12)3.

Afolabi, A. and Adeyanya, A. (2005). ''Why College Teachers do not use ICT Facilities in teaching.'' In Journal of E-learning (Joel) Training (2)1. Pp. 26- 28.

Ajshola, O. and OlusinaFelix(2013). ''Information and Communication Technology and students' cognitive development: A case study of English and History students, Adeyemi College of Education, Ondo, Nigeria.'' In Journal of Qualitative Education. (9) 3.

Audu, U.F. (2005).'' The Role of Information and Communication Technology in Marinating Quality Education in Nigeria.'' In Journal of Curriculum Organization of Nigeria.. (12) 3.pp. 46-52)

Ezekoka, G.K. (2007).'' Evaluation of secondary school teachers' use of information and communication technology (ICT) for curriculum implementation.'' In Journal of Women in Academics (JOWACS), 4(1),pp 210-219.

FRN (2004). National Policy on Education. Yaba: NERDC Press.

Gusen,J.H.; Olarin, R.D. and Garba, E.J.D. (2005). ''The place of information and Communication technology in promoting Quality Assurance in Nigeria University system''. In Journal of curriculum organization of Nigeria(CON). 12(3).pp. 25-32.

Ibiam, J.U. (2007). ''Primary School Teachers' Information and Communication Technology (ICT) Competences inKogi State''. In Journal of Curriculum Organisation of Nigeria. (14)3.pp291-298.

Jones, A. J. (2002). ''ICT and learning theories: preparing pre-service teachers For the classroom. Retrieved from www.leads.ac.uk/./oooo2496.htm on 3/9/15.

Jones, A. J. (2002). ''Refusing or ignoring? An investigation of students teachers' Perception of the use of computers. Paper presented at the Australian Society for Educational Technology Conference'. Melbourne .July. Retrieved from www.leads. Ac.uk/./oooo2496.htm on 5/9/15.

Mbangwu, F. O. and Ochai G.O. (2012). ''Innovation in Curriculum Development For Poverty Alleviation in Nigeria'' In Journal of CUDIMAC (4) 1.

Mbakwem, J.N. (2007). ''Undergraduate students' Perception of the Role of ICTs In National Development''. In Nigerian Journal of curriculum studies. (14)3. pp. 131-138.

Offor, E.I.D. (2013). '' Assessment of Implementation of ICT-Driven Secondary Education in Owerri Municipal, Council of Imo State towards National Development'' In Journal of Qualitative Education.(9)3.

Watson, D. (2001). ''Pedagogy before technology: Rethinking the relationship Between ICT and teaching education and information technologies.'' 6(4), pp. 251-266.