# Impact Of ICT On Quality Education Delivery In Tertiary Institutions In Nigeria: A Case Of Federal College Of Education (Technical), Asaba, Delta State

BY

**Dominic Ngozi Patience**

*GENERAL STUDIES DEPARTMENT*

*FEDERAL COLLEGE OF EDUCATION (TECHNICAL) ASABA*

Phone:  07032560476

*chiedozie34@yahoo.com*

&

**Emmanuel Oshilonya**

*GENERAL STUDIES DEPARTMENT*

*FEDERAL COLLEGE OF EDUCATION (TECHNICAL) ASABA*

*EMAIL:emmanueloshilonya@yahoo.com*

**PHONE:** 09031719190

&

**Gift Emanuel Ndaeyoh**

*GENERAL STUDIES DEPARTMENT*

*FEDERAL COLLEGE OF EDUCATION (TECHNICAL) ASABA*

*PHONE: 08164084506*

*EMAIL: giftndaeyoh@gmail.com*

**IN**

# WORLD  WIDE  MULTIDICIPLINARY  RESEARCH  AND DEVELOPMENT

**Abstract**

*The study assessed the impact of ICT on quality education delivery in tertiary institutions in Nigeria using Federal College of Education, Asaba as case Study. Four research questions and two hypotheses were adopted for the study. The study adopted a survey research design. The target population of the study was 379 respondents (lecturers) in the College. Taro Yamene's formula was used to derive 195 respondents that served as sample of the study. One hundred and twenty 120 copies of the instrument (representing 62%) were retrieved and used for the study. Data were collected from respondents using structured questionnaire and analyzed using frequencies, percentages, mean and standard deviation. Pearson product moment correlation was used to test the hypotheses. The result revealed that most ICT equipment required for teaching and learning in the College were not available in the school. ICT equipment available in the College was rarely utilized by lecturers. However, few ICT equipment available in the College reasonably enhanced quality educational process. Problems confronting the ICT usage in the school were insufficient ICT facilities and unsophisticated accessories, lecturers' lack of ICT knowledge/skills, poor attitude of management towards ICT attitudes, not enough simultaneous access to ICT facility, and not enough supervision staff and lack of technical assistance. The study recommended among others that ICT facilities should be made adequately available by administration of higher institutions such that lecturers can utilize them in their offices and classroom. This is necessary because ICTs are regarded as integral parts of teaching and research in universities. Training programme should be organized by school management for lecturers in the College who are not competent in operating ICT equipment. This training will enhance the use of ICT in teaching and learning process.*

**Key Words**: ICT, Lecturers, Quality Education, Tertiary Institutions

## Introduction

Education is one of the most important needs for the well-being of individual and that of the society. Thus, education is a powerful instrument of social, political, and economic progress, without which neither an individual nor a society can attain professional growth. Education is also known to be a complex social undertaking, and there is no easy way to analyze the many dimensions of the policies involved. Nonetheless, we can begin with the simple characterization of higher education as a process involving the allocation and use of available resources to achieve certain instructional, social and/or economic objectives (Ololube, 2007). In most higher education circles in Nigeria, it is often observed that some institutions are undoubtedly better endowed than others in terms of, for example, the number, qualification and experience of the faculty and the availability of books and instructional technology materials (Ololube, 2008).

The Federal Ministry of Education (2014) defined higher or tertiary education as post-secondary education given after secondary education in colleges of education, monotechnics, polytechnics and universities and those institutions offering correspondence courses. Defining tertiary education in terms of the levels and functions of the educational experience offered, (Bernett, 2007) sees tertiary educational institutions as unique institutions which is differentiated from others in terms of research and its managers are designated as Provost, Rector, and Vice-chancellor. According to Peretomode (2007), tertiary or higher education is the facilitator, the bed rock, the power house and the driving force for the strong socio-economic, political, cultural, healthier and industrial development of a nation as higher education institutions are key mechanisms increasingly recognized as wealth and human capital producing industries. Only human capital can sustain growth (Kors, 2008). World Bank (2014) argued that higher education is fundamental to all developing countries if they are to prosper in a world economy where knowledge has become a vital area of advantage. The quality of knowledge which is generated in institutions of higher learning is critical to national competitiveness. It is only quality education that can sharpen the minds of the individual and help transform the society economically, socially and politically. Countries can achieve sustainable development by improving through

training in higher level, the skills of their human capitals with the presence of good teaching technology like Information and communication technology (ICT).

Information and communication technology (ICT) is an indispensable part of the contemporary world. In fact, culture and society have to be adjusted to meet the challenges of the information age. Information and communication technology (ICT) is a force that has changed many aspects of people's ways of life. Considering such fields as medicine, tourism, travel, business, law, banking, engineering and architecture, the impact of ICT in the past two or three decades has been enormous Adavbiele, (2016). The way the fields operate today is vastly different from the way they operated in the past. But if one looks at education sector, there seems to have a little impact of ICT utilization and far less change, than other fields have experienced. However, a lot of people have attempted to explore this lack of activity and influence (Soloway & Pryor, 2016; Collis, 2012).

The pervasive influence of ICT has brought about a rapid technological, social, political and economic transformation, which has paved way to network society, organized around ICT. The field of education has not been unaffected by the penetrating influence of information and communication technology. However, ICT has immensely contributed to the quality and quantity of teaching and learning and research in traditional and distance education institutions. ICT enhances teaching and learning through its dynamic interactive and engaging content and provides real opportunities for individualization of instruction. Information and communication technology has the potential to accelerate, enrich and deepen skills, motivate and engage students learning, helps to relate school experience to work practice, helps to create economic viability for tomorrow's workers; contributes to the total development of the institution; strengthens teaching and learning and provides opportunities for connection between the school and the world (Davis & Tearle, 2009).

In 2007, the Federal Ministry of Education created its ICT department and has since been collaborating with several government agencies and other stakeholders in the private sector to initiate ICT driven projects and programmes to affect all levels of education sector in Nigeria (Osakwe, 2012). Like every issue of development in the country, all tertiary institutions in Nigeria are struggling to access the technology as a measure to ascertain academic excellent

through teaching and learning. An appreciable number of lecturers in tertiary institutions today have never use computers in their lives and they are terribly shy when they are confronted with this new technology and the terminology associated with using them. Some schools do not have them provided for their academic staff and some staff may not be economically buoyant to buy one for themselves. At the tertiary-level of education, Okhiria (2007) noted that National Universities Commission (NUC) and other higher education bodies in Nigeria has prescribed that there should be at least one computer to every four students and one PC to every two lecturers below the grade of lecturer I, one PC per senior lecturer and one notebook per reader/ professor.

Almost all African countries' basic ICT infrastructures are inadequate; a result of a lack of electricity to power the ICT materials and poor telecommunication facilities. Above all, this lack of access to much needed infrastructure is to the result of insufficient funds (Ololube, Ubogu & Egbezor, 2007).    Some tertiary institutions in the in Delta State poorly maintains their scarcely available ICT equipment and poor network infrastructure are prominent obstacles to the integration of ICT tools in teaching in the area. Poor technical equipment would make negative impact on teacher's desire to integrate ICT tools in teaching all other subjects. Technological and science laboratories are using electricity, but epileptic electricity persists in the schools thereby negatively affecting qualitative educational delivery. There are significant bodies of research relating to the obstacles of ICT integration in teaching and learning in the developed countries such as US and UK, but in the developing countries like Nigeria, especially at the tertiary education level, such publications are few and scanty in scope, if they exist at all. Whereas such publications are valuable information sources for countries which would like to improve and make a success on ICT tools integration in teaching and learning. It against this backdrop the study seeks to assess the impact of ICT on quality education delivery in tertiary institutions using Federal College of Education (Technical), Asaba, Delta State as a case study.

## Objectives of the Study

The main objective of the study is to assess the impact of ICT on quality education delivery in tertiary institutions in Nigeria using Federal College of Education, Asaba as case Study. Specifically, the study seeks:

1. To identify ICT equipment available for teaching and learning in Federal College of Education, Asaba

2. The extent of ICT usage by lecturers in Federal College of Education, Asaba

3. Determine ways ICT have enhanced quality teaching and learning in the school

4. Find out problems confronting the use of ICT in teaching and learning in the school

**Research Questions**

1. What are the ICT equipment available for teaching and learning in Federal College of Education, Asaba?

2. To what extent do lecturers use ICT in Federal College of Education, Asaba?

3. What ways have ICT enhanced quality teaching and learning in the school?

4. What are the problems confronting the use of ICT for teaching and learning in the school?

**Research Hypotheses**

$HO_1$: There is no significant relationship between availability of ICT and Lecturers' ICT usage in Federal College of Education, Asaba

$HO_2$: There is no significant relationship between the problems confronting the use of ICT and extent of ICT usage by lecturers in the school

**Methodology**

**Design of the Study**

The research work adopted a survey research approach. Ngwogu (2006) explained survey approach as one in which the respondents' view, perception and position are considered on an issue with objectivity. The design is adequate as it will help in obtaining the views of respondents.

**Population of the Study**

The population of the study comprised of 379 academic staff in Federal College of Education (Technical), Asaba, Delta State (Teaching Practice Supervision List, Federal College of Education (Technical), Asaba, 2020). The College has 5 schools which include: Business Education, Technical Education, Vocational Education, School of Education and School of Science Education

**Sample and Sampling Technique**

Taro Yamane's formula was used to derive one hundred and ninety-five (195) respondents used as sample for the study. Stratified random sampling technique was used to obtain the sample. Thirty-nine (39) lecturers were randomly drawn from each of the 5 schools (strata) that make up the College.

Taro Yamene's formula:  $n= N/ 1+N (e)^2$

Where: n= sample size required

N= number of people in the population

e = allowable error (%)

n= $379/1+379 (0.05)^2$

= 379/1.94

=195.30

Aprox= 195 respondents (Lecturers)

**Instrument for Data Collection**

Structured questionnaire was used for data collection in this study. The questionnaire was generated from review of literature. The questionnaire was divided into two parts. Part A elicited the personal information of the respondents while part B was divided into sections A-D based on the specific purpose of the study. Four scale response questionnaires were used as follows: strongly agreed/ Very High extent (4); agreed/ high extent (3); disagreed/ low extent (2); strongly disagreed/ very low extent (1).

**Validation of the Instrument**

Two experts from Department of Educational Administration, Delta State University, Abraka and the project supervisor were requested to review the questionnaire items to: determine the accuracy; relevance; clarity and total coverage of the content; determine the appropriateness of the instruction to the respondents; and evaluate the suitability and adequacy of the questionnaire in line with research variables. The final corrections were effected in the final version of the instrument.

**Reliability of the Instrument**

The reliability of the instrument was established using the Cronbach Alpha and the split-half technique. Trial testing of the instrument was carried out using 20 lecturers from Delta State Polytechnic, Ogwashi-ukwu. The population used was different from the sample of the study. A

coefficient value of 0.797 was obtained. The high coefficient suggests that the instrument was reliable for the study.

**Method of Data Collection**

Data were collected from the respondents with the help of two research assistants who were trained in distribution and collection of instruments from respondents. The researcher and the assistants collected the questionnaire from the Schools and Departments where the instruments were administered. One hundred and twenty (62%) out of 195 of the copies distributed were duly retrieved

**Method of Data Analysis**

Data collected from the field were analyzed using the statistical tools: Mean and standard deviation were used for the research questions. SPSS 16 statistical package was used to analyze the data. Items with mean value of 2.5 and above were agreed on while items with mean value of less were disagreed. The hypotheses were tested using Pearson Moment Correlation at 0.05 level of significance to determine acceptance or rejection.

**Results**

**Table 1: Demographic characteristics of Lecturers (N=120)**

| Characteristics | Frequency | Percentage |
|---|---|---|
| **Educational Level** | | |
| B.Sc/HND | 58 | 48.33 |
| M.Sc/M.Ed | 52 | 43.33 |
| PhD | 04 | 3.34 |
| **Age of Lecturers** | | |
| 20 – 30 | 08 | 6.67 |
| 31 – 40 | 66 | 55.00 |

| | | |
|---|---|---|
| 41 – 50 | 32 | 26.66 |
| 51 – 60 | 14 | 11.67 |
| Above 60 | -- | -- |
| **Years        of Experience** | | |
| 1 – 10 | 78 | 65.00 |
| 11 – 20 | 14 | 11.67 |
| 21 – 30 | 18 | 15.00 |
| Above 30 | 10 | 8.33 |
| **Owner        of computer** | | |
| Yes | 72 | 60.00 |
| No | 48 | 40.00 |

**Source: Field Work, 2020**

The result in Table 1 showed that most (48.33%) of the respondents were B.Sc/HND holders, 43.33% of them had Master Degree while 3.34% had Ph.D. Response on age indicated that most (55%) of the respondents are within the age of 31 – 50, 6.67% of the lecturers are within the age of 20 – 30 years while 11.67% were within 51 – 60. Response on years of experience indicated that most (65%) of the respondents have 1 – 10 years, 11.67% have 11 – 20 years while 15% have 21 – 30 years. Response on computer owner indicated that most (60%) of the lecturers own a computer while 40% do not own a computer.

**Research Question 1**

What are the ICT equipment available for teaching and learning in Federal College of Education, Asaba?

**Table 2: Mean responses on ICT equipment available for teaching and learning in Federal College of Education, Asaba (N=120)**

| S/N | Statement items | Available | Not Available | Remark |
|---|---|---|---|---|
| 1 | Internet-Connected Desktop Computers | 24 (20%) | 96 (80%) | Not Available |
| 2 | Internet-Connected Laptops | 31 (25.83%) | 89 (74.17%) | Not Available |
| 3 | CD-ROM Database | 38 | 82 | Not |

| S/N | Item | | | Remark |
|---|---|---|---|---|
| | | (31.67%) | (68.33%) | Available |
| 4 | Institutional Cybercafé | 78 | 42 | Available |
| | | (65) | (35) | |
| 5 | Institutional Virtual Library (Digital Library) | 44 | 76 | Not Available |
| | | (36.67) | (63.34) | |
| 6 | Computer Networking (Wide Area Network) | 64 | 56 | Available |
| | | (53.34) | (46.67) | |
| 7 | Departmental Computer Laboratory | 45 | 75 | Not Available |
| | | (37.5) | (62.5) | |
| 8 | Computer Networking (Local Area Network) | 21 | 99 | Not Available |
| | | (17.5) | (82.5) | |
| 9 | Projector | 20 | 100 | Not Available |
| | | (16.66) | (83.34) | |
| 10 | Microphone | 105 | 15 | Available |
| | | (87.5) | (12.5) | |

**Source: Field Work, 2020**

Note: Figures in bracket are percentages

Table 2 shows the ICT equipment available for teaching and learning in Federal College of Education, Asaba. The responses of the lecturers showed that 7 out of 10 identified ICT equipment for teaching and learning in the College were not available in the school.

**Research Question 2**

To what extent do lecturers use ICT in Federal College of Education, Asaba?

**Table 3: Mean responses on extent lecturers use ICT in Federal College of Education, Asaba (N= 120)**

| S/N | Statement items | Mean | SD | Remark |
|---|---|---|---|---|
| 1 | Internet-Connected Desktop Computers | 1.73 | 0.62 | Low Extent |
| 2 | Internet-Connected Laptops | 2.19 | 0.74 | Low Extent |
| 3 | CD-ROM Database | 1.63 | 0.77 | Low Extent |
| 4 | Institutional Cybercafé | 1.68 | 0.68 | Low Extent |
| 5 | Institutional Virtual Library (Digital Library) | 1.78 | 0.81 | Low Extent |
| 6 | Computer Networking (Local Area Network) | 1.91 | 0.86 | Low Extent |
| 7 | Projector | 2.01 | 0.83 | Low Extent |

| 8 | Departmental Computer Laboratory | 1.66 | 0.88 | Low Extent |
| 9 | Computer Networking (Wide Area Network) | 2.22 | 0.76 | Low Extent |

**Source: Field Work, 2020**

The result in Table 3 showed that statement items had a mean range of 1.63 to 2.22. The means were below the cut-off points of 2.50. The respondent indicated that the identified items were not usually or highly used in the College. The standard deviation of the items ranged from 0.62 to 0.88. This indicates that the respondents were unanimous or close in their responses.

**Research Question 3**

What ways have ICT enhanced quality teaching and learning in the school?

**Table 4: Mean responses on ways ICT have enhanced quality teaching and learning in the school (N= 120)**

| S/N | Statement items | Mean | SD | Remark |
|---|---|---|---|---|
| 1 | ICT gives learner opportunity to choose when to learn irrespective of geographical location without stress | 1.51 | 0.63 | Disagreed |
| 2 | ICT also enable learners to discover and explore new ideas or innovations from experts around the global world | 2.51 | 0.72 | Agreed |
| 3 | ICT enables delivery of lectures to students, monitoring of learner progress and assessment can be done timely | 2.66 | 0.74 | Agreed |
| 4 | ICT promotes learn as they do and, whenever appropriate, work on real-life problems in-depth, making learning less abstract and more relevant to the learner's life situation | 3.31 | 0.78 | Agreed |
| 5 | ICT-supported learning encourages interaction and cooperation among students, teachers, and experts regardless of where they are | 2.61 | 0.68 | Agreed |
| 6 | ICT-supported learning promotes the manipulation of | 2.03 | 0.54 | Disagreed |

|   | existing information and the creation of real-world products |   |   |   |
|---|---|---|---|---|
| 7 | ICT-enhanced learning is student-directed and diagnostic | 2.10 | 0.72 | Disagreed |

**Source: Field Work, 2020**

The result in Table 4 showed that the respondents agreed with 4 out 7 items on ways ICT have enhanced quality teaching and learning in the school. The statement items had a mean range of 1.51 to 3.31. Most of the means were above the cut-off points of 2.50 while items 1, 6 and 7 were below the cut-off point. The standard deviation of the items ranged from 0.54 to 0.78. This indicated that respondents were unanimous in their responses.

**Research Question 4**

What are the problems confronting the use of ICT for teaching and learning in the school?

**Table 5: Mean responses on problems confronting the use of ICT for teaching and learning in the school (N=120)**

| S/N | Statement items | Mean | SD | Remark |
|---|---|---|---|---|
| 1 | Insufficient ICT facilities and unsophisticated accessories | 3.31 | 0.63 | Agreed |
| 2 | Epileptic electricity power supply | 2.21 | 0.71 | Disagreed |
| 3 | Lecturers' lack of ICT knowledge/skills | 2.56 | 0.61 | Agreed |
| 4 | Poor attitude of management towards ICT attitudes | 3.01 | 0.53 | Agreed |
| 5 | Not enough simultaneous access to ICT facility | 3.51 | 0.71 | Agreed |
| 6 | Not enough supervision staff and lack of technical assistance | 3.12 | 0.68 | Agreed |

**Source: Field Work, 2020**

The data presented in Table 5 showed that the statement items had a mean range of 2.21 to 3.51. Most of the means were above the cut-off point of 2.50, while item 2 was below the cut-off point. The standard deviation of the items ranged from 0.53 to 0.71. This indicated that respondents were unanimous in their responses as they were not far from the mean.

**Hypothesis 1**

$HO_1$: There is no significant relationship between availability of ICT and Lecturers' ICT usage in Federal College of Education, Asaba

**Table 6: Pearson's product moment analysis on the relationship between availability of ICT and Lecturers' ICT usage in Federal College of Education, Asaba**

| Variables |   | Availability | ICT    usage |
|---|---|---|---|

| | | of ICT $(X_1)$ | $(X_2)$ |
|---|---|---|---|
| Availability of ICT $(X_1)$ | Pearson Correlation (r) Sig. (2-tailed) N | 1 120 | -0.16* 0.00 120 |
| ICT usage $(X_2)$ | Pearson Correlation (r) Sig. (2-tailed) N | -0.16** 0.00 120 | 1 120 |

*. Correlation is significant at the 0.05 level (2-tailed)
Source: SPSS output on Field Data, 2020

Table 6 presented Pearson's product moment analysis on relationship between the use of ICT by lecturers and ICT enhancement in quality teaching and learning in the school. The result indicated that there was negative relationship between availability of ICT and Lecturers' ICT usage in Federal College of Education, Asaba with r=-0.16. This shows that the level of available ICT did enhance ICT usage by the lecturers.

**Hypothesis 2**

$HO_2$: There is no significant relationship between the problems confronting the use of ICT and extent of ICT usage by lecturers in the school

**Table 7: Pearson's product moment analysis on the relationship between the problems confronting the use of ICT and extent of ICT usage by lecturers in the school**

| Variables | | Problems of ICT $(X_1)$ | ICT usage $(X_2)$ |
|---|---|---|---|
| Problems of ICT $(X_1)$ | Pearson Correlation (r) Sig. (2-tailed) N | 1 120 | -0.13** 0.00 120 |
| ICT usage $(X_2)$ | Pearson Correlation (r) Sig. (2-tailed) N | -0.13** 0.00 120 | 1 120 |

**\*\*. Correlation is significant at the 0.01 level (2-tailed)**
**Source: SPSS output on Field Data, 2019**

Table 8 presented Pearson's product moment analysis on relationship between the problems confronting the use of ICT and extent of ICT usage by lecturers in the school. The result indicated that there is a negative relationship between problems confronting the use of ICT and extent of ICT usage by lecturers in the school with r=-0.13. This shows that increase in problems of ICT translated to decrease the extent ICT is used in by the lecturers.

**Discussion of the Findings**

The result in Table 2 showed that 7 out of 10 identified ICT equipment for teaching and learning in the College were not available in the school. This implies that most of the ICT equipment required to enhance teaching and learning in the College were not available. The finding is line with the finding of Izuagba (2009) saw unavailability of ICT equipment as a problem that disrupts the effectiveness of this (ICT) in teaching and learning in higher institution.

The result in Table 3 showed that the ICT equipment identified by the study were rarely used by lecturers in the College. This implies that lecturers and the school management are yet to embrace and integrate ICT in instructional exercise. In line with the findings, Eze and Aja (2014) stated that ICTs are not considered central to the teaching and learning process especially in the developing countries as most of the tests and examinations in schools follow traditional paper and pencil instead of the use of improved technology on-line assessment, tele-conferencing etc. Study from Nigeria showed that the lack of ICT resources and poor infrastructure prevent the full implementation of ICT in education (Adeosun, 2010). Despite the benefits of ICT in teaching-learning process, Lecturers and the school management are not interested in using ICT for instructional purposes. This is an area that the school management should pay attention urgently.

The result in Table 4 indicated that the use of the available ICT equipment in school has enhanced quality and teaching by: enabling learners to discover and explore new ideas or innovations from experts around the global world, enables delivery of lectures to students, monitoring of learner progress and assessment can be done timely, learners' learn as they do and, whenever appropriate, work on real-life problems in-depth, making learning less abstract and more relevant to the learner's life situation, encouraging interaction and cooperation among students, teachers, and experts regardless of where they are. This implied that the few ICT equipment available in the College have reasonably enhanced quality educational process to a

reasonable extent. In line with the finding, Ugwu and Oboegbulem (2011) who held that effective use of ICTs in schools guarantees more access to information and experience in this era of globalization. Badmus (2004) stated that introduction of ICT in the school setting has a great impact in contributing to the achievement of the educational objectives, aims and goals as well as improving teaching and learning. In similar vein, Hadda and Draxler (2002) stated that ICTs have brought about a personalized, just-in-time, up-to-date and user-centered educational activities.

The result in Table 5 indicated that the problems confronting the use of ICT in the school include: Insufficient ICT facilities and unsophisticated accessories, lecturers' lack of ICT knowledge/skills, poor attitude of management towards ICT attitudes, not enough simultaneous access to ICT facility, and not enough supervision staff and lack of technical assistance. In line with the findings, Eze and Aja (2014) stated that despite the benefits of ICT in teaching-learning process, teachers and school management are not interested in using ICT for instructional purposes. This has been attributed to many factors which include inadequate funds, poor condition of electricity, teacher's incompetence and pervasive poverty in the society (Aja, 2013).

**Hypotheses**

The result in Table 6 indicated that there was negative relationship between availability of ICT and Lecturers' ICT usage in Federal College of Education, Asaba. This implies that the extent of ICT equipment available to enhance quality education did not enhance the lecturers' usage of the equipment. When the ICT equipment are available and accessible to the lectures, it will enhance the use of these equipment for teaching and learning process in the school.

The result in Table 7 showed that there exist a negative relationship between problems confronting the use of ICT and extent of ICT usage by lecturers in the school. Problems confronting the use of ICT negatively influenced ICT usage by lecturers in the school.

**Conclusion**

The study noted that ICT facilitates both instructional and learning process and has a great influence on teaching and learning at higher education. However, the study found out that most ICT equipment required for teaching and learning in the College were not available in the school. ICT equipment available in the College was rarely utilized by lecturers. However, few

ICT equipment available in the College reasonably enhanced quality educational process. Problems confronting the ICT usage in the school were insufficient ICT facilities and unsophisticated accessories, lecturers' lack of ICT knowledge/skills, poor attitude of management towards ICT attitudes, not enough simultaneous access to ICT facility, and not enough supervision staff and lack of technical assistance.

## Recommendations

1. ICT facilities should be made adequately available by administration of higher institutions such that lecturers can utilize them in their offices and classroom. This is necessary because ICTs are regarded as integral parts of teaching and research in universities

2. Training programme should be organized by school management for lecturers in the College who are not competent in operating ICT equipment. This training will enhance the use of ICT in teaching and learning process

3. The school management and lecturers in Federal College of Education, Asaba should develop a positive attitude towards the use of ICT

## References

Adavbiele, J.A. (2016). The Use of ICT to Enhance University Education in        Nigeria. *International Journal of Education, Learning and Development*, 4  (5), 1-11

Adeosun, O. (2010). Quality basic education development in Nigeria: Imperative  for use of ICT. *Journal of International Cooperation in Education*, *13*(2),   193-211.

Aja,  S.N.  (2013).  Information  and  Communication  Technology  Opportunities  and Challenges in the Nigerian Education System. *J. Qualitative Educ.* 9(3)

Badmus, A.M. (2004). Computer Instruction: An Approach that Expedites the     system        of education. *Niger. J. Computer Literacy*. Ibadan: University of        Ibadan.

Bennett, T. (2007). The Work of Culture. *Journal of Cultural Sociology*, 1(1), 31- 48.

Collis, B. (2012). Information technologies for education and training. In Adelsberger H, Collis B & Pawlowski J (eds.) *Handbook on technologies for information training*. Berlin: Springer Verlag

Davis, N.E & Tearle, P. (2009). A core curriculum for telematics in teacher training. Available: http://www.ex.ac.uk/telematics.T3/corecurr/tteach98.htm

Eze, P.I & Aja, S. N. (2014). Availability of Information and Communication Technology (ICT) in Ebonyi Local Government Area of Ebonyi State: Implications for Effective Teaching and Learning. *International Research Journal*, 5 (4), 116-121.

Federal Ministry of Education (2014). *National policy on Education*. Lagos: Education research and development council

Federal college of Education, Technical , Asaba, 2020 Teaching Practice Supervision List

Haddad, W. D & Jurich, S. (2002). ICT for education: potential and potency. In W.D. Haddad & A. Draxler (Eds.), *Technologies for education*. Paris: UNESCO and AED.

Kors, L.A. (2008). On the sadness of higher education. *The Wall Street Journal*, Tuesday may 27, 1-7.

Okhiria, P. (2007). *ICT Tertiary level Education: Universities and Colleges of Education*. Retrieved from file http://www.wikieducator.org/ICT4 Africa/country report Nigeria on18/5/2010.

Ololube, N. P. (2007). The relationship between funding, ICT, selection processes, administration and planning and the standard of science teacher education in Nigeria

Ololube, N. P. (2008) Computer communication and ICT attitude and anxiety among higher education students. In A. Cartelli, (Ed). *Encyclopedia of Information and Communication Technology*, 100-105. Hershey, PA: Idea Group Publishing.

Ololube, N. P., Ubogu, A. E. & Egbezor, D. E. (2007). ICT and distance education programs in a Sub-Saharan African country: A theoretical perspective. *Journal of Information Technology Impact, 7*(3), 181-194.

Osakwe, R.N. (2012). Challenges of information and communication technology (ICT) education in Nigerian public secondary schools. *Education Research Journal*, 2(12), 388-391. Retrieved on the 15th February, 2015 from http://www.resjournals.com/ERJ

Peretomode, V.F. (2007). *Introduction to the Teaching Profession in Nigeria.* Owerri: Totan Publishers Ltd.

Soloway, E & Pryor, A. (2016). The Next Generation in Human-computer Interaction. *Communications of the ACM*, *39*(4), 16-19.

Ugwu, R.N & Obegbulem, A.I. (2011). Information and Communication Technology (ICT) capacity Building for Staff Personnel in Post Primary Schools for Effective School Administration. *Int. Journal for Educational Research, 11(1), 190-201.*