



AVAILABILITY AND UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) RESOURCES IN TEACHING POLITICAL SCIENCE EDUCATION IN COLLEGES OF EDUCATION IN ENUGU STATE NIGERIA

¹C. J. Akuruka and ²A. E. Eze (Ph.D)

¹Institute of Ecumenical Education Thinkers Corner Enugu, Nigeria.

²Professor & Dean, School of Postgraduate, Godfrey Okoye University, Enugu, Nigeria

Abstract: Information and Communication Technology resources embrace those equipment or tools that can retrieve, store manipulate, transmit and disseminate information electronically. This study sought to determine the availability and utilization of information and communication technology resources. Where four research questions and two null hypotheses were formulated to guide the study. The instrument for data collection was a researchers' developed and peer-validated. Cronbach Alpha method was used to compute the internal consistency of the instrument, which had an overall reliability index of 0.76. five hundred and five copies of the questionnaire were administered and four hundred and seventy-nine copies were retrieved from the respondents, which yielded 94.85% return rate. The researchers used mean scores and standard deviation to answer research questions while t-test statistics was used to test the null hypotheses. It was found out by matching the available ICT resources in the Colleges of Education under study with the National Commission for Colleges of Education (NCCE) benchmark, that there should be conducive environment, provision of computers, internet facilities, television, multi-media, and computer laboratory among others. The availability of these facilities makes teaching and learning more interesting, interactive and effective. The findings of the study revealed among others that ICT facilities are available but not adequate for teaching and learning of Political Science Education in Public and private Colleges of Education in Enugu State.

Keywords: Information and Communication Technology (ICT) Resources, Political Science Education, Colleges Of Education In Enugu State

1. Introduction

Education is vital for the development of any nation. An educated population leads to a productive workforce. Education is one of the tools used to achieve a society's goals towards development. The importance of education cannot be neglected when it is remembered that education is the pillar of any country or state. According to Montoya (2013) education is referred to as a means of enlightenment and a process of training and preparation for useful life in the community. Various nations, including Nigeria, have for long been making efforts to develop their

educational sector for optimal development especially in its methods of teaching. Teaching method in this context comprises the principles and methods used by teachers to enable students' learning to be effective. Methods of teaching are planned activities involved in the presentation of the demands of a lesson. According to Okam (2011) teaching is a process of bringing the learner (the receiver of education) into contact with the subject matter (what is to be learned). Information and Communication Technology (ICT) resources have become an integral part of education the world over. ICT are an umbrella term used to describe communication devices or applications that are used for

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the gathering, processing and dissemination of information. ICT are always talked of in terms of context, like in this case, ICT in education (Rouse, 2015). Ayodele in Oluwarobi (2012) defined ICT as electronic-based technology that is generally used to retrieve, store, process, and package information as well as provide access to knowledge. ICT according to Arugu (2016) is a means of accessing or receiving, storing, transferring, processing and sending ideas, perception or information through computers and other communication facilities. Farhadi, Rahmah & Masood (2012) referred to ICT as a general expression, which covers computers, telecommunication and electronics.

Furthermore, the emergence of ICT has revolutionized the way people access, process, retrieve, store and disseminate information within organizations or across the globe. Whether it is vocal, pictorial, textual, and numeric or macro- electric based, ICT is now a topical issue in Nigeria. It may not be because it is relatively new in this part of the world, but because ICT encompasses a range of technologies and application systems of micro-processor that have profound impact on the society and its way of life. ICT revolution is gradually affecting the nature of learning and the process of knowledge and transforming the world in unexpected way (Jamalahdin, Sayed, Pari and Maryam 2017). This has enabled the pattern change from the traditional instructional methods to a more modern and innovative technological based teaching-learning methods. The traditional instructional method is the teacher- centered tactics of instructional delivery while the modern and innovative technologically based teaching creates the opportunity for interactions or communication between the teacher and the students.

ICT can be used in teaching Political Science Education in order to make learning attention-grabbing and interactive to both the teacher and the learner. Political Science Education is a discipline that concerns the study and critical analysis of political theories, political institutions, political organizations and activities of the State. It examines political dynamics, adjustment of the individual to the state, international laws, international

relations, the concept of power and power relationship among members of a given society. According to Okoli (2013), Political Science Education plays a vital role in achieving sustainable development, it is very useful for the moulding and development of good, effective and efficient citizenry. If citizens do not know their rights and duties, they will be exploited by the government of their own country. Political Science Education is a process of preparing exclusively the young ones for the socio-political world in which they grow into, so that they will be able to be useful to themselves and contribute meaningfully to the growth and development of a state. Political science makes the citizens to assume their responsibilities of contributing to the development of the society; to make them aware of their rights; to provide them with the encouragement to defend their rights without fear and thus struggle against the impositions and domination of a few privileged; to harness and tap the latent forces in the people; to make them see politics as an essential aspect of the entire social fabric; to make them less visible to unparadigmatic influences in the political process, etc (Nwankwo, 2012).

These are issues immediately communicable in the idea of Political Science Education in the context of Nigeria. The education system in Nigeria is divided into preprimary, primary, secondary and tertiary education. Political Science as discussed above is a discipline in the tertiary educational institutions such as Universities, Colleges of Education etc. colleges of Education have the mandate to prepare teachers who teach in the secondary schools, where the ideas above are taught as in a discipline called “government” at the Colleges of Education, the discipline is termed “Political Science Education” where Political Science is looked at from the educational perspectives in which the psychological, sociological and methods of teaching are emphasized. Many Colleges of Education own by the Federal and State Governments and private Organizations exist in Nigeria. The global down turns in economy particularly in developing countries, Nigeria who has not recover from three years



devastating civil war, inclusive has affected such institutions in the country, especially in the areas of resources for teaching and learning. The availability and utilization of many vital resources for teaching and learning ICT inclusive became doubtful, hence this study. They are more than, and cannot be achieved by mere political propaganda of occasional jingles, media broadcast, caravan shows, lessons and verbal arguments, etc. Though important in any institution, political publicity must not be made to replace real political education, which in addition to lessons and verbal arguments must also be action and model-based. on the contrary, it is a slow, systematic and continuous process of orientation and re-orientation in premise and goal.

This study made use of minimum standard for all NCE teachers provided by the National Commission of Education (NCCE) to Colleges of Education in Nigeria, as a benchmark guiding the acquisition and utilization of ICT facilities in the Colleges. However, these ICT facilities are not comprehensively documented, for they are scattered across various departments but, the researchers tried to pull them together in order to develop the instrument for this study. Information and communication technology (ICT) can be used in teaching Political Science in order to make learning, attention-grabbing and interactive to both the teacher and the learner and also acquaint students with the methods of teaching political science in tertiary institutions. There are however some factors that militate against teachers' utilization of available ICT facilities in teaching (Davies, 2016). Factors such as teachers' educational qualifications, ages, educational experiences, school location and attitude towards technologies can hinder the utilization of ICT ((Olayode 2016).). These factors were explored to ascertain which of them constrain the full utilization of ICT facilities in schools.

Teachers' qualifications are the mark of academic attainment of teachers on pedagogical knowledge of contents, methods and materials that promote teaching and learning towards a better academic outcome

(Onyishi, 2015). The professional, educational or vocational growth of a teacher acquired through in-service training in a formal educational institution determine the skills, knowledge of subject matter, competence and experiences, of the teacher in a particular field of education. These expose him/her to pedagogical knowledge of skills, subject matter, methods and instructional materials as to be able to perform efficiently and effectively in the field of study the student specializes (Wang, 2012).

More so, lecturers teaching Political Science Education in Colleges of Education in Enugu State still have problems utilizing ICT in teaching Political Science Education as a course. Major among these problems is the incessant power failure followed by excess workload for staff which does not give them enough time to prepare their lessons and teach them using ICT. A more serious problem is availability ICT facilities to enhance their performance (Esoswo 2011). The constraints arise from the fact that lecturers have anxiety over the use of ICT in teaching because of lack of ICT skills, disinclination to change, ICT facilities are very expensive to acquire and maintain. Unavailability of ICT facilities and erratic power supply are barriers among other factors. The researchers wonder whether this is the situation in Colleges of Education in Enugu State. It also examined the available ICT resources in public and private Colleges of Education in Enugu State with a view to finding out the level of availability, utilization and factors affecting utilization of these ICT resources as well as remedies in overcoming the constraints in teaching Political Science Education in public and private Colleges of Education in Enugu State. This study therefore, is designed to determine the extent of utilization of information and communication technology in teaching Political Science in College of Education in public and private Colleges of Education in Enugu State.

2. Purpose of the Study

The general purpose of the study is to determine specifically, to:



- i. Determine the available ICT facilities Political Science Education in public and private Colleges of Education in Enugu State.
- ii. Determine the extent of utilization of available ICT resources in teaching Political Science Education in public and private Colleges of Education in Enugu State.
- iii. Determine the factors that constrain availability of ICT resources in teaching and learning Political Science Education in public and private Colleges of Education in Enugu State.
- iv. Determine factors that constrain the utilization of available ICT resources in teaching and learning Political Science Education in public and private Colleges of Education in Enugu State.

Research Questions

The following research questions guided the study:

- i. What ICT facilities available for teaching and learning Political Science Education in public and private Colleges of Education in Enugu State?
- ii. To what extent do lecturers utilize available ICT facilities in teaching of Political Science Education in public and private Colleges of Education in Enugu State?
- iii. What are the factors that constrain the availability of ICT resources for teaching of Political Science Education in public and private Colleges of Education in Enugu State?
- iv. What are the factors that constrain the utilization of available ICT resources in teaching and learning Political Science Education in public and private Colleges of Education in Enugu State?

3. Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

H₀₁: There is no significant difference in the mean ratings of lecturers and students in public and private colleges of Education on the extent utilization of ICT facilities available for teaching Political Science Education.

H₀₂: There is no significant difference in the mean ratings of lecturers and students in public and private colleges of Education on factors that constrain availability of ICT resources in teaching Political Science Education.

4. Research Method

The researchers adopted descriptive survey research design. The study was carried out among the Colleges of Education in Enugu State. The population for the study was 505 respondents which comprised 30 lecturers and 475 students. The population for the study was manageable therefore, there was no sampling. The instrument for collection of data comprised of NCCE ICT resources bench mark; and questionnaires developed by the researchers. The questionnaires were given to three research specialists for face validation. Cronbach Alpha method was used to compute the internal consistency of the questionnaires. The overall reliability index of **0.76** which indicates that the instrument is reliable and, therefore, considered appropriate for use. The 505 copies of the questionnaire were administered on the respondents by the researchers with the help of 2 research assistants. 479 copies were retrieved from the respondents which yielded 94.85% return rate. The researchers used mean to answer research question 1, mean and standard deviation to answer research questions 2-5, while t-test statistic was used to test the null hypotheses.

5. Results

Research Question 1: What are the ICT facilities available for teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State?



Table 1: Mean and Response Distributions of the Respondents on ICT facilities available for teaching and learning of Political Science Education

| S/N | Items | Quantity Required | Available | Not Adequate | Not Available | Total | |
|-----|-------------------------------------|----------------------|-----------|-----------------|------------------|---------------|-----|
| | | No of Sch. | | No of Sch. | No of Sch. | No of Sch. | X |
| | Experienced lecturers. | 2 per Dept | 3 | 2 | 2 | 7 | 2.1 |
| | Computers. | 1 per student | 2 | 3 | 2 | 7 | 2.0 |
| | Internet facilities. | Installed | 1 | 4 | 2 | 7 | 1.9 |
| | Printers. | | 1 | 3 | 3 | 7 | 1.7 |
| | Conducive class. | | 3 | 2 | 2 | 7 | 2.1 |
| | LCD Projectors. | | 2 | 2 | 3 | 7 | 1.9 |
| | Electric Power Supply. | Installed in school | 4 | 2 | 1 | 7 | 2.4 |
| | E-library. | | 0 | 1 | 5 | 7 | 1.3 |
| | Scanner. | | 3 | 2 | 2 | 7 | 1.7 |
| | Computer laboratory. | 1 per Dept. | 4 | 2 | 2 | 7 | 2.3 |
| | Audio visual devices. | | 3 | 2 | 2 | 7 | 2.1 |
| | Generator. | | 2 | 2 | 3 | 7 | 1.9 |
| | Furniture's like chairs and tables. | 1 per student | 3 | 2 | 2 | 7 | 2.1 |
| | Uninterrupted power supply (UPS). | 1 per system | 2 | 2 | 3 | 7 | 1.9 |
| | Photocopier. | 1 per Dept. | 3 | 2 | 2 | 7 | 2.1 |



| | | | | | | |
|-------------------|----------------|-----------|-----------|-----------|----------|------------|
| television | | 2 | 2 | 3 | 7 | 1.9 |
| Solar power. | 1 per student | 1 | 3 | 3 | 7 | 1.7 |
| Modems. | 1 per computer | 2 | 2 | 3 | 7 | 1.9 |
| Flash disk drive. | 1 per student | 2 | 3 | 2 | 7 | 2.0 |
| Grand Mean | | 45 | 44 | 47 | 7 | 2.0 |

Table 1 above shows that the mean scores of available facilities is 2.0 indicating that ICT facilities are available for teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State. In other words, the internet facilities, printers, LCD Projectors, E-library, scanner, Generator, UPS, Television, solar power and modems are available or not adequate for teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State. Generally, it implies that

ICT facilities are available for teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State based on the fact that, the level of its availability is less than the 2.0 benchmark of this study.

Research Question 2: To what extent do lecturers utilize available ICT tools in teaching of Political Science Education in public and private Colleges of Education in Enugu State?

Table 2: Mean Response Distributions of the Respondents on the extent Lecturers Utilize the Available ICT tools in Teaching of Political Science Education

| S/N | ITEMS | Lecturers = 26 | | | Students = 453 | | |
|-----|--|----------------|------|------|----------------|------|------|
| | | \bar{x} | SD | Dec. | \bar{x} | SD | Dec. |
| | The extent of utilizing the available ICT tools in teaching of Political Science Education: | | | | | | |
| | Computers | 2.58 | 1.02 | GE | 2.52 | 0.93 | GE |
| | Internet | 2.41 | 0.93 | LE | 2.36 | 0.90 | LE |
| | Radios | 2.55 | 0.99 | GE | 2.51 | 0.90 | GE |
| | Televisions | 2.51 | 1.01 | GE | 2.53 | 0.95 | GE |
| | Cell phones | 2.62 | 0.91 | GE | 2.58 | 0.98 | GE |
| | Audio visual devices | 2.60 | 0.99 | GE | 2.64 | 0.91 | GE |
| | Tape recorders | 2.41 | 0.80 | LE | 2.38 | 0.95 | LE |
| | Overhead projectors | 2.52 | 0.91 | GE | 2.54 | 0.96 | GE |



| | | | | | | |
|-----------------------|-------------|-------------|-----------|-------------|-------------|-----------|
| Multi-media projector | 2.46 | 0.81 | LE | 2.41 | 0.85 | LE |
| Grand Mean | 2.52 | 0.93 | GE | 2.50 | 0.93 | GE |

The above Table shows the mean distributions of the respondents on the extent lecturers utilize available ICT tools in teaching of Political Science Education in public and private Colleges of Education in Enugu State. The mean scores of lecturers ranged from 2.41 to 2.62, while that of students ranged from 2.36 to 2.64. They also have grand means of 2.52 and 2.50 respectively with standard deviations of 0.93 and 0.93 respectively. The standard deviations of the respondents are closely related which shows that the

respondents' mean scores are closely clustered around the mean. Thus, the respondents were generally of the view that, lecturers utilize the available ICT tools in teaching of Political Science Education in public and private Colleges of Education in Enugu State.

Research Question 3: What are the factors that constrains the availability of ICT resources for teaching of Political Science Education in public and private Colleges of Education in Enugu state.

Table 3: Mean Response Distributions of the Respondents on the Factors that Constrains the Availability of ICT Resources for Teaching of Political Science Education in Public and Private Colleges of Education

| S/N | ITEMS | Lecturers = 26 | | | Students = 453 | | |
|-----|--|----------------|-------------|----------|----------------|-------------|----------|
| | | \bar{x} | SD | Dec. | \bar{x} | SD | Dec. |
| | The following are the constraints to making ICT resources available: | | | | | | |
| | Lacking access to ICTs resources. | 2.58 | 0.85 | A | 2.56 | 0.93 | A |
| | High cost of ICT equipment and accessories. | 2.62 | 0.93 | A | 2.58 | 0.90 | A |
| | Lack of interest on the part of teachers and students. | 2.58 | 0.85 | A | 2.55 | 0.90 | A |
| | Most lecturers lack computing skills to operate computers. | 2.55 | 0.89 | A | 2.62 | 0.95 | A |
| | Lack of adequate accommodation for ICT equipment. | 2.60 | 0.90 | A | 2.52 | 0.98 | A |
| | Lack of security. | 2.56 | 0.94 | A | 2.57 | 0.91 | A |
| | Inability to replace broken-down equipment and resources. | 2.50 | 0.91 | A | 2.54 | 0.93 | A |
| | Poor electric power supply. | 2.54 | 0.95 | A | 2.61 | 0.96 | A |
| | Grand Mean | 2.57 | 0.90 | A | 2.57 | 0.93 | A |

Decision rule indicates that if the mean is above 2.5 is accepted but if less than 2.5 is rejected. The above Table shows the mean distributions of the

respondents on the factors that constrain the availability of ICT resources for teaching of Political Science Education in public and private Colleges of



Education in Enugu state. The mean scores of lecturers ranged from 2.50 to 2.62, while that of students ranged from 2.53 to 2.62. They also have grand means of 2.57 and 2.57 with standard deviations of 0.90 and 0.93 respectively. This means that the respondents agreed that there are factors that constrain the availability of ICTs resources for teaching of Political Science Education in public and private Colleges of Education in Enugu state.

Research Question 4: What are the factors that constrains the utilization of available ICT resources in teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State?

Table 4: Mean Response Distributions of the Respondents on the factors that constrains the utilization of available ICT resources in teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State

| S/N | ITEMS | Lecturers = 26 | | | Students = 453 | | |
|-----|--|----------------|-------------|----------|----------------|-------------|----------|
| | | \bar{x} | SD | Dec. | \bar{x} | SD | Dec. |
| | The following are the factors that constrains the utilization of available ICT resources: | | | | | | |
| | Lack of internet infrastructure. | 2.55 | 0.92 | A | 2.50 | 0.98 | A |
| | Ineffectual training of lecturers to use ICT resources. | 2.53 | 0.89 | A | 2.51 | 0.89 | A |
| | Lack of electricity supply. | 2.61 | 1.03 | A | 2.52 | 0.94 | A |
| | Improper implementation of ICT resources for teaching. | 2.56 | 0.88 | A | 2.55 | 1.01 | A |
| | Inability to recruit innovating lecturer with ICT skills. | 2.51 | 0.94 | A | 2.53 | 0.90 | A |
| | When there is no conducive, airing class for teaching and learning. | 2.57 | 1.01 | A | 2.51 | 0.98 | A |
| | When the tariffs for data subscription is at a high rate. | 2.61 | 0.98 | A | 2.50 | 0.91 | A |
| | When the ICT resources are not properly managed. | 2.50 | 1.00 | A | 2.52 | 0.95 | A |
| | Grand Mean | 2.56 | 0.96 | A | 2.52 | 0.95 | A |

The above Table shows the mean distributions of the respondents on the factors that constrains the utilization of available ICT resources for teaching of Political Science Education in public and private Colleges of Education in Enugu state. The mean scores of lecturers ranged from 2.50 to 2.61, while that of students ranged from 2.50 to 2.55. They

obtained grand means of 2.56 and 2.52 with standard deviations of 0.96 and 0.95 respectively. This means that the respondents were of the opinion that there are factors that constrains the utilization of available ICT resources in teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State.



H₀₁: There is no significant difference between the mean ratings of lecturers and students on the extent lecturers utilize available ICT tools in teaching of

Political Science Education in public and private Colleges of Education in Enugu state.

Table 5: Summary of t-test Analysis on the Mean Response Distributions of the Respondents on the extent of lecturers utilize available ICT tools for teaching Political Science Education

| Variables | n | \bar{x} | SD | df | t-cal | t-crit | Decision |
|-----------|-----|-----------|------|-----|-------|--------|-------------------------------|
| Lecturers | 26 | 2.52 | 0.93 | 477 | 0.11 | ±1.96 | Do not Reject Ho ₁ |
| Students | 453 | 2.50 | 0.93 | | | | |

The Table above shows that the calculated t-value of 0.11 is less than the t-table value of ±1.96 at 0.05 level of significance at 477 degree of freedom. there is no significant difference between the mean responses of lecturers and students on the extent lecturers utilize available ICT tools in teaching of Political Science Education in public and private Colleges of Education in Enugu state. Thus, Ho was rejected.

H₀₂: There is no significant difference between the mean ratings of lecturers and students on the factors that constrains the availability of ICT resources for teaching of Political Science Education in public and private Colleges of Education in Enugu state.

Table 6: Summary of t-test Analysis on the Mean Response Distributions of the Respondents on the factors that constrains the availability of ICT resources for teaching Political Science Education

| Variables | N | \bar{X} | SD | df | t-cal | t-crit | Decision |
|-----------|-----|-----------|------|-----|-------|--------|-------------------------------|
| Lecturers | 26 | 2.57 | 0.90 | 477 | 0.00 | ±1.96 | Do not Reject Ho ₁ |
| Students | 453 | 2.57 | 0.93 | | | | |

The Table above shows that the calculated t-value of 0.00 is less than the t-table value of ±1.96 at 0.05 level of significance at 477 degree of freedom. This implies that there is no significant difference between the mean responses of lecturers and students on the factors that constrains the availability of ICT resources for teaching of Political Science Education in private and public Colleges of Education in Enugu state. Thus, Ho was rejected.

6. Findings

The following are the summary of the major findings:

1. ICT facilities are not available for teaching and learning of Political Science Education in public and private Colleges of Education in Enugu state.
2. Lecturers utilize the available ICT tools in teaching of Political Science Education in public and private Colleges of Education in Enugu state.



3. There are pertinent factors that constraint the availability of ICTs resources for teaching of Political Science Education in public and private Colleges of Education in Enugu state.

4. There are factors that constrains the utilization of available ICT resources in teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State.

7. Discussion

Utilization of ICT facilities available for teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State.

With reference to research question one which dealt with the ICT facilities available for teaching and learning of Political Science Education, evidence show that both the lecturers and the students share the view that ICT resources such as computers, internet facilities, LCD projectors, conducive class, Electric power supply, E-library, Modems and Flash disk drive were used at low extent in teaching and learning Political Science Education in Colleges of Education in Enugu State.

The findings agree with the view of Thanusha (2016) that the teaching and learning over the years has been delivered traditionally or by rote learning, which makes instruction lecturer- centered. Lecturers should learn not only how to use technology to enhance traditional teaching or increase productivity, but also should learn from a student centered perspective how ICT can be integrated into classroom activities in order to promote student learning.

The hypotheses tested revealed that, there is no significant difference between the mean responses of lecturers and students on the extent lecturers utilize available ICT tools I teaching of Political Science Education in public and private Colleges of Education in Enugu State. Extent of utilization of ICT resources in teaching of Political Science Education in public and private Colleges of Education in Enugu State.

Research question two dealt with the extent of utilization of ICT resources in teaching in public and private Political Science Education in Colleges of Education. Evidence from the study shows that both the lecturers and students in Political Science Education in public and private Colleges of Education agreed that the following ICT facilities such as internet, multi-media and overhead projector are utilized by lecturers in teaching and learning.

The finding buttressed the views of Onasanya, Nathaniel, Sofoluwe and Onasanya (2014) that digital media and electronic resources are credible tools in disseminating of information, which facilitates concretization of learning, equal access to education, individualization of instruction, arouses learner's interests and provides for the immediacy of learning.

Factors constraining the availability of ICT resources in teaching of Political Science Education in public and private Colleges of Education in Enugu State.

Research question three dealt with the factors constraining the availability of ICT resources in teaching of Political Science Education in public and private Colleges of Education. Evidence from the study shows that both lecturers and students in public and private Colleges of Education agreed that there are factors that constrains the availability of ICT resources for teaching of Political Science Education in public and private Colleges of Education in Enugu State such as high cost of ICT equipment and accessories, lacking access to ICTs resources, most lecturers lack computing skills to operate computer and lack of security.

The finding agrees with the views of Mojgan, Kamariah, Wong, Bahaman and Foo (2009) stated that computer technology is an effective means for widening educational opportunities, but most lecturers neither use technology as an instructional delivery system nor integrate technology into their curriculum studies. The study reveals a number of factors influencing lecturer's decisions to use ICT in



the classroom. The success of the implementation of ICT is not dependent on the availability or absence of one individual factor, but is determined through a dynamic process involving a set of interrelated factors. It is suggested that ongoing professional development must be provided for teachers to model the new pedagogies and tools for learning with the aim of enhancing the teaching- learning process. The finding is in agreement with Ngwu (2014) who stated that most ICT resources are not adequately available in schools which has hindered some lecturers to pass the needed knowledge to the students. The availability of ICT resources in Colleges of Education in Enugu State and beyond has to be an important factor to be considered by the government and school managements.

Factors constraining the utilization of ICT resources in teaching of Political Science Education in public and private Colleges of Education in Enugu State.

Research question four dealt with the factors constraining the utilization of ICT resources in teaching of Political Science Education in public and private Colleges of Education. Evidence from the study shows that both lecturers and students in public and private Colleges of Education are of the opinion that there are factors that constrain the utilization of available ICT resources in teaching and learning of Political Science Education in public and private Colleges in Enugu State such as lack of internet infrastructure, ineffectual training of lecturers to use ICT resources, lack of electricity supply and inability to recruit innovating lecturer with ICT skills.

The finding suggests the importance of two factors which is technology infrastructures and teacher's beliefs and practices. Nwana et al (2017). In addition, the circumstances that are important even now for the integration of ICT in to the teaching process is the evaluation of teaching through modern technology are investment in the capacity of lecturers to use ICT in education, constant exchange of knowledge with colleagues, support from school

management and government, as well as strengthening the school infrastructure. Also in the finding in agreement with Badu (2004) who stated that, several factors inhibit the successful implementation of ICT in schools which has hindered the effectiveness of education. If the various factors are properly checkmated, it will boost the lecturers and students' morale in the utilization of internet services.

Hence, there is no significant difference between the mean responses of lecturers and students on the factors that constrain the utilization of available ICT resources in teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State

With reference to the hypothesis, it revealed that here is no significant difference between the mean responses of lecturers and students on remedies for overcoming the constraints for the utilization of ICT resources in teaching and learning of Political Science Education in public and private Colleges of Education in Enugu State.

8. Conclusions

The study focused on the availability and utilization of Information and Communication Technology resources in teaching of Political Science Education in public and private Colleges of Education in Enugu State. ICT is a veritable tool that can be used to improve on the standard of teaching Political Science in Colleges of Education in Nigeria especially in Enugu State. But this study found that ICT facilities are not available in Colleges of Education, Enugu. The available ones were not adequate to make the teaching and learning of Political Science Education effective in Colleges in Enugu State.

9. Recommendations

Based on the findings and conclusions of this study, the following recommendations were proffered:

School managements should ensure that internet facilities are installed in every Political Science



Department, students and lecturers should be trained to make use of them.

Every classroom in the Department of Political Science Education should have television set and over-head projector to improve more on the use of such facilities in teaching and learning process.

The Federal Government of Nigeria should embark on total rural-urban area electrification project to ensure that Enugu Electricity Distribution Company (EEDC) and the likes should provide constant electricity power supply to all parts of the country.

Computer literacy awareness campaign should be carried out in the country just as it is done for any disease outbreak.

Non-government organizations (NGOs) and private companies should help to provide ICT facilities and training to Nigerian citizens as part of their social responsibilities to their operating environment. Infrastructural facilities such as the computer laboratory and computerized library should be provided in the schools for effective teaching of Political Science Education.

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