Information and Communication Technology as educational input in the administration of tertiary institutions in Osun State

BABATUNDE YUNUS OYEWALE

Department of Educational Management Obafemi Awolowo University, Ile-Ife Nigeria oyewalebabatundeyunus@yahoo.com

ABSTRACT

Modern day school administration is facilitated by Information and Communication Technology (ICT) facilities. As technology improves, educational capability increases correspondingly. However, it is observed that most tertiary institutions in Osun State still face the challenges of poor teaching of large classes, delayed students results, poor records of staff and students' information, poor payment mode of fees and other levies despite the general belief that educational inputs such as ICT facilities have been incorporated into the teaching, learning and general school administration of these institutions. Hence, this study tends to examine the availability and utilisation of ICTs in three tertiary institutions in Osun State. The population for the study consisted of the undergraduate students, academic staff and non-teaching staff. Specifically, convenience sampling technique was used to select 1479 respondents to include 1200 students and 279 teaching and non-teaching staff. One selfdesigned instrument was used for the study, titled "Availability and Utilization of Information and Communication Technology Facilities -Questionnaire (AUICTF-Q)". The instrument was divided in to two parts; the first part was designed to elicit information from staff and students together while the other part was developed to elicit information from the staff and students separately in the three selected tertiary institutions in Osun State. The results showed that there is availability of ICT facilities in the administration of tertiary institutions in Osun State and that both the academic and administrative staffs make use of ICT facilities for administrative activities.

KEYWORDS

Educational input, information, communication, technology, administration, institutions

RÉSUMÉ

L'administration moderne des écoles est facilitée par les installations des technologies de l'information et de la communication (TIC). À mesure que la technologie s'améliore, la capacité éducative augmente en conséquence. Cependant, il est observé que la plupart des établissements d'enseignement supérieur de l'État d'Osun sont toujours confrontés aux défis d'un enseignement médiocre des grandes classes, de résultats retardés des étudiants, de mauvais dossiers d'information du personnel et des étudiants, d'un mode de paiement médiocre des frais de scolarité et d'autres prélèvements, malgré la conviction générale que les intrants éducatifs tels que les installations TIC ont été intégrés dans l'enseignement, l'apprentissage et l'administration scolaire générale de ces institutions. Par conséquent, cette étude tend à examiner la disponibilité et l'utilisation des TIC dans trois établissements d'enseignement supérieur de l'État d'Osun. La population pour l'étude était composée d'étudiants de premier cycle, de personnel académique et de personnel non enseignant. Plus

précisément, la technique d'échantillonnage de commodité a été utilisée pour sélectionner 1479 répondants, dont 1200 étudiants et 279 membres du personnel enseignant et non enseignant. Un instrument auto-conçu a été utilisé pour l'étude, intitulé « Disponibilité et utilisation des installations de technologie de l'information et de la communication - Questionnaire (AUICTF-Q) ». L'instrument était divisé en deux parties; la première partie a été conçue pour obtenir des informations du personnel et des étudiants ensemble tandis que l'autre partie a été développée pour obtenir des informations du personnel et des étudiants séparément dans les trois établissements d'enseignement supérieur sélectionnés dans l'État d'Osun Les résultats ont montré qu'il existe des installations TIC dans l'administration des établissements d'enseignement supérieur dans l'État d'Osun et que le personnel académique et administratif utilise les installations TIC pour les activités administratives.

MOTS CLÉS

Apport éducatif, information, communication, technologie, administration, institutions

INTRODUCTION

Effective use of computers as input in the education system could be one of the important factors in determining a country's success in the future. Its integration in schools is essential in order to achieve various educational objectives, as well as to improve the quality of teaching and lessons delivery. Undoubtedly, ICT has impacted on the quality and quantity of teaching, learning and research in tertiary institutions across the world (Akpabio & Ogiriki, 2017; Mbaeze, Ukwandu, & Anudu, 2010).

ICT have continued to increasingly influence different aspects of our daily activities and way of lives; such influence could be on work, business, teaching, learning, leisure and health (Adedeji, 2011; Gilakjani, Sabouri, & Zabihniaemran, 2015; Hilty & Huber, 2017; Okojie, 2011). Since ICT is a crucial element in the advancement of any society, every person is expected to become technology-competent. ICT have formidable capabilities and can be cost effective as development tools. Therefore, the place of ICT as a vital tool for development, particularly in higher institutions of learning cannot be overemphasized.

Generally, ICT can be applied in the core areas of teaching and learning, research, library, administration and management in any given tertiary institution. Thus, all schools have to be equipped with the necessary ICT tools in order to provide the next generations with the needed tools and resources to access, use and attain the expected skills for a modern society. This is extremely important with higher institutions, where students are trained with the knowledge and skills to prepare for a new turning point in their life.

Tertiary institutions have an important role to play in facilitating relevant life skills that support the economic and information development process in fulfilling the expectations of a new society. This role is characterized by being more open, flexible, and competitive (Garcia-Valcarcel & Tejedor, 2009; Sara et al., 2010). Tertiary institutions must think globally in order to respond to students' needs, create new relationships, design new programs and rebuild their conceptions on the characteristics of learning environments to encourage innovation, experimentation and creativity of the lecturers'.

To satisfy these requirements, tertiary institutions must promote the use of ICT as part of their educational inputs. The success of any educational system or otherwise depends on educational inputs available to it. According to Jebeile and Abeysekera (2010), educational inputs are substances that give necessary help, support or comfort when required. Educational inputs can include facilities such as computer that support ICT integration in schools which

contributes to the performance of the educational sector. ICT are very important in developing quality education.

Other researchers have proposed that technology aided teaching provides curricular support to students, teaching and non-teaching staff, in areas that would otherwise be viewed as difficult (Eickelmann, Gerick, & Koop, 2017; Gilakjani et al., 2015). Gilakjani et al. (2015) and Achor & Ityobee (2020) had previously concluded that one of the most commonly cited reasons for using ICT in the classroom has been to prepare the current generation of students for a workplace where ICT, particularly computers, the internet and related technologies, are becoming more and more far-reaching.

The efficacy of ICT in higher education has been proved beyond reasonable doubt. It has been known to enhance educational opportunities of individuals and groups constrained from attending traditional institutions as well as the use of computers for instructional delivery (Arkorful, Anhwere, & Enchill, 2020). Omiunu (2014) in an investigation of the availability and utilization of ICT among human resources capitals in tertiary institutions in South Western Nigeria where four tertiary institutions were used (University of Ibadan, Emmanuel Alayande Colleges of Education, Ajayi Crowder University and the Polytechnic Ibadan). The result of the finding found that the staff majorly used ICT for research and academic purposes while students majorly used it for social network and personal purposes. Also, the major challenges that affect the use of ICTs were non-availability of ICT tools.

In the same vein, Adedeji (2011) carried out a research on the Availability and Use of ICT in South Western Nigeria Colleges of Education and the results revealed that there is low level of usage of ICT gadgets and non-availability of ICT equipment and that respondents were disgruntled with sluggish use and integration of ICT. This align with the findings of Idoko and Ademu (2010) on investigation of the challenges of ICT for teaching/learning as perceived by agricultural science teachers in 210 secondary schools from the three educational zones in Kogi State also found that ICT facilities were not available in secondary schools.

Nzwili (2017) investigated the availability of resources and facilities for ICT integration in school curriculum and found out that majority of the schools lacked ICT resources such as laptops, computers, whiteboards, CD-ROMs and anti-viruses. Though, he reported that computers were actually available in some of the schools but were not being used by teachers as direct instruction. He reported that these computers were mainly used in the storage of school records and teacher plans, examination questions and for examination registration exercises. Nzwili (2017) also found out that one of the main problems affecting ICT integration is the lack of internet connectivity in the schools.

This finding was also supported by Adedeji (2011) who found that low level of usage of ICT gadgets and non-availability of some ICT equipments. This was further corroborated by Ali, Nwafor and Onoh (2019) who found that ICT facilities were not available in some of the institutions studied, though ICT facilities were reported to be available to a certain degree and proportion and some of the ICT facilities where available were not functional. Similarly, Mohammed and Abuldughani (2017) reported that internet is one of the most important elements that support the use of technology in the education system. They submitted that application of technology should be encouraged and even be incorporated as a routine part in students' daily activities.

Wisdom and Joyce (2012) investigated the ICT Resource utilization, availability and accessibility by teacher educators for instructional development in Katsina-Ala College of Education and the result of the study showed that ICT resources were not available, and for that reason, teacher educators could not access them for instructional development purposes. Similarly, Fakeye (2010) also investigated English language teachers' knowledge and use of ICT in Ibadan Southwest LGA of Oyo State and found that availability of computers and their

connectivity to the internet was non-existent in virtually all the school studied and utilization, which is dependent on availability, and because availability is poor, thus, usability was also found to be poor.

Eseroghene and Barisi (2020) also examined the availability and utilization of information and communication technology. The study concluded that there is low presence of functional ICT facilities available and that the utilization of ICT facilities was to a low extent. This assertion was supported by Ofodu and Oso (2015) who also explored Information and Communication Technology resources utilization. The results demonstrated that the level of utilization was low. Langat (2015) and Mungai (2010) identified that the low utilization of ICT facilities was due to lack of qualified personnel, lack of electricity, insufficient computers, breakdown of the computers, higher prices for the procurement of ICT resources, burglary and computer phobia by the administrators, students and teachers.

Nevertheless, Aja and Eze (2016) examined the use of ICT gadgets for instructional conveyance in secondary schools in Ebonyi State, Nigeria. It was established that ICT gadgets are not adequately available, and are not sufficiently utilized. In a related vein, Apagu and Bala (2015) examined the utilization of ICT facilities for instructing and learning Vocational and Technical Education in Yobe state. The investigation discovered that ICT services were insufficient, for example, it was reported by Apagu and Bala (2015) that computer, TVs, CCTV et cetera are not adequately available in schools. Given the submission of Omeje and Chineke (2015) on the availability and the use of ICT, it was reported that non-provision of ICT facilities hampers competence and utilization of ICT; it can be deduced that the staff and students job is greatly hampered in the administration of Tertiary Institutions when ICT resources are not provided.

Okojie (2011) positioned that, different ICTs do make some valuable contributions to various parts of educational development and effective learning through expanding access, promoting efficiency, improving the quality of learning, enhancing the quality of teaching and improving management systems. These findings have been made elsewhere but not in Osun State higher institutions of learning. The researcher then set out to see the extent to which ICT resources are available and utilized in the administration of tertiary institutions in Osun State.

Statement of the Problem

It has been commonly accepted and proven that information and communication technology (ICT) is the engine of the 21st century and beyond; as it will chart the economic, education, political, religious, cultural, legal and social life of nations, particularly that of developing countries. It is perhaps easy to understand why the emphasis at the tertiary level should include research application of ICT to serve as part of the educational inputs for quality and modern education delivery. Modern day teaching and learning, research and administration are facilitated by Information and Communication Technology facilities. As technology improves, educational capability increases correspondingly. The emergence of computer technology as part of educational inputs has given teachers, administrators and students better tools to work with. However, it is observed that most tertiary institutions in Nigeria and Osun State in particular are still faced with the challenges of poor teaching of large class size where lecturers still stand to teach without the aids of ICT, delayed in processing of students results, poor records of staff and students' information, issues of non-payment and remittance of fees and other levies despite the general belief that ICT facilities have been incorporated in teaching and learning generally. There may be a need to examine the availability and utilisation of ICTs as part of the educational inputs in tertiary institutions in Osun State; hence this study.

Objectives of the study

- i. To determine the availability of ICT facilities in the administration of Tertiary Institutions in Osun State
- ii. To examine the extent of utilization of ICT facilities by staff and students in the administration of Tertiary Institutions in Osun State

Research Questions

- 1. What are the available ICT facilities in the administration of Tertiary Institutions in Osun State?
- 2. What is the extent of utilization of ICT facilities by staff and students in the administration of Tertiary Institutions in Osun State?

METHODOLOGY

The population for the study consisted of the undergraduate students, academic staff and non-teaching staff of the three selected tertiary institutions in Osun state. Since it is impossible for the researcher to use all the members of the three different population types to respond to the questionnaire due to inadequate resources and time constraint. Specifically, convenience sampling technique was used to select 1479 respondents to include 1200 students and 279 academic staff and non-teaching. That is, 500 students from Obafemi Awolowo University, Ile-Ife (OAU), 300 students from Federal Polytechnic, Ede (FEDPE) and 400 students from Osun State College of Education, Ilseha (OSCOED). Ten percent of the academic staff and non-teaching staff were selected in each institution using proportionate sampling technique. Thirty-nine academic staff was selected from OAU, 20 from FEDPE and 35 from OSCOED while 88 non-teaching staff were selected from OAU, 40 in FEDPE and 57 from OSCOED.

One self-designed instrument was used for the study, titled "Availability and Utilization of Information and Communication Technology Facilities -Questionnaire (AUICTF-Q)". The instrument developed by the researcher was validated using both face and content validity procedures. The questionnaire was given to senior colleagues and other experts in Department of Educational Management for their inputs, comments and suggestions. The researcher used written and oral comments of these senior colleagues and changed some questions of the items on the instrument. Some poorly worded and senseless questions were discarded and some were modified. In the questions developed to assess the available ICT facilities, the items were modified and limited to ten. On the questions developed to assess the extent of utilization of ICT facilities, 3rd and 5th items were discarded and replaced by another question. Therefore, appropriate and relevant suggestions were provided to improve the quality of the instrument as modifications were made used to ensure the suitability of the instrument for the study. The reliability of the research instrument was done through test-retest measure of reliability method at two weeks interval. The instrument was administered on 20 respondents to include 14 students who were randomly selected, 2 academic staff and 4 administrative staff who were purposively selected within the population but outside the intended sample area on two different occasions within the interval of two weeks. In addition, the data collected from test-re-test was subjected to reliability test using Pearson product moment correlation (Ppmc) to provide the internal consistency reliability estimate of the instrument. The reliability coefficient obtained for the instrument AUICTF-Q was 0.84. The value obtained was greater than 0.05, indicating that the instrument was reliable, consistent and good enough to obtain information for the study.

The researcher administered the instrument personally on the respondents with the help of four research assistants. Necessary explanations were given to the respondents on how

to fill out the questionnaires. This assisted the respondents in filling the questionnaires even in the absence of the researcher. Not all the questionnaires were returned but the return rate was 98%. Data analysis focused on two research questions. Descriptive statistics were used to analyse the data pertaining to Research Questions 1 and 2. The responses were coded numerically and all data were analysed using simple percentages and chi- square.

RESULTS

Research Question 1: What are the available ICT facilities in the administration of Tertiary Institutions in Osun State?

To answer this question, responses was scored for each item contained in the questionnaire using frequency counts and simple percentage method of analysis. Later on strongly agree and agree were collapsed to form agreed response rating in the results interpretation while disagree and strongly disagree were equally collapsed to form disagreed response rating in the interpretation section. The results are presented in Table 1 below.

TABLE 1Analysis of responses on the availability of the ICT facilities

S/N	Availability and Adequacy of ICT Facilities	SA F (%)	A F (%)	D F (%)	SD F (%)
1	In my school there are functional computers to teach students	363 (25%)	464 (32%)	334 (23%)	29 (20%)
2	In my school there are enough computers for administrative tasks	594 (40.9%)	447 (30.8%)	171 (11.8%)	239 (16.5%)
3	In my school there are projectors for teaching students	177 (12.2%)	239 (16.5%)	504 (34.7%)	531 (36.6%)
4	The ICT facilities are only made available for senior staff in the school	83 (5.9%)	99 (6.8%)	812 (55.8%)	457 (31.5%)
5	In my school the school is connected to the internet	457 (31.7%)	812 (55.8%)	99 (6.8%)	83 (5.7%)
6	Close Circuit Televisions (CCTV) are available for teaching students	68 (4.7%)	151 (10.4%)	759 (52.3%)	473 (32.6%)
7	In my school there are enough ICT storage facilities like floppy disc, compact disc, super disc that can aid teaching, research and administration	515 (35.5%)	644 (44.4%)	161 (11.1%)	131 (9.0%)
8	Internet connections are reliable for teaching, learning, research and administration	567 (39.1%)	535 (36.9%)	172 (11.8%)	177 (12.2%)
9	The institution can compete with other institutions with the available ICT facilities	656 (45.2%)	546 (37.6%)	156 (10.8%)	93 (6.4%)
10	Disc players are available for teaching students	89 (6.1%)	197 (13.6%)	738 (50.9%)	427 (29.4%)

The results in Table 1 show that 57% of the respondents agreed that there were functional computers to teach students in the school. Also, about 72% of the respondents agree that there were enough computers for administrative tasks. This implies that there were enough functional computers to teach and do administrative work in tertiary institutions in Osun State. The results further show that 71.3% of the respondents disagreed to the use of projector in teaching the students; hence the use of projector for teaching students was limited. The results also show that about 85% of the respondents disagreed that ICT facilities are only

made available for senior staff in the school. This revealed that the ICT facilities were made available for both junior and senior staff of the institutions. The notion that the school is connected to the internet was strongly agreed to by 88% of the respondents. This implies that the schools have internet connection for both academic and administrative activities.

About, 85% of the respondents disagreed to the availability of Close Circuit Television (CCTV). The analysis of the responses shows that Close Circuit Televisions (CCTV) was not available for teaching students in tertiary institutions in Osun State. Nevertheless, 79.9% of the respondents agreed that there were enough ICT storage facilities like floppy disc, compact disc, super disc that can aid teaching, research and administration. The result revealed that there are enough ICT storage facilities for administration and research in the institutions. Majority, 76% of the respondents agreed that the internet connections in the schools are reliable for teaching, learning, research and administration. Also, larger percentage of the respondents 82.8% agreed that their institution can compete with other institutions in the area of available ICT facilities. Furthermore, larger percentage 80.3% of the respondents disagreed to the availability of Disc players for teaching students. This indicates that there is non-availability of disc players in the institutions for teaching and learning processes.

It can be concluded that the majorly available ICT facilities in the administration of Tertiary Institutions in Osun State are functional computers and internet connectivity while projectors, Close Circuit Televisions (CCTV) and disc players are not readily available in the administration of most tertiary institutions in Osun State.

Research Question 2: What is the extent of utilization of ICT facilities by staff and students in the administration of Tertiary Institutions in Osun State?

To answer this question the responses from staff and students were reported separately. Furthermore, the responses were scored for each item as contained in the questionnaire. Frequency counts, simple percentage and chi- square method of analysis was used to analyse the responses of the respondents. In the interpretation section, strongly agree and agree were collapsed to form agreed response rating while disagree and strongly disagree were equally collapsed to form disagreed. The results are presented in Table 2 below.

Table 2 revealed the extent of ICT facilities utilization by staff in the administration of tertiary institutions in Osun State. Majority (71.3%) of the respondents reported that academic staff are exposed to the use of ICT facilities in teaching students in this institution. This implies that the knowledge of ICT devices is a must for all the academic staff and thereby making use of it in teaching the students. Also, (87.5%) of the respondents agreed that administrative staff used ICT facilities to take records of staff and student information. The analysis of the respondents' responses shows that ICT devices were being used to take records and information in Osun State tertiary institutions. In the same regard, majority (84.9%) of the respondents agreed that administrative staff use ICT facilities to compute and store students' results in the system. This means that ICT facilities are used to compute and keep students' results in Osun State tertiary institutions. Furthermore, majority of the respondents (79.9%) agreed that periodic trainings were organized for the staff on effective use of ICT facilities. The implication of this is that both academic and administrative staffs enjoy periodic training to improve, develop and update their knowledge on the use of ICT facilities for teaching and administrative activities. Also, about (80%) of the respondents disagreed that staff find it difficult to adapt to the new development in ICTs. This implies that many of the staff does not find ICT difficult to use due to their periodic training.

TABLE 2Analysis of the staff responses on the extent of utilization of ICT facilities

S/N	Utilization of ICT Facilities	SA F (%)	A F (%)	D F (%)	SD F (%)	Mean	SD	\mathbf{X}^2	Sig.
1	Academic staff are exposed to the use of ICT facilities in teaching students in this institution	119 (42.6)	80 (28.7)	43 (15.4)	37 (13.3)	3.07	1.05	85.31	.000
2	Administrative staff use ICT facilities to take records of staff and student information	154 (55.2)	90 (32.3)	19 (6.8)	16 (5.7)	3.41	0.83	218.84	.000
3	Administrative staff use ICT facilities to compute and store student results in the system	154 (52.2)	83 (29.7)	29 (10.4)	13 (4.7)	3.34	0.83	174.85	.000
4	Periodic trainings are organized for the staff on effective use of ICT facilities	122 (43.7)	101 (36.2)	42 (15.1)	14 (5.0)	3.34	0.87	130.76	.000
5	Staff finds it difficult to adapt to the new development in ICTs.	25 (9.0)	31 (11.1)	118 (42.3)	105 (37.6)	3.19	0.93	121.95	.000

Finally, the analysis showed the mean scores, standard deviation and chi-square (X^2) values of all the sub-questions analyzed and the results of the chi-square (X^2) analysis revealed that the values were statistically significant at 0.05 alpha level since the significant value obtained (0.00) is less than 0.05 (p \leq 0.05). This implies that both the academic and administrative staff makes use of ICT facilities for administrative activities in tertiary institutions in Osun State.

TABLE 3Analysis of the students' responses on the utilization of ICT facilities

S/N	Utilization of ICT Facilities	SA F (%)	A F (%)	D F (%)	SD F (%)	Mean	SD	\mathbf{X}^2	Sig.
1	Students are exposed to the use of ICT facilities	408 (34.8)	652 (55.6)	82 (7%)	30 (2.6)	3.44	0.74	873.02	.000
2	Students are frequently trained on the use of ICT facilities	400 (34.2)	476 (40.6)	196 (16.7)	100 (8.5)	2.89	1.04	312.61	.000
3	All the academic works are done through ICT facilities	436 (37.2)	452 (38.6)	242 (20.6)	42 (3.6)	3.11	0.85	383.90	.000
4	Students find it difficult to adapt to the new development in ICTs	66 (5.6)	154 (13.2)	512 (43.7)	440 (37.5)	3.13	0.85	479.24	.000
5	Periodic trainings are organized for the students on the effective use of new ICT facilities	472 (40.3)	580 (49.5)	99 (8.4)	21 (1.8)	3.37	0.72	771.43	.000

Table 3 revealed the extent of ICT facilities utilization by students in the administration of tertiary institutions in Osun State. Analysis of the findings showed that majority (90.4%) of the respondents agreed that students are exposed to the use of ICT facilities. The report indicated that students are exposed to the use of ICT facilities in tertiary institutions in Osun State. Also (74.8%) of the respondents agreed that students are frequently trained on the use of ICT facilities. Furthermore, majority of the respondents agreed (75.8%) that academic works are done through ICT facilities. The result indicated that most of the academic works are done through ICT facilities. However, majority of the respondents (81%) disagreed that students find it difficult to adapt to the new development in ICTs. This implies that students do not have difficulty to adapt to the new development in ICTs. But, a larger percentage of the respondents agreed that periodic trainings are organized for the students on the effective use of new ICT facilities students. The analysis of respondents' responses shows that students are trained periodically on the use of ICT facilities.

Consequently, the analysis of the data in the above table showed the mean scores, standard deviation and chi-square (X^2) values of all the sub-questions analyzed were statistically significant at 0.05 level of significant since the sig. values are less than 0.05 (p \leq 0.05). This implies that students make use of ICT facilities in tertiary institutions in Osun State. It can be concluded that, there is a great extent of the utilization of ICT facilities by staff and students in the administration of tertiary institutions in Osun State

DISCUSSION

The findings to research question one revealed the availability of ICT facilities and how adequate they are available in the administration of tertiary institutions in Osun State. It showed that ICT facilities are available for administrative activities and that there is availability of ICT facilities in the administration of tertiary institutions in Osun State. The results negates the findings of Adedeji (2011), Nzwili (2017), and Ali et al. (2019) who found that majority of the schools lacked ICT resources and there was low level of usage of ICT gadgets and non-availability of ICT equipment. The result is also at variance with the findings of Idoko and Ademu (2010) that ICT facilities were not available in schools. Also, Wisdom and Joyce (2012) showed that ICT resources were not available, and for that reason, teacher educators could not access them for instructional development purposes.

The findings to research question two revealed the extent at which ICT facilities are been utilized by staff and students in the administration of tertiary institutions in Osun State. The results showed that both the academic and administrative staffs make use of ICT facilities for administrative activities and that both the lecturers and students make use of ICT facilities in tertiary institutions in Osun State. The results was in contrary with the findings of Apagu and Bala (2015) who revealed that ICT facilities such as PC, TV sets are not sufficiently available and utilization of ICT facilities was low. Likewise, Ofondu and Oso (2015); Langat (2015) and Mungai (2010) reported that the level of Information and Communication Technology utilization was low. The results also negate the findings of Fakeye (2010) who found that availability of computers and their connectivity to the internet was non-existent in virtually all the school studied hence, utilization which is invariably a dependant on availability is poor, thus, usability was also found to be poor. This corroborates the findings of Omeje and Chineke (2015), who informed that non-provision of ICT facilities hampers utilization of ICT; it can be deduced that staff and students job is greatly hampered in the administration of Tertiary Institutions when ICT resources are not provided. The findings was at variance with the submission of Eseroghene and Barisi (2020) who concluded that there was low presence of functional ICT facilities availability and that the utilization of ICT facilities was to a low extent.

CONCLUSION

It can be concluded in this study that the majorly available ICT facilities in the administration of Tertiary Institutions in Osun State are functional computers and internet connectivity while projectors, Close Circuit Televisions (CCTV) and disc players are not readily available in the administration of most Tertiary Institutions in Osun State. It was also found out that there is a great extent of the utilization of ICT facilities by staff and students in the administration of Tertiary Institutions in Osun State.

RECOMMENDATIONS

Based on the findings of the study, it is recommended that ICT facilities such as projectors, Close Circuit Televisions (CCTV) and disc players should be made available for effective teaching and learning. The number of the available (functional computers and internet connectivity) and non-available (projectors, CCCTV and disc players) ICT facilities should be increased in institutions Faculty and Department computer laboratory as well as organizing training for staff and students on the proper usage of these ICT facilities.

Also, administrators should enhance the use of ICT facilities in recording both administrative records like staff personnel data and physical resource documents. Recording of students personnel document manually should be discarded. Therefore, administrators should insist on using ICT facilities in keeping student personnel records like results, admission and disciplinary records.

Finally, ICTs availability should be used as an important criterion for tertiary institutions accreditation where National University Commission (NUC), National Board for Technical Education (NBTE), National Polytechnic Commission (NPC) and National Commission for Colleges of Education (NCCE) will set ICTs availability as part of the yardstick to get any institution accredited before operation.

REFERENCES

Achor, E. E., & Ityobee, S. (2020). Assessment of availability of ICT facilities for basic Science teaching and learning in upper basic schools in Benue State. *Journal of Research in Curriculum and Teaching*, 12(1), 1-10.

Adedeji, T. (2011). Availability and use of ICT in South-Western Nigeria Colleges of Education. *African Research Review*, 5(5), 315-331.

Aja, S. N., & Eze, P. I. (2016). Utilization of information and communication technology (ICT) devices for instructional delivery in secondary schools in Ebonyi State of Nigeria. *European Scientific Journal*, 12, 57-185.

Akpabio, E., & Ogiriki, I. B. (2017). Teachers use of information and communication technology (ICT) in teaching English language in senior secondary schools in Akwa Ibom state. *Equatorial Journal of Education and Curriculum Studies*, 2(2), 28-33.

Ali, A. A, Nwafor, M. C., & Onoh, C. C. (2019). Availability and utilization of ICT facilities for teaching and learning of library and information science (LIS) undergraduate Programme

- in universities in South-South, Nigeria. *Journal of Applied Information Science and Technology*, 12(2), 26-35.
- Apagu, V. V., & Bala, A. W. (2015). Accessibility and use of ICT facilities for instructing and learning of vocational and technical education in Yobe State technical colleges. *American Journal of Engineering Research*, 4, 113-118.
- Arkorful, V. Anhwere, K., & Enchill F. A. (2020). The use of ICT for teaching Social Studies: Does the availability of ICT resources matter? *American Journal of Education Research and Reviews*, 5(75), 1-11.
- Eickelmann, B., Gerick, J., & Koop, C. (2017). ICT use in mathematics lessons and the mathematics achievement of secondary school students by international comparison: Which role do school level factors play? *Education and Information Technologies*, 22(4), 1527-1551.
- Eseroghene, A., & Barisi, G. P. (2020). Availability and utilization of Information and Communication Technology in teaching and learning of Biology in Secondary Schools. *International Journal of Research and Scientific Innovation*, 7(2), 239-244.
- Fakeye, D. O. (2010). Assessment of English Language teachers' knowledge and use of information and communication technology (ICT) in Ibadan Southwest Local Government of Oyo State. *American-Eurasian Journal of Scientific Research*, *5*(4), 56-59.
- Garcia-Valcarcel, A., & Tejedor, F. J. (2009). Training demands of the lecturers related to the use of ICT. *Procedia- Social and Behavioural Sciences*, *1*(1), 178-183.
- Gilakjani, P. A., Sabouri, B. N., & Zabihniaemran, A. (2015). What are the barriers in the use of computer Technology in EFLL instruction? *Review of European Studies*, 7(10), 173-181.
- Hilty, L. M., & Huber, P. (2017). Motivating students on ICT-related study programs to engage with the subject of sustainable development. *International Journal of Sustainability in Higher Education*, 19(3), 642-656.
- Idoko, J. A., & Ademu, A. (2010). The challenges of information and communication technology for teaching-learning as perceived by Agricultural Science Teachers in Secondary Schools in Kogi State. *Journal of Educational Innovators*, *3*(2) 43-49.
- Jebeile, S. H., & Abeysekera, I. (2010). The spread of ICT innovation in Accounting Education. *International Journal of Teaching and Learning in Higher Education*, 22(2), 158-168
- Langat, A. C. (2015). Barriers hindering implementation, innovation and adoption of ICT in secondary schools in Kenya. *International Journal of Innovation Research and Development*, 4(2), 56-70.
- Mbaeze, I. C. Ukwandu, U. E., & Anudu, C. (2010). The influence of information and communication technologies on students' academic performance. *Journal of Information Technology Impact*, 10(3), 129-136.
- Mohammed, T. A., & Abuldughani, A. A. (2017). Impact of students use of technology on their learning achievements in physiological courses at the University of Damman. *Journal of Taibah, University Medical Sciences*, 12(1), 82-85.
- Mungai, M. (2010). *Challenges facing computer education in Kenyan schools*. Retrieved from http://www.ictworks.org/2011/09/12/12-challenges-facing-computer-education-kenyan-schools/.
- Nzwili, K. M. (2017). Availability of resource materials and facilities for ICT integration in the public Primary School Curriculum in Kitui County, Kenya. *Saudi Journal Humanities Social Sciences*, 2(5), 362-368.
- Ofondu, G. O., & Oso, S. O. (2015). Technical resources and English language teaching in schools. *International peer Reviewed Journal*, 11, 20-35.

Okojie, J. A. (2011). ICT interventions for the development of Nigerian universities. Paper presented during the international conference on ICT and educational development in Africa. Faculty of Education, Delta State University, Abraka, 26-29 October 2011.

Omeje, M. O., & Chineke, S. O. (2015). Availability and the use of instructional materials in the teaching and learning of Igbo Language. *Mediterranean Journal of Social Sciences*, 6(3), 286-289.

Omiunu, O. G. (2014). Availability and utilization of ICT among human resources capitals in tertiary institutions in Southwestern Nigeria. *Journal of Education Research and Behavioural Sciences*, 3(5), 126-132.

Sara, H., Brown, O., David, H. Enos, K. A., Susan, N., Azra, N. & Leornard, W. (2010). *Developing the use of information and communication to enhance teaching and learning in East African schools; Review of the literature*. Centre for Commonwealth Education & Aga Khan University, Institute for Educational Development – Eastern Africa.

Wisdom, I. J., & Joyce, T. D. (2012). ICT resource utilization, availability and accessibility by teacher educators for instructional development in College of Education Katsina-Ala. *Journal of New Media and Mass Communication*, *3*, 1-6.