



## INFORMATION COMMUNICATION TECHNOLOGY UTILIZATION AND ADMINISTRATIVE EFFECTIVENESS IN COLLEGES OF EDUCATION IN KWARA STATE, NIGERIA

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### Abstract

*This study examined the relationship between ICT utilization and administrative effectiveness in some Colleges of Education in Kwara State. The impacts of internet facility, computer system, software facility system, communication equipment and email messages utilization on administrative effectiveness in Colleges of Education in Kwara State were examined. Simple random sampling technique was adopted to select six (6) sample colleges of education in Kwara State which represented about 60% of the total population. A sample size of 200 respondents was determined using proportional sampling technique. A researcher designed questionnaires tagged 'ICT Utilization Questionnaire' and 'Administrative Effectiveness Questionnaire' were the instruments used to collect data from the respondents. The instruments were validated by two experts and the reliability coefficients were determined at .917 and .853. The respondents comprised of all the administrative staff of the sampled colleges of education in Kwara State. The major finding of the study revealed that there was a significant relationship between ICT Utilization and Administrative Effectiveness in Colleges of Education in Kwara State ( $r=.294$ ;  $p>0.05$ ,  $t=.075$ ). Based on the findings of the study, it was concluded that the ICT utilization in Colleges of Education in Kwara State is positively correlated to administrative effectiveness. It was therefore, recommended amongst others, that the administrators of Colleges of Education in Kwara State should subject all the administrative staff of the colleges to special ICT training in order to improve their knowledge and consequently enhance the administrative effectiveness of the Colleges.*

**Keywords:** ICT utilization, administrative effectiveness, Colleges of Education

### Introduction

ICT generally contributes to the development and improvement of our education in terms of its acquisition, application and utilization in the system. Moreover, the application and use of ICT in the education system in Nigeria should be given high priority especially in the higher level of our education systems. It is therefore, forms a major impact to the educational development in the country most especially in the area of administration. ICT refers to as facilities or tools that could generally be used to process, store, preserve, retrieve and disseminate information with ease and getting timely feedback within a given environment. In recent time, ICT plays a major role in the development of education system, therefore its utilization has a comparative advantage to educational development in this century most

especially at the higher level of education system which encompasses the universities, colleges of education, polytechnics, monotechnics and others. Also, the Nigeria education systems that comprises of basic (primary and junior secondary), senior secondary and tertiary levels of education witness a resounding success with the acquisition and utilization of ICT facilities. Moreover, ICT is very significant to the educational development in the tertiary level of education system especially the Colleges of Education, which involves electronic devices that help to capture, process, store and retrieve the required information as at when needed. Similarly, Adeyemi and Esere (2013) noted that ICT is use for transmitting the information by digital or analogue means (telecommunications) until the information



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gets to the end-users and it is a computer-based technology for storing, accessing, processing and communication of information to the target receivers. It was further observed that ICTs include but not limited to internet facilities, satellite equipments, cable data transmission and computer assisted equipment (Ufuophu & Ayobami, 2012).

However, the administrative process in colleges of education is supposed to be an activity plan to successfully run an organizational set up in order to achieve a target or predetermined goals of such institution. Liverpool and Jacinta (2013) supported this by identifying administrative process as a service activity or tool through which the fundamental objectives of the institutional process may be better optimized efficiently when allocating both human and material resources, as well as to make the best use of existing resources in the system. It is based on this view, that no organization or an institution can actually accomplish its goals without a proper management of its available human and material resources. This can actually be possible through an effective utilization of ICT for the storing of collated data, process such data and finally produce meaningful information for the users of the colleges of education as at when required.

The effective management of the colleges of education lies in the hands of the administrators known as school management which are the Provost, the Deputy Provosts (Academic & Administration), the Bursar, the Registrar, the Librarian, the Deans, the Head of Departments (HODs) and others (Kwara State College of Education, Ilorin, 2019). The proper discharge of duties of these administrators in Colleges of Education with the use of ICT facilities and equipment enhances their administrative effectiveness. Therefore, according to Fayol (1916), the management functions that if effectively carried out by the administrators will enhance the administrative effectiveness in any organization include planning, organizing, staffing, directing, coordinating, controlling and motivating. In carrying out these functions effectively, the application and utilization of ICT facilities must be involved. Therefore, the application and utilization of ICT facilities in

colleges of education by the administrators will improve and enhance their administrative effectiveness in the institution.

### **Statement of the Problem**

In the 21<sup>st</sup> century, many colleges of education have developed and acquired several ICT equipment and facilities to enhance their administrative effectiveness on both the staff and students' management as well as managing the community services in their areas. But in view of the adventure of so many facilities that can improve the institution administrative effectiveness, many colleges of education in Kwara State still perform below expectation administratively in the area of staff management, students' management, that is, in the area of registration processing and e-learning process. However, several studies had been conducted in relation to this study, such studies include Bello and Johnson (2011), which conducted their study on role of ICT in Managing Higher education for sustainable development and Ayoade (2014) that conducted the study on access and use of ICT for administrative purposes by institutional administrators in Colleges of Education in Nigeria: an example of Emmanuel Alayande College of Education, Oyo.

In view of the foregoing, the importance of ICT to administrative effectiveness necessitated the researcher to carry out this study to critically examine the relationship between the ICT utilization and administrative effectiveness in Colleges of Education in Kwara State.

### **Objectives of the Study**

The main objective of this study was to examine the ICT utilization and administrative effectiveness in Colleges of Education in Kwara State. Specifically, the study sought to:

- i. determine the level of administrative effectiveness in Colleges of Education in Kwara State.
- ii. examine the level of internet facility utilization on administrative effectiveness in Colleges of Education in Kwara State.
- iii. examine the level of computer system utilization on administrative effectiveness in Colleges of Education in Kwara State.



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- iv. examine the level of computer software utilization on administrative effectiveness in Colleges of Education in Kwara State.
- v. examine the level of communication equipment utilization on administrative effectiveness in Colleges of Education in Kwara State.
- vi. examine the level of email messages utilization on administrative effectiveness in Colleges of Education in Kwara State.

### Research Questions

- i. What is the level of administrative effectiveness of administrators in Colleges of Education in Kwara State?
- ii. What is the level of internet facility utilization on administrative effectiveness in Colleges of Education in Kwara State?
- iii. What is the impact of computer system utilization on administrative effectiveness in Colleges of Education in Kwara State?
- iv. What is the level of computer software utilization on administrative effectiveness in Colleges of Education in Kwara State?
- v. What is the level of communication equipment utilization on administrative effectiveness in Colleges of Education in Kwara State?
- vi. What is the impact of email message utilization on administrative effectiveness in Colleges of Education in Kwara State?

### Research Hypotheses

- H<sub>0</sub>:** There is no significant relationship between ICT utilization and Administrative effectiveness in Colleges of Education in Kwara State.
- H<sub>01</sub>:** There is no significant relationship between internet facility utilization and administrative effectiveness in Colleges of Education in Kwara State.
- H<sub>02</sub>:** There is no significant relationship between computer system utilization and administrative effectiveness in Colleges of Education in Kwara State.
- H<sub>03</sub>:** There is no significant relationship between computer software utilization and administrative effectiveness in Colleges of Education in Kwara State.
- H<sub>04</sub>:** There is no significant relationship between communication equipment

utilization and administrative effectiveness in Colleges of Education in Kwara State.

**H<sub>05</sub>:** There is no significant relationship between email messages utilization and administrative effectiveness in Colleges of Education in Kwara State.

### Methodology

The study adopted descriptive survey research design. The population of the study consisted of all the administrators of the colleges of education in Kwara State, Nigeria. The total population of Colleges of Education in Kwara State is 10, including both public and private ones. Six out of the ten colleges of education were randomly sampled to represent 60% of the total population because of the time constraint in covering the whole population. The sampled colleges of education were Kwara State College of Education, Ilorin; Kwara State College of Education, Oro; Kwara State College of Education (Technical), Lafiagi; Muyideen College of Education, Ilorin; Nana Aishat Memorial College of Education and Imam Hamzat College of Education, Ilorin. Proportionate sampling technique was adopted to select unequal number of respondents from each of the sample colleges of education because of the difference in their staff population. Therefore, 45 respondents were picked from each of the Kwara State Colleges of Education, in Ilorin, Oro and Lafiagi while 25 respondents were selected from Muyideen College of Education, 20 respondents each from Nana Aishat Memorial College of Education and Imam Hamzat College of Education. The total sample selected for the study was 200 respondents. The instruments used for data collection were structured questionnaires tagged "ICT Utilization" and "Administrative Effectiveness Questionnaire". The instruments were designed by the researcher. The designed instruments were later validated by two experts from Educational Management Department, University of Ilorin. Cronbach's Alpha statistics was used to determine the reliability of the instruments and the reliability coefficients of the two instruments were found to be .917 and .853 for ICT utilization and administrative effectiveness



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respectively. Subsequently, the instruments were administered to the respondents of the Colleges of Education in Kwara State. The data collected were coded and analyzed using Statistical Packages for Social Sciences (SPSS) version 21.0. Descriptive statistics adopted includes mean (1.00 – 2.00= Low; 2.01– 3.00=Moderate & 3.01–4.00= High) and standard deviation for the research questions

raised in the study while Pearson Product Moment Correlation (PPMC) statistics was used to test the formulated hypotheses at 0.05 level of significant.

### Results:

**Research Question 1:** What is the level of administrative effectiveness of administrators' in Colleges of Education in Kwara State?

**Table 1: Level of administrative effectiveness on administrators**

S/N	Items	Mean	Std. Dev.
1	Keeping an updated personnel data and information on staff and students	3.45	.721
2	Maintaining and keeping proper inventory of college stores and other properties	3.36	.680
3	Maintain proper procedure for the registration of newly admitted students	3.33	.680
4	Maintain accurate records of students' continuous, semester and session assessment	3.37	.666
5	Maintain proper procedure for the management of entire students' population	3.51	.610
6	Prepare and keep up-to-date staff work schedule and time table	3.30	.610
7	Proper internal control systems are maintained in the college	3.40	.634
8	Keep relevant data and information on college budget and finances	3.37	.595
9	Issuance of internal memos for messages dissemination	3.49	.641
10	Ensure regular circulation of relevant minutes of staff meetings	3.49	.593
11	Encourage delegation of duty and responsibility where necessary	3.33	.619
12	Maintain a harmonious relation with the supervising ministry and agency	3.38	.645
13	Ensure regular coordination of staff meetings	3.46	.608
14	Maintain free flow of communication among the subordinate staff in the College	3.29	.647
15	Ensure adequate management/students communication	3.28	.641

**Note: Mean: (1.00 – 2.00= Low; 2.01 – 3.00=Moderate & 3.01 – 4.00= High)**

In table 1, none of the items of the construct on administrative effectiveness shows the mean values to be low or moderate. All the items of the construct on administrative effectiveness in Colleges of Education in Kwara State ranges from 3.28 and 3.51, which shows that the items of administrative effectiveness were highly

performed by the administrators in the Colleges.

**Research Question 2:** What is the level of internet facility utilization on administrative effectiveness in Colleges of Education in Kwara State?

**Table 2: Level of internet facility utilization on administrative effectiveness**

S/N	Items	Mean	Std. Dev.	Level
1.	Use of internet facility improves administrative effectiveness	3.17	.64	High
2.	Internet modem is used for administrative responsibilities	3.22	.73	High
3.	Internet is use for process of students' information	3.38	.70	High
4.	Internet use for students' admission process	3.06	.60	High

**Note: Mean: (1.00 – 2.00= Low; 2.01–3.00=Moderate & 3.01–4.00= High)**



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Table 2 shows the mean values of all the four items of internet facility utilization on administrative effectiveness which ranges between 3.06 and 3.38. This means that the respondents in various Colleges of Education in Kwara State tend to have a high level of internet

facility utilization in the discharge of their administrative assignments in the colleges.

**Research Question 3:** What is the impact of computer system utilization on administrative effectiveness in Colleges of Education in Kwara State?

**Table 3: Impact of computer system utilization on administrative effectiveness**

S/N	Items	Mean	Std. Dev.	Level
1.	Availability of computer system in offices	3.26	.62	High
2.	Administrative staff of the college are computer literate	2.83	.63	Moderate
3.	Staff utilizes computer in discharge of their duties	2.95	.69	Moderate
4.	Complete computer system is provided in major admin offices	3.19	.53	High

Note: Mean: (1.00 – 2.00 = Low; 2.01 – 3.00 = Moderate & 3.01 – 4.00 = High)

Table 3 shows the impact of computer system utilization on administrative effectiveness, the results revealed that the mean values of all the items ranges between 2.83 and 3.26. This means that the respondents moderately utilize the computer system to carry out their major

administrative work in colleges of education in Kwara State.

**Research Question 4:** What is the level of computer software utilization on administrative effectiveness in Colleges of Education in Kwara State?

**Table 4: Level of computer software utilization on administrative effectiveness**

S/N	Items	Mean	SD	Level
1.	Necessary software are provided to enhance administrative effectiveness	3.30	.68	High
2.	Available software are utilize by the admin staff for their primary duties	3.24	.58	High
3.	Power point is commonly used by the administrators in the college	3.12	.49	High
4.	MS Words, Excel and Database are software commonly used	3.17	.55	High

Note: Mean: (1.00 – 2.00 = Low; 2.01 – 3.00 = Moderate & 3.01 – 4.00 = High)

Table 4 shows that the mean value of all the items of the construct on computer software utilization on administrative effectiveness ranges from 3.12 and 3.30. This means that the respondents highly utilize the computer software to carry out their administrative

assignment in Colleges of Education in Kwara State.

**Research Question 5:** What is the level of communication equipment utilization on administrative effectiveness in Colleges of Education in Kwara State?

**Table 5: Level of communication equipment utilization on administrative effectiveness**

S/N	Items	Mean	Std. Dev.	Level
1.	Mobile phone is a common communication equipment use in the College	3.12	.570	High
2.	CCTV is another communication equipment found in the College	3.05	.548	High
3.	Intercom system is a facility use in departments/units in the college	3.11	.558	High

Note: Mean: (1.00 – 2.00 = Low; 2.01 – 3.00 = Moderate & 3.01 – 4.00 = High)

The level of communication equipment utilization on administrative effectiveness in table 5 shows that the mean values ranges

between 3.05 and 3.12. This means that the respondents, who were the administrative staff of the College highly utilizes the



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communication equipment at their disposal to carry out their administrative assignment in Colleges of Education in Kwara State.

**Research Question 6:** What is the impact of email message utilization on administrative effectiveness in Colleges of Education in Kwara State?

**Table 6: Level of email message utilization on administrative effectiveness**

S/N	Items	Mean	Std. Dev.	Level
1.	Email message is very effective mean of sending messages	3.10	.560	High
2.	Email facility is used to send messages to outside world	3.17	.626	High
3.	Email message enhances administrative effectiveness in the College	3.19	.535	High
4.	Email helps to improve the office management practices	3.39	.625	High

Note: Mean: (1.00 – 2.00= Low; 2.01 – 3.00=Moderate & 3.01 – 4.00= High)

Table 6 shows that the mean values of all the items of the construct on email messages utilization on administrative effectiveness ranges from 3.10 and 3.39. It means that the college administrators highly utilize the email messages to carry out their administrative assignment in Colleges of Education in Kwara State.

### Hypotheses Testing

**H<sub>0</sub>:** There is no significant relationship between ICT utilization and Administrative effectiveness in Colleges of Education in Kwara State.

Table 7 row 1, shows the result of the hypothesis that there is no significant relationship between ICT utilization and administrative effectiveness in Colleges of Education in Kwara State. The result of the analysis revealed that the calculated r. value of .294 is greater than the t-value of .075, hence the hypothesis was rejected. Therefore, there is significant relationship between ICT utilization and administrative effectiveness in Colleges of Education in Kwara State.

**H<sub>01</sub>:** There is no significant relationship between internet facility utilization and administrative effectiveness in Colleges of Education in Kwara State.

In Table 7 row 2, the result of the hypothesis that there is no significant relationship between internet facility utilization and administrative effectiveness in Colleges of Education in Kwara State was shown. The result of the analysis revealed that the calculated r. value of .562 is greater than the t. value of .014, hence

the hypothesis was rejected. Therefore, there is a significant relationship between internet facility utilization and administrative effectiveness in Colleges of Education in Kwara State.

**H<sub>02</sub>:** There is no significant relationship between computer system utilization and administrative effectiveness in Colleges of Education in Kwara State.

The result of the Pearson Correlation of relationship between computer system utilization and administrative effectiveness in Colleges of Education in Kwara State was shown in table 7, row 3. The result revealed that the calculated r. value of .802 is greater than t. value of .018 and hence the hypothesis was rejected. Therefore, there is significant relationship between computer system utilization and administrative effectiveness in Colleges of Education in Kwara State.

**H<sub>03</sub>:** There is no significant relationship between computer software utilization and administrative effectiveness in Colleges of Education in Kwara State.

Table 7 row 4, shows the result of the analysis which revealed that computer software utilization has a significant relationship with the administrative effectiveness of Colleges of Education in Kwara State. The result revealed that the calculated r. value of .155 is greater than the t. value of .101. Thus, the hypothesis which stated that there is no significant relationship between computer software utilization and administrative effectiveness in Colleges of Education in Kwara State was



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rejected. Therefore, there is significant relationship between computer software utilization and administrative effectiveness in Colleges of Education in Kwara State.

**H<sub>04</sub>:** There is no significant relationship between communication equipment utilization and administrative effectiveness in Colleges of Education in Kwara State.

Table 7 row 5, shows the result of the Pearson correlation analysis which revealed that communication equipment utilization doesn't have a positive significant relationship with the administrative effectiveness in Colleges of Education in Kwara State (calculated r. value = .039 < t. value = .146). Thus, the hypothesis which stated that there is no significant relationship between communication equipment utilization and administrative effectiveness in Colleges of Education in Kwara State is accepted. Therefore, there is no significant relationship between

communication equipment utilization and administrative effectiveness in Colleges of Education in Kwara State.

**H<sub>05</sub>:** There is no significant relationship between email messages utilization and administrative effectiveness in Colleges of Education in Kwara State.

Table 7 row 6, shows the result of the Pearson's Correlation analysis which revealed that the email message utilization has a positive significant relationship with the administrative effectiveness in Colleges of Education in Kwara State (calculated r. value = .276 > t. value = .078). Thus, the hypothesis which stated that there is no significant relationship between email messages utilization and administrative effectiveness in Colleges of Education in Kwara State is rejected. Therefore, there is a significant relationship between email messages utilization and administrative effectiveness in Colleges of Education in Kwara State.

**Table 7: Summary of Hypothesis Testing**

Hypothesis	Relationship	t-value	r- value	Decision
H <sub>0</sub>	ICT utilization->Administrative effectiveness	.075	.294**	Rejected
H <sub>01</sub>	Internet Facility ->Administrative Effectiveness	.014	.562**	Rejected
H <sub>02</sub>	Computer System Utilization->Administrative Effectiveness	.018	.802**	Rejected
H <sub>03</sub>	Software Utilization ->Administrative Effectiveness	.101	.155**	Rejected
H <sub>04</sub>	Communication Equipment ->Administrative Effectiveness	.146	.039	Accepted
H <sub>05</sub>	Email messages Utilization ->Administrative Effectiveness	.078	.276**	Rejected

\*\*. Correlation is significant at the 0.01 level (2-tailed).

### Findings and Discussion

The result of the main hypothesis stated that there is no significant relationship between ICT utilization and administrative effectiveness in Colleges of Education in Kwara State is positively related. This means that the ICT utilization in Colleges of Education in Kwara State is significantly correlated to administrative effectiveness in the Colleges.

Hypothesis 1 revealed that there is significant relationship between internet facility utilization and administrative effectiveness in Colleges of Education in Kwara State. This mean that,

almost all the administrative staff of the colleges of education in Kwara State uses internet facility at maximum level of utilization to carry out their administrative assignments in the colleges, as internet has become a major ICT facility that enhances the administrative work of an organizations.

Hypothesis 2, revealed that there is a positive and significant relationship between computer system utilization and administrative effectiveness in Colleges of Education in Kwara State. However, administrative effectiveness cannot be achieved in an

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organization without an effective utilization of computer system which constitutes one of the ICT facilities. Hence, the result showed that majority of the administrative staff of the colleges of education in Kwara State use computer system in the discharge of their duties. This was corroborated by Ayoade (2014) in his study, revealed that there was a significant relationship between ICT usage and administrative effectiveness of College of Education Administration at Emmanuel Alayande College of Education, Oyo. The result of the study as obtained from the analysis shows that the t-calculated value of 2.96 is greater than t-table value of 1.98 at 0.05 level of significance

Hypothesis 3, the result shows that there is significant relationship between computer software utilization and administrative effectiveness in Colleges of Education in Kwara State. The result further revealed that all the administrative staff of the colleges of education utilizes relevant and appropriate computer software to carry out their administrative assignment, this therefore, enhances their administrative effectiveness in the college.

Hypothesis 4, revealed that there is no significant relationship between communication equipment utilization and administrative effectiveness in Colleges of Education in Kwara State. It further shows that the communication equipment utilization was not correlated to administrative effectiveness in the Colleges, meaning that the following communication equipment were not properly and currently in use in the college to carry out their administrative work; such as radio communication, CCTV and others. However, the advent of the mobile phone in the country has made the use of other communication equipments irrelevant to the administrative effectiveness in the Colleges on this regards.

And hypothesis 5 revealed that there is a significant relationship between email messages utilization and administrative effectiveness in Colleges of Education in Kwara State. The result of the hypothesis further revealed that email messages form a major means of sending electronic data and information between departments/units within

the colleges and to the outside world. This finding was also supported by Krishnaveni and Meenakumari (2010), their study identified the various functional areas to which ICT is deployed for information administration in higher education institutions and also found out the current extent of ICT usage in all these functional areas pertaining to information administration. The findings of their study therefore revealed that the current level of ICT usage indicates a clear integration for managerial or information-based administration in higher education institutions.

**Conclusion**

From the finding of this study, it was clearly shown that the ICT utilization and administrative effectiveness in colleges of education were significantly related. Moreover, the utilization of internet facilities, computer system, software system, communication facilities and email message on administrative effectiveness were rated high as revealed in the result of the study. This further indicated that the measures of ICT utilization were highly used to carry out their administrative functions in the colleges in order to improve its administrative effectiveness. However, the utilization of communication equipment did not enjoy much patronage in enhancing the college administrative effectiveness in the use of radio communication and CCTV. Therefore, all the ICT utilization measures highlighted were significantly correlated to administrative effectiveness in Colleges of Education in Kwara State except the communication equipments measure.

**Recommendations**

Based on the findings and conclusion of the study, it was therefore recommended that:

- i. The administrators of the College of Education in Kwara State should put more effort in the acquisition of more ICT facilities to further enhance their administrative effectiveness.
- ii. The administrators of the Colleges of Education in Kwara State should ensure that all the administrative staff of the college are subjected to some special ICT training as there are new innovation that are



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- swinging up in the ICT environment that can help improve the administrative effectiveness in the College.
- iii. Effort should be concentrated on acquisition and utilization of internet facilities, most especially the private ones so that the administrative staff can be well up to the task as far as the internet facilities are concern in the discharge of its administrative assignment in the college.
  - iv. The source of generating power in the Colleges of education should be improved as the use of electricity is very paramount to the ICT utilization. The government and administrators in the public and private colleges of education should ensure there is provision of alternative power generation in the College in order to improve its administrative effectiveness.
  - v. The proprietors of Colleges of Education in Kwara State should appropriate more funds to the college so that necessary and current ICT equipment could be acquired for use in the College to improve the administrative effectiveness.

### References

- Adeyemi, I. I. & Esere, M. (2013). ICT and higher educational system in Nigeria. *Academic Journals, Educational Research and Reviews*, ISSN: 1990-3839, 8(21), 2021-2025.
- Ayoade, O. B. (2014). *Access and use of Information and Communication Technology for administrative purposes by institutional administrators in Colleges of Education in Nigeria: an example of Emmanuel Alayande College of Education, Oyo*, 1-14.

- Bello, S. A. & Johnson, S. (2011). Role of ICT in Managing Higher Education for sustainable development. *Makerere Journal of Higher Education*, 3(1), 10 – 20. ISSN: 1816-6822.
- Fayol, H. (1916). 14 Principles of Management. Retrieved on 5<sup>th</sup> April, 2020 from: <http://byjus.com>.
- Krishnaveni, R. & Meenakumari, J. (2010). Usage of ICT for Information Administration in Higher Education Institutions. *International Journal of Environmental Science and Development*, 1(3), 282-286. ISSN:2010-0264. (Retrieved on 28<sup>th</sup> February, 2020 from <http://www.ijesd.org>).
- Liverpool, E. O. & Jacinta, A.O. (2013). Information and Communication Technologies (ICT): A Panacea to Achieving Effective Goals in Institutional Administration. *Middle-East Journal of Scientific research*, 18 (9), 1380-1384.
- Kwara State College of Education, Ilorin (2019). Retrieved on 13<sup>th</sup> October, 2019 from: <http://kwcoeilorin.edu.ng>.
- Ufuophu, E. & Ayobami, O. (2012). Usage of Information and Communication Technologies and Job Motivation among Newspaper Workers in Nigeria. *Journal of Communication and Media Research*, 4 (1). 126 – 129.