

Information and Communication Technology (ICT) And Administrative Performance of Principals': A Survey of Public Secondary Schools in Ilorin Metropolis, Nigeria

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Abstract

As, information and communication technology (ICT) is sweeping through the global world, there is the need for Nigeria and her educational administrators to keep abreast of the innovations and applications of ICT for performance of their daily administrative task and duties. However, studies directed in this regard were constraint in content and geographical scope. This study therefore examined the impact of ICT on secondary schools' principals' administrative performance in Ilorin metropolis, Kwara State. This study was anchored on the Technology Acceptance Model. The study was a descriptive research of a survey type. Stratified random sampling technique was used to select 135 participants (45 principals and 90 vice-principals) from 45 sampled public secondary schools. Data were collected using a structured questionnaire. Data collected were statistically treated with percentages, mean and Pearson product moment correlation (PPMC) statistics. Result obtained revealed that, the extent of ICT usage by secondary school principals was moderate (grand mean value of 2.90), while the level of principals' performance in the discharge of their routine administrative duties was also moderate (grand mean value of 2.65). Finding also revealed a significant relationship between the usage of ICT facilities and administrative performance of secondary school principals ($r\text{-cal } 0.631 > r\text{-tab } 0.195$). The study concluded that, although ICT has significant influence on performance of principals' administrative duties, its level of availability and usage led the researcher to conclude that secondary school principals in Nigeria are not yet ready for technological advancement or development.

Keywords: Information and Communication Technology, Principals', Administrative Performance.

Introduction

Globally, socio-economic and political developments are increasingly being driven by the advancement and application of knowledge (education). The structure of formal education in Nigeria is made up of Pre-Primary (Early Childhood), Basic (lower basic education: primary 1-3; middle basic education: primary 4-6; and upper basic education: JSS 1-3), Senior Secondary and tertiary education. However, the secondary level occupies a strategic position in the educational system, as it serves as the level of education that children obtain after primary education but before the tertiary education

(Federal Republic of Nigeria -FRN, 2013, p.18). In the light of this, secondary education is of six years duration, given in two stages: a junior secondary school stage; and a senior secondary school stage; which is three years duration each. The broad goal of secondary education is to prepare the individual for useful living within the society and higher education. The achievement of the above stated goals is however dependent on the extent to which secondary school principals who as the custodian are capable of implementing the needful processes in school administrative operations.

Apparently, the principal does not work in quarantine, as he/she is in a continuous harmony with the relevant education stakeholders like the Ministry of Education, Teaching Service Commission, school-based management board, teachers, parents and students. This is occasioned by the fact that the school is an interoperable system that is in constant association with the immediate environment. That is, the school receives its inputs from the external environment in the form of human and material resources, processes them and produces same into the environment. This makes the traditional management functions/tasks of the principal a complex dilemma. These functions, which include: planning, organising, communicating, decision making, coordinating/directing and evaluating (Shah, 2014) later metamorphose to curriculum development, staff professional development, instructional supervision, staff and student personnel management, Financial management, record management, conflict management, community relations, procurement and Management of facilities as well as support and referral services.

At this juncture, it is germane to note that, the principal cannot perform the aforementioned duties without accurate, timely, sufficient and relevant information. This is because of the cumbersome managerial processes associated with the storage, preservation and presentation of large volumes of the information in hard copy or paper form. Also, in all spheres of administrative task of the principal, technological advances are now needed (Ghavifekr, Afshare, Saedah, & Seger, 2013). Therefore, alternative techniques and methods provided by Information and Communication Technology (ICT) became very imperative. Specifically, for the principal to perform efficiently and effectively in this present computer evolution, he/she must rise up to the demer of adopting new technological infrastructures and equipment's (that is, ICT facilities) in the administration or management of the school. Corroborating, Ugwoke, Onu, Agangan and Ugwanyi (2015) stated that discovery of ICT has proven to be a very powerful tool in education reform; and that, in the present world, ICT can increase school efficiency/effectiveness and reduce unnecessary bottleneck in school administration.

With ICT, the secondary school head (principal) can discharge his/her duties by using computers, accessories and Internet in solving overall school administrative problems especially in carrying out his/her day-to-day managerial assignments. Specifically, ICT can play a major part in diminishing the work load of the administrator and his/her staff especially in keeping daily records of staff and students, providing prompt communication, analyzing students' attendance records, recording students results and analyzing overall students' performance. Through this, much time is saved and utilized in other directions for effective school administration. Despite the importance and innovation of ICT in the administration of schools, the administrative process in most Nigerian secondary schools, inclusive of those in Ilorin metropolis, Kwara State, is still slow and cumbersome, indicating possible unavailability and ineffective usage of ICT. In view of this, the researcher is curious to ascertain the extent to which ICT facilities are available and utilized for the effective discharge of statutory administrative tasks and duties by secondary school principals in Ilorin metropolis, Kwara State.

Statement of the problem

The state of administration in secondary schools in Ilorin metropolis and Kwara State in general has been a source of concern to its educational stakeholders. This concern has been hinged on the inability of the school principal to carry out their administrative routinely duties effectively as a result of the enormous increase in student enrolment, class size, students and teacher data, stringent resources and complex goals/objectives inherent in Nigeria secondary schools (Okon, Ekaette & Ameh, 2015; Salisu, 2014). All this called for the use of sophisticated equipment and facilities such as ICT for the processing of administrative task in schools. However, of much greater concern is whether or not Information and Communication Technology (ICT) facilities are readily available and adequately utilized for effective secondary school administration? This is not unconnected with the shortfall in the allocation of funds to Nigerian education sector by the government, the inability of secondary school administrators to keep up with the pace of development in ICT, the lack of the staff with appropriate skills to

manage ICT both at the strategic and operational levels (Adeyemi & Olaleye, 2010; Muchiri, 2014), epileptic electricity supply or complete absence of it in schools, and the weak institutional policies to support and guide the use of ICT. Observations in our secondary schools showed that, this shortfall could have serious consequences on the administrative effectiveness of secondary school principals'. This therefore, attracts the question: what extent does ICT facilities availability and utilization influence administrative performance of public secondary school principals in Ilorin metropolis, Kwara State?

Objectives of the study

Specifically, this study:

1. determined the level of availability of ICT facilities in secondary school in Ilorin metropolis;
2. examined the extent of ICT facilities usage for administrative purposes among secondary school principals' in Ilorin metropolis;
3. ascertained the level of principals' performance in the discharge of their routine administrative duties in secondary schools in Ilorin metropolis; and
4. Determine the relationship between the usage of ICT facilities and principals' administrative effectiveness in Ilorin metropolis secondary schools.

Research questions

In addressing the problem of this study, the following research questions were raised:

1. What is the level of availability of ICT facilities in secondary school in Ilorin metropolis?
2. What is the extent of usage of ICT facilities for administrative purposes among secondary school principals' in Ilorin metropolis?
3. What is the level of principals' performance in the discharge of their routine administrative duties in secondary schools in Ilorin metropolis?
4. Does the usage of ICT facilities have a significant relationship with administrative performance of secondary school principals' in Ilorin metropolis?

Literature review

Conceptualization of ICT

A number of scholars have viewed the concept of ICT from different perspectives and standpoints. The term information and communications technology (ICT) was said to have been introduced in the early 1990s to replace that of information technology (IT) in recognition of the communicating abilities and facilities offered by the computer. Egoeze, Misra, Akman and Colomo-Palacios (2014) reiterated this fact by stating that information and communication technology (ICT) is the convergence of communication, information and media technologies, which are based on the common digital technology. ICT can therefore be described as electronic device, equipment, or tool used for collection, processing, storage, retrieval or transfer of information, and its associated services. Salisu (2014) refers to ICT infrastructure as the hardware or equipment, software applications, and services associated with ICTs, including telecom networks. In view of this, Atunde (2011), and Egoeze, Misra, Akman and Colomo-Palacios (2014) categorized ICT into four (4) types, namely; communication technologies, network technologies, computer technologies and mobile technologies. Communication technologies include all media employed in transmitting audio, video, data or multimedia such as cable satellite, fibre optics, wireless (radio, infra – red, Bluetooth, Wi-Fi). Network technologies include: Personal Area Networks (PAN), Campus Area Network (CAN), intranets, extranets, Local Area Networks (LANs), Wide Area Networks (WANs) and the internet. Computer technologies are all the removable media such as optical discs, disks, flash memories, video books, multimedia projectors, interactive electronic boards, and continuously emerging state-of-the art personal computers (PCs). Mobile technologies such as mobile phones, Personal Digital Assistants (PDAs), palmtops, etc which have information as their material object are also used in e – learning.

Brinda, Mavengere Lewin and Passey (2016)

further categorized ICT into five groups as follows: computing facilities and services; film/tape-based facilities which include microfiche reader, micro card reader, microprint reader, slide projector, reel to reel recorder, tape recorder, and video machine; reproduction facilities like photocopying machine, and duplicating machine; telecommunication facilities e.g. telephone, GSM, telex, telegram, fax machine, and satellite; and broadcasting facilities like radio, television, cable transmission (e.g. Al-jazeera, BBC, CNN, Fox News, NTA Parliament). However, the extents to which an institution (secondary school) can provide all the necessary ICT facilities are a measure of the status of the institution. Unfortunately, recent report emanated that the readiness of ICT in the Sub-Saharan Africa is still very low with most countries experiencing strong lags in procurement of facilities because of the insufficient funds. The report also indicated that African countries suffer from severe weaknesses in all components of the index of ICT which ranges from poor connectivity caused by expensive and poor-quality ICT infrastructure to very low levels of basic skills and a weak framework for technology (Oyedemi, 2015). Generally speaking, a number of factors are said to have militated against the use of ICT in education in Nigeria. These have included such factors as lack of funding to support the purchase of the technology, lack of training, lack of motivation on the part of lecturers to adopt ICTs as teaching tools in the classroom instruction and so on (Adesina, 2015; Oluwalola, 2017).

Principal administrative performance

The term 'principals' administrative performance' and the instruments for its measurement have generated a lot of controversy the world over. Thus, in order to understand the concept, it is foremost to understand these three concepts, namely: 'principal' 'administration' and 'effectiveness'. At the head of every secondary school in Nigeria is the Principal, who is regarded as the Chief Executive and responsible for all that happens in the school. According to Anukam, Okunamiri and Ogbonna (2012), the principal is the individual who plans and implements the daily routines within an education setting. A principal is also an individual who has a hand in

government grants and funding acquisitions and is in the best position to know all the materials the school needs and the best ways in which to obtain these materials from governmental entities. In specific terms, Arikewuyo (2009, p.35) adduced that the functions of the Principal are to: manage and deploy school resources efficiently; allocate school accommodation appropriately; ensure satisfactory standards of maintenance and cleanliness of school facilities; organize staff development in school; guide curriculum implementation and change; and create a professional ethos within the school. In carrying out these functions, Adeniyi and Omoteso (2014) contended that principals are to demonstrate his/her ability to lead through: professional knowledge; organizational and administrative competence; ability to work out a good school policy and put it into effect; skill in the management of the school.

Administration is a global concept of universal importance. According to Adeniyi and Omoteso (2014), administration as the co-ordination of human being and materials within an organization for the accomplishment of identified purposes. Administration also connotes such activities as implementation of organizational decisions and goals as well as the systematic study of these activities.

The National Open University of Nigeria (2014) posited that administration consists of those activities that are related to the general administrative operations and services of an institution. These activities include: the administration of personnel, programme, facilities and space management, purchase and maintenance of supplies and materials, communication and transportation services, health and safety. Thus, administration involves the mobilization, deployment and direction of human and material resources to attain the specified objectives.

The concept of performance is not easy to define and to understand. With the term effectiveness, other terms like effectiveness, efficiency, productivity and competency are generally used as synonyms. As noted by Atunde (2011), performance is the extent to which desired outcomes have been produced through duties exercised by the headship of an institution. Oyedele (2012) considered performance as an end product in terms of results and productivity. Okon, Akpan and

Ukpong (2013) referred to performance as the level of achievement based on the available resources, time and situation. Performance therefore implies the discharge of prescribed statutory duties or functions by principals, which are geared towards the attainment of school set objectives. From the foregoing, administrative performance is described as the positive response to administrative efforts and actions with the intention to accomplish stated goal; the administrative performance in decision making; delegation of duties to subordinates; and setting good examples and motivating the staff (academic and non academic) and students alike in an effort to create a conducive working environment to accomplish school goal and objective (Ereh & Okon (2015).

This implies that effective administration involves the achievement in many of the day-to-day management issues which are of practical and paramount importance to the school. In view of this, the tasks of proactive secondary school administrators include among other things, coordinating both human and material resources available and using them systematically for the achievement of educational objectives.

Thus, principal's administrative performance is the systematic coordination of human, material and financial resources by principals for the achievement of the day-to-day administrative issues in order to achieve the predetermined goals of secondary education.

Studies on ICT and principal's administrative performance

Several surveys have been designed in recent years to gather information on the extent to which schools are developing the capacity to integrate ICT into learning, teaching, and management processes. Oboegbulem and Ugwu (2013) identified the role of ICT in school among 30 schools in the south eastern states, comprising Abia, Anambra, Ebonvi, Enugu, and Imo states with ICT and Internet facilities.

The findings showed among others that the use of ICT in school administration is a necessity and worthwhile venture especially in this era of globalization, but the extent of their application in secondary schools is very slow as school administrators are incompetent in handling ICT facilities for effective administration of schools. An ex-post facto research (Okon, Ekaette & Ameh, 2015)

conducted among 255 principals from eighty-five (85) public secondary schools in Akwa Ibom State, Nigeria reported that a significant relationship between ICT usage in the communication process and record keeping, and principals' administrative effectiveness.

Findings from another study conduct in similar study setting by Oyedemi (2015) on the perspective of 120 administrators' towards using ICT for effective school management in Ilesa Local Government area in Osun State indicated that school administrators have a positive perspective towards the use of ICT tools in effective school management by solving the problem of poor communication in schools and achieving effective planning. In another similar study conducted in Osun State, Subair and Bada (2014) among 100 principals in public secondary schools, it was reported that school administrators are aware of the importance of ICT in school administration, but the major challenge is the lack of the required skill and knowledge to use these facilities.

Also, it was revealed that majority of the schools lacked the required ICT resources hence very few principals could apply the ICT resources for administrative purposes. In addition, the study found that majority of the principals relied on print technology for various administrative purposes. Etudor-Eyo, Ante, and Emah (2012) studied the use of ICT and communication effectiveness among 396 secondary school administrators in Akwa Ibom State, Nigeria.

The findings were that the extent of administrators' use of ICT and the extent of administrators' effectiveness in communication are high; there is a significant positive relationship between administrators' use of ICT and administrators' effectiveness in communication; the effectiveness of secondary school administrators in communication is significantly predicted by the use of ICT. From the foregoing empirical review, a small body of knowledge exists alluding to ICT and administrative performance in the study area (Ilorin metropolis) and the geo-political region (North-Central geo-political zone), it is situated in Nigeria. Besides, one of the major limitations of existing research, which warrant the need for further research, is the content coverage of these studies.

In addition, the literature surveyed shows that even though there are a lot of studies on this research endeavour, the results do not show any cohesiveness regarding the association between the variables under study. These observations indicate a clear gap in the literature, which this current study intends to fill.

Theoretical underpinning

This study was therefore hinged on the Technology Acceptance Model (TAM) proposed by Fred Davis in 1985 at the MIT Sloan School of Management. TAM is one of the models that have been developed to provide a better understanding of the usage and adoption of information communication and technology. It is presently a prominent theory used in modeling technology acceptance and adoption in Information systems research. TAM is an information systems theory that models how users come to accept and use a technology that will encourage economic growth. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it.

The factors are; perceived usefulness (PU) and perceived ease-of-use (PEOU). According to TAM, one's actual use of a technology system is influenced directly or indirectly by the user's behavioral intentions, attitude, perceived usefulness of the system, and perceived ease of the system, all which have evolution on previous organization's process.

Methodology

The design of this study is a descriptive research of survey type, aimed at ascertaining influence of ICT on principals' administrative performance. This is in line with Atunde (2011) who remarked that descriptive research gives the researcher the opportunity of sampling the opinions of significant large number of samples from the study population so as to make inferences and generalization with the responses obtained. The area of study is Ilorin Metropolis, Kwara State. The study was carried out among principals' and vice-principals' in secondary schools in Ilorin Metropolis. The Metropolis is made up of three Local Government Areas (LGAs) namely: Ilorin West, Ilorin South and Ilorin East. Ilorin Metropolis has a total of 75

public secondary schools (Kwara State Ministry of Education and Human Capital, 2018).

The population of this study was 292 comprising of 75 principals 217 vice-principals in all the 75 public secondary schools in Ilorin Metropolis. By means of stratified random sampling technique, 45 out of the 75 public secondary schools (that is 15 schools were selected from each of the LGAs) in Ilorin Metropolis were sampled. Also, the Principal and two vice-principals were selected from each of the 45 public secondary schools used for this study. This brought the total of respondents that was used to 135.

The instrument for data collection was a structured, validated and pretested (reliability coefficient values of 0.85, 0.74 and 0.71 were obtained for sections B, C, and D respectively) questionnaire titled "Information Communication Technology and Principal's Administrative Effectiveness Questionnaire (ICTPAEQ)". The questionnaire is made up of two parts, part A and B. Part A consist of items seeking the personal information of the respondents. Part B consists of four sections (A – D). Section A consists of 15 items, which was used to know the availability of ICT equipment in the schools. Section B consists of 10 items used to obtain information on the extent of ICT usage by principals. Section C contains items soliciting information from respondents on how effective they are in carrying out their administrative duties with the use of ICT equipment's. Section D comprises items for gathering information on the constraints to the effective usage of ICT in secondary schools. The responses on the questionnaire were structured on 'Available', 'Not Available' for section A; 'Frequently Used', 'Occasionally Used', 'Seldom Used' and 'Not Used' for section B; and "Strongly Agree", "Agree", "Disagree", "Strongly Disagree" for sections C and D.

The researcher, with the help of three research assistants, administered the questionnaire directly on the subjects. The direct approach gave room for timely completion and return of the completed copies of the questionnaire. This questionnaire administration gave a 96.3% response rate (that is 130 out of 135 administered questionnaires were returned and filled correctly). Data collected from the field was analyzed using relevant descriptive

statistics such as percentages, mean and standard deviation to answer research questions 1, 2, 3 respectively, while Pearson Product Moment Correlation (PPMC) statistics was used to answer research question 4.

Results and discussion of findings

The results of this study were presented in tables according to the individual research questions.

Research question 1. What is the level of availability of ICT facilities in secondary school in Ilorin metropolis?

In interpreting the response of respondents on the level of availability; if the overall percentage score is between 75% and 100%, it is interpreted as High; if the overall percentage score is between 50% to 74%, it is interpreted as Moderate; and if the overall percentage score is < 50.0%, it is interpreted as Low.

Table 1. The level of availability of ICT facilities in secondary school in Ilorin metropolis

S/N	Items	Available	n = 130
		F & %	Not Available F & %
1.	Computer (Desktop)	84(64.6%)	46(35.4%)
2.	Printer	78(60.0%)	52(40.0%)
3	Internet Services	72(55.4%)	58(44.6%)
4	Projector	24(18.5%)	106(81.5%)
5	Projector Screen	24(18.5%)	106(81.5%)
6	Xerox Machines/Photocopying machine	70(53.8%)	60(46.2%)
7	Scanning Machine	48(36.9%)	82(63.1%)
8	Computer Accessories	79(60.8%)	51(39.2%)
9	Software	33(25.4%)	97(74.4%)
10	Radio	104(80.0%)	26(20.0%)
11	Television	37(28.5%)	93(71.5%)
12	Satellite Disc	31(23.8%)	99(76.2%)
13	Handset/Mobile Phone	130(100.0%)	-
14	Laptop	38(29.2%)	92(70.8%)
15	Fax Machine	-	130(100.0%)
	Overall	43.7%	56.3%

Source: Field Survey, 2019

As indicated in Table 1, the level of availability of Information and Communication Technology (ICT) facilities in the sampled secondary schools was low (43.7%). Most of the ICT facilities were in short supply in majority of secondary schools. The short fall varied from 0% for Fax Machine to 18.5% for projector and projector screen to 25.4% for software program and 23.8% for Satellite Disc. Desktop computer set which should be a common feature in all administrative offices was found to be unavailable in 35.4% of the secondary schools. However, of all the ICT facilities available in public secondary school in Ilorin metropolis, the mobile phone (130 or 100.0%) and radio (80.0%) were the most available.

Research Question 2. What is the extent of usage of ICT facilities for administrative purposes among secondary school principals' in Ilorin metropolis?

In analyzing research question 2, mean computation was utilized. Based on this, means score of above 2.5 were regarded as accepted responses while below Mean score below 2.5 were classified as non-accepted responses (rejected). The individual and grand mean score were interpreted as follows: 3.25 – 4.00 were classified as High Extent (HE), 2.50 – 3.24, indicated Moderate Extent (ME); and mean values < 2.50 were classified as Low Extent (LE).

Table 2. Extent of usage of ICT for administrative purposes among secondary school principals' in Ilorin metropolis

S/ N	Items	n = 130		
		Mean	S. D	Decision
16	Computer for processing and storage of data for effective management	3.30	0.78	HE
17	Printers for printing of documents	2.75	0.75	ME
18	Internet services for browsing	2.64	0.73	ME
19	Handset for passing information on latest update on school issues to staff, parents and students.	3.96	0.94	HE
20	Scanners for scanning passport, documents etc.	2.19	1.12	LE
21	Radio for assessing the current and up-to-date happenings or information across the globe	3.50	0.85	HE
22	Computer accessories like flash drive for storage of data and information.	2.89	0.78	ME
23	Satellite disc for distance viewing of foreign programmes	2.46	1.03	LE
24	Photocopy machine for reproduction of staff, students and school documents	3.27	0.85	HE
25	Software like Microsoft Office and Corel Draw for typing and designing.	1.98	1.07	LE
	Overall Mean	28.95	8.90	
	Grand Mean	2.90	0.89	Moderate Extent

Source: Field Survey, 2019

Table 2 indicates the extent of usage of ICT for administrative purposes among secondary school principals' in Ilorin metropolis. The table shows that the mean scores 3.96, 3.50, 3.30 and 3.27 on items 19, 21, 16 and 24 respectively indicates that to an high extent principals use: handset for communication between principal and staff, principal and students as well as staff and students; radio for listening to latest happenings around the globe; computer for typing, processing and storage of data for effective management; and photocopy machine for reproduction of documents. Also, the mean values of 2.89, 2.75 and 2.64 on items 22, 17, and 18 respectively indicates that to a moderate extent principals use: computer accessories for processing data; printers for printing of documents; Internet services for browsing. However, mean values of 2.46, 2.19 and 1.98 on items 23, 20 and 25 respectively indicates that to a low extent principals use: satellite disc for distance viewing of foreign programmes;

scanners for scanning passport, documents etc.; and software of different types. Consequently, the grand mean value of 2.90 revealed that principals in public secondary schools in Ilorin metropolis to a moderate extent utilize ICT for administrative purposes.

Research Question 3. What is the level of principals' performance in the discharge of their routine administrative duties in secondary schools in Ilorin metropolis?

In analyzing research question 3, mean computation was utilized. Based on this, means score of above 2.5 were regarded as accepted responses while below Mean score below 2.5 were classified as non-accepted responses (rejected). The individual and grand mean score were interpreted as follows: 3.25 - 4.00 were classified as Highly Level (HL); 2.50 - 3.24, indicated Moderately Level (ML); and mean values < 2.50 were classified as Low Level (LL).

Table 3. Level of principals' performance in the discharge of their routine administrative duties in secondary schools in Ilorin metropolis

S/N	Items	n = 130		
		Mean	S. D	Decision
26	Storing information that can be updated on personal data of staff/ or students.	2.60	0.81	ML
27	Writing and dispatching mails	3.09	0.60	ML
28	Browsing the Internet for up-to-date information	3.29	0.74	HL
29	Storing of inventory of school properties that can be updated at any point in time	1.75	1.04	LL
30	Designing/ or printing of students' results and testimonial.	2.42	0.91	LL
31	Admission and registration of new and existing students.	2.95	0.69	ML
32	Online registration of students for public examinations.	2.64	0.71	ML
33	Early preparation of school budget.	2.56	0.73	ML
34	Storage and retrieval of students' disciplinary records.	2.80	0.82	ML
35	Preparation of school internal memos	2.63	0.78	ML
36	Preparing teachers work load	2.75	0.75	ML
37	Preparation of school time table	2.70	0.81	ML
38	Dissemination of information within and outside the school.	2.85	0.78	ML
39	Compilation of student academic results	2.66	0.77	ML
40	Maintenance of accurate academic records of students.	2.24	1.02	LL
	Overall Mean	39.79	11.26	
	Grand Mean	2.65	0.75	ML

Source: Field Survey, 2019

Findings from table 3 revealed that the grand mean value of 2.65 is above the criterion limits of 2.50. This indicates that the performance of secondary school principals' in the discharge of their routine administrative duties was at

moderate level.

Research Question 4. Does the usage of ICT facilities have a significant relationship with administrative performance of secondary school principals' in Ilorin metropolis?

Table 4. Correlations between usage of ICT facilities and administrative performance

Descriptive Statistics			
	Mean	Std Deviation	N
Usage of ICT	28.9523	8.90304	130
Administrative Performance	39.7853	11.25708	130
Correlations			
		Usage of ICT	Administrative Performance
Usage of ICT	Pearson Correlation	1	0.631
	Sig. (2-tailed)		0.000
	N	130	130
Administrative Performance	Pearson Correlation	0.631	1
	Sig. (2-tailed)	0.000	
	N	130	130

**Correlation is significant at the 0.05 level (2-tailed).

As indicated in table 4, the calculated r- value (0.631) is greater than the critical r-table value (0.195) at 0.05 significance levels for 128 degree of freedom. Hence, the null hypothesis is

rejected. This shows that there was significant positive relationship between the usage of ICT facilities and administrative performance of

secondary school principals' in Ilorin metropolis.

Discussion of findings

Findings of this study show that, the level of availability of information communication and technology (ICT) facilities in public secondary schools in Ilorin metropolis was low. This finding was consistent with an earlier study by Adeyemi and Olaleye (2010) who found out that the level of provision of ICT equipment to secondary schools in the Ekiti State was low. This finding also corresponds with that of Subair and Bada (2014) who reported that majority of public secondary schools in Osun State lacked the required ICT resources hence very few principals could apply the ICT resources for administrative purposes.

Findings from the second research question revealed that usage of ICT for administrative purposes by secondary school principals in Ilorin metropolis was to a moderate extent (grand mean value of 2.90). This finding might be attributed to the availability of these ICT facilities which were in short supply in most of the schools. The study of Adeyemi and Olaleye (2010) who reported that the level of usage of ICT equipment by secondary school principals in Ekiti State was low negates the findings of this study.

The present study also discovered that the performance of principals' in discharging their prescribed administrative responsibilities was moderately. This finding might not have been unconnected with the problem of shortage of ICT equipment in the schools as well as their moderate usage of the available ICT facilities. This finding is therefore was consistent with those of earlier researchers (Makewa, Eremo, Role & Role, 2013) but contradicts that of Adeyemi and Olaleye (2010) who observed that the level of management of secondary schools in Ekiti State Nigeria was low.

In furtherance, findings indicated that, the utilization of Information and Communication Technology (ICT) facilities had a significant association with administrative performance of principals. This suggested that, the more secondary school principals utilize of ICT facilities, the better their performance administratively. This further suggests that, without ICT effective management of secondary schools could be in jeopardy. This finding is in

line with that of Oboegbulem and Ugwu (2013) who reported that, the application of ICT in school administration is a necessity and worthwhile venture especially in this era of globalization, but the extent of their application in secondary schools is very slow as school administrators are incompetent in handling ICT facilities for effective administration of schools in the South Eastern states of Nigeria. This finding also agreed with those of Etudor-Eyo, Ante, and Emah (2012), Okon, Ekaette and Ameh (2015) and Oyedemi (2015) which reported a considerable influence of ICT on the effective management of secondary schools.

Conclusion and recommendations

Considering the findings of this study, it was concluded that, Information and Communication Technology (ICT) has significant influence on secondary school principals' administrative performance in Ilorin metropolis. This suggested that, ICT is a critical variable in the effective management of secondary schools. However, the level of availability and usage of ICT facilities which were found to be moderate has led the researcher to conclude that secondary schools in Nigeria are not yet ready for technological development.

Based on the findings of this study, the following recommendations were made

1. Government should make ICT tools available in all secondary schools in order to enhance it proficiency and usage among secondary school administrators (principals).
2. Improved training should be organized from time to time by the Governments and NGOs (Non-Governmental Organizations) for school administrators who are not yet ICT literate. This can be delivered by organizing workshops, seminars and conferences. In such workshops/seminars, the principals should be advised to come with their own lap tops to enhance practical-oriented training and skill acquisitions.

References

- [1]. Adeniyi, W. O. & Omoteso, B. A. (2014). Emotional intelligence and administrative effectiveness of secondary school principals in Southwestern Nigeria. *International Journal of Psychology and Behavioral Sciences*, 4(2), 79-85. DOI: 10.5923/j.ijpbs.20140402.03.

- [2]. Adesina, M. O. (2015). ICT: Its relevance in the teaching and learning of physical education in Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 6(3), 236-239. Available at: <https://jeteraps.scholarlinkresearch.com>.
- [3]. Adeyemi, T. O. & Olaleye, F. O. (2010). Information communication and technology (ICT) for the effective management of secondary schools for sustainable development in Ekiti State, Nigeria. *American-Eurasian Journal of Scientific Research*, 5 (2), 106-113.
- [4]. Anukam, I.L., Okunamiri, P.O., & Ogbonna, R.N.O. (Eds.). (2012). *Basic Text on Educational Management*. Nigeria: Eehech Versatile.
- [5]. Arikewuyo, M. O. (2009). Professional training of secondary school principals in Nigeria: A neglected area in the educational system. *Florida Journal of Educational Administration and Policy*, 2 (2), 73-84.
- [6]. Atunde, M.O. (2011). *Influence of management information system on academic staff effectiveness in Kwara State colleges of education*. M.Ed Thesis, Faculty of Education, National Open University of Nigeria, Abuja.
- [7]. Brinda, T., Mavengere N., Lewin, C. & Passey, D. (Eds.) (2016). *Stakeholders and information technology in education: IFIP TC 3 International Conference, SaITE 2016, Guimaraes, Portugal, July 5 – 8, 2016, Revised Selected Papers*. (IFIP Advances in Information and Communication Technology, vol. 493). Heidelberg, Germany: Springer.
- [8]. Egoeze, F., Misra, S., Akman, I. & Colomo-Palacios, R. (2014). An evaluation of ICT infrastructure and application in Nigeria Universities. *Acta Polytechnica Hungarica*, 11 (9), 115 - 122.
- [9]. Ereh, C.E. & Okon, N.N. (2015). Keeping of teachers' records and organizational effectiveness in Akwa Ibom State Secondary Schools, Nigeria. *International Journal of Education, Learning and Development*, 4 (1), 40-44. Available at: www.eajournals.org.
- [10]. Etudor-Eyo, E., Ante, E.A. & Emah, I.E. (2012). The use of ICT and communication effectiveness among secondary school administrators. *EDUCARE: International Journal for Educational Studies*, 4(2), 125 -135.
- [11]. Federal Republic of Nigeria (2013). *National policy on education*. Abuja: NERDC Press.
- [12]. Ghavifekr, S., Afshare, M., Saedah, S. & Seger, K. (2013). ICT application for administration and management: A conceptual review. *Procedia - Social and Behavioral Sciences*, 103, 1344 – 1351. Available online at: www.sciencedirect.com.
- [13]. Makewa, L., Eremo, J., Role, E. & Role, J. (2013). ICT in secondary school administration in rural southern Kenya: An educator's eye on its importance and use. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 9 (2), 48-63.
- [14]. Muchiri, G.M. (2014). *Factors influencing school principals' integration of ICT in administration of public secondary schools in Githunguri Sub County, Kiambu County, Kenya*. M.ED thesis, University of Nairobi, Kenya.
- [15]. NOUN (2014). *Course material on theories and practice of public administration (PAD 813)*. Abuja: National Open University of Nigeria Press. ISBN:978-058-914-7
- [16]. Oboegbulem, A. & Ugwu, R.N. (2013). The place of ICT (information and communication technology) in the administration of secondary schools in South Eastern States of Nigeria. *US-China Education Review A*, 3 (4), 231-238.
- [17]. Okon, F. I., Akpan, E. O. & Ukpung, O. U. (2011). Financial control measures and enhancement of principals' administrative effectiveness in secondary schools in Akwa Ibom State. *African Journal of Scientific Research*, 7 (1), 335-342.
- [18]. Okon, J. E., Ekaette, S. O. & Ameh, E. (2015). Information and communication technology (ICT) utilization and principals' administrative effectiveness in public secondary schools in Akwa Ibom State, Nigeria. *African Educational Research Journal*, 3(2), 131-135.
- [19]. Oluwalola, F. K. (2017). Record keeping, information and communication technology (ICT) in school management. In Olubor, R.O., Abdulkareem, A.Y., Alabi, A.T., Adeyanju, F. (eds.). *Educational management: New perspectives*. Nigeria: Amfitop Books.
- [20]. Oyedemi, N.B (2012). *Management in education: principles and practice (Revised Edition)*. Ilorin: Success Educational Services.
- [21]. Oyedemi, O.A. (2015). ICT and effective school management: Administrators' perspective. Proceedings of the World Congress on Engineering, July 1 - 3, 2015, London, U.K.
- [22]. Salisu, R.O. (2014). *Information and communication technology (ICT) and registrars' administrative effectiveness in Kwara State Colleges of Education*. M.Ed Thesis, Faculty of Education, National Open University of Nigeria.
- [23]. Shah, M. (2014). Impact of management information systems (MIS) on school administration: What the literature says. *Procedia - Social and*

Behavioral Sciences, 116, 2799 – 2804. Available online at: www.sciencedirect.com.

[24]. Subair S.T. & Bada T.A. (2014). Information communication technology and public-school administration in Osun State, Nigeria. *International Journal of Social Science and Education*, 4 (4), 782 - 791.

[25]. Ugwoke, S.C., Onu, O., Agangan, M. A. & Ugwanyi, J. (2015). Principals challenges in the use of ICT in secondary school administration in Nigeria. *SAUSSUREA*, 5 (6), 132 – 149.