

AVAILABILITY AND UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY FACILITIES FOR ADMINISTRATIVE PURPOSES IN PUBLIC AND PRIVATE SECONDARY SCHOOLS IN ILORIN METROPOLIS

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Abstract

The availability and utilization of information and communication technology facilities in carrying out administrative tasks in secondary schools cannot be undermined. The researcher adopted descriptive survey design for the study. The population for the study comprised secondary school principals and their assistants in both private and public within Ilorin metropolis while ten schools were selected each as sample. The sample consists of 100 teachers, that is, 5 teachers from each school. A research instrument titled “Availability and Utilization of ICT Facilities Questionnaire” (AUICTFQ) was employed to elicit relevant data from the respondents. This study was guided by two research questions. The research questions raised for the study were answered with descriptive statistics of percentages while t-test was used as statistical tool for testing the two hypotheses at 0.05 level of significance. The study found that a significant difference exists in the availability and utilization of ICT facilities for administrative purposes in the two independent groups i.e private and public secondary schools in Ilorin metropolis. The findings showed further that ICT facilities like computer, laptop, photocopying machine, and printer are highly available in the public and private schools while some ICT facilities such as projector and scanner are less available in public and private secondary schools in Ilorin metropolis of Kwara State. In line with what was found out in this study, it was recommended that school principals, the government, and relevant stakeholders such as parent teacher association should seek to the provision of these facilities as this will help to improve the administrative functions of secondary schools.

Keywords: Availability, Utilization, Information and communication technology facilities, Administrative purposes

Introduction

The advent and use of ICT in carrying out administrative functions in schools cannot be overemphasized. ICT facilities are very germane for administrative purposes of any institution because its utilization will bring about improved performance. Ofodu (2007) opined that ICT is seen as electronic or computerized devices that assist school operations. School is an institution of learning designed primarily for effective teaching of students by teachers, so its administration goes a long way to determine its success or failure. School administrators are saddled with the day to day management of the various units and ensure the smooth communication and transfer of information among the different components of the school. With regards to the above statement, ICT have become important components of school management in Nigeria. The place

of ICTs in school management today cannot be over-emphasized. The incorporation of ICT in the management of schools in Nigeria has been regarded by many stakeholders in the education sector as a right step in the right directions based on the positive effects it has on the operations of the school.

Information and communication technology (ICT) is an indispensable part of the contemporary world. The field of education has not been unaffected by the penetrating influence of information and communication technology. Horn and Siew (2011) and Hashim (2010) opined that ICTs utilization are also recognized to make impact in the administrative and management activities of educational institutions. According to Zain (2004), ICTs utilization helps school administrators perform school duties effectively. Information and communication technology can make the school more efficient and productive, thereby engendering a variety of tools to enhance and facilitate administrators' effectiveness (Kirschner & Woperies, 2003). Gulbahar (2007) stated that ICT utilization increase and provide information to the finger tips of administrators and build very conducive atmosphere for work.

The uses of ICT for administrative purposes have been researched by a lot of scholars in the field of education. Ahmed (2011) was of the opinion that ICT can be used to maintain the personal record of school personnel. According to him, ICT can be useful in maintaining the record of enrolment and attendance/leave information. Application of ICT in student personnel services will enhance administrative work, reduce occupational stress and improve students' academic performance (Adomi & Kpangban, 2010). Adeyemi (2010) emphasized that the prominent role of ICT could be seen in advancing knowledge and skills necessary for effective functioning in the modern world. Niyaz (2011) opined that the application of ICT is necessary in areas of collection of students' data, recording of students results and for effective keeping of students' records.

A study to investigate teachers and administrators' perceptions on the importance of Information and Communications Technologies (ICT) in secondary school administration in rural southern Kenya was conducted by Lazarus, Jackson, Elizabeth and Jesse (2013). The major findings of the study are that both teachers and administrators viewed the use of ICT in secondary school administration as important. It was also found out in the study that ICT is important in areas such as computerizing financial systems, fee payment and analysis, income projections, school financial monitoring and planning for prudent decision making in administration. It was also found out from this study that ICT has a dominant position in education; it aids decision-making process and facilitates the effectiveness of administrative services.

A study to established school administrators use of Information and Communication Technologies (ICT) was conducted in Brunei Darussalam by Afzaal (2012). The major findings of the study indicate that majority of the school administrators have intermediate level of computer expertise and possess an adequate computer literacy. It was also found out in the study that school administrators use ICT for administrative purposes. A study to investigate the application of information and communication technology in Nigerian secondary schools was

conducted by Ajayi and Ekundayo (2009). Findings of the study revealed that ICT facilities were lacking in schools and teachers and students were to a little extent exposed to the use of ICT. Findings of the study further revealed some of the challenges facing ICT in secondary schools as: irregular power supply; inadequate computer literate teachers; high cost of purchasing computers in schools; inadequate facilities to support full application of the ICT and lack of fund.

Adeyemi and Olaleye (2010) carried out a study to investigate the use of information communication and technology (ICT) for effective management of secondary schools in Ekiti State, Nigeria. It was found in the study that the level of provision of ICT equipment to secondary schools in the State was low. The study further revealed that intermittent disruption of electricity and inadequate funding were found as major problem inhibiting the usage of ICT equipment for the management of schools in the State. Asibiaka (2010) investigated the access and use of information and communication technology for administrative purposes by Principals of Government Secondary Schools in Imo State, Nigeria. Findings revealed that majority of the principal never used the broadcast/audiovisual and telecommunication/computer technologies for administrative purposes. Furthermore, findings also showed that majority of the principals used print technology for various administrative purposes.

Statement of the Problem

A lot of studies have been carried out by researchers in the past on ICT and its uses in educational institutions at the basic education level, secondary level and tertiary level. But it seems the results on it are inconclusive. Despite the wide range of opportunities brought by the advent of ICT in most schools, it seems there still exist in secondary schools in Ilorin metropolis a lot of administrative inadequacies in the areas of staff administration, students' administration and general administration of the school. This study therefore was carried out to assess the availability and utilization of ICT for administrative purposes in public and private secondary schools in Ilorin Metropolis of Kwara State, Nigeria.

Theoretical Framework

The theoretical framework guiding this study is the system theory of management. In its simple meaning, a theory refers to a set of established principles upon which an action may be predicted. This theory therefore places much emphasis on the interrelatedness and interdependence of all administrative units within the organization. In the light of this, this study views secondary schools as a social system with open subsystems that emphasize the interdependence and interrelatedness of all its administrative which can be facilitated by the utilization of information and communication technology.

The incorporation of ICT into the day-to-day functions of educational institutions has a marked impact on every aspect of management structure and dynamics. It means the study on ICT utilization in the schools would not have been exhaustive if the social and technical aspects were not considered in their entirety explaining the reason for the adoption of the socio-technical approach in the study based on the systems theory as espoused by Kast and Rosenzweig (1985).

Therefore, theoretical framework forms the basis upon which the findings of a study and its discussions hang on. It stands on the bedrock and the needed foundation upon which one can conveniently build on. As stated earlier, this was chosen to guide this study due to its all encompassing nature to get the total picture of the factors that influence ICT utilization in schools, as this avoids an overemphasis of some elements over others.

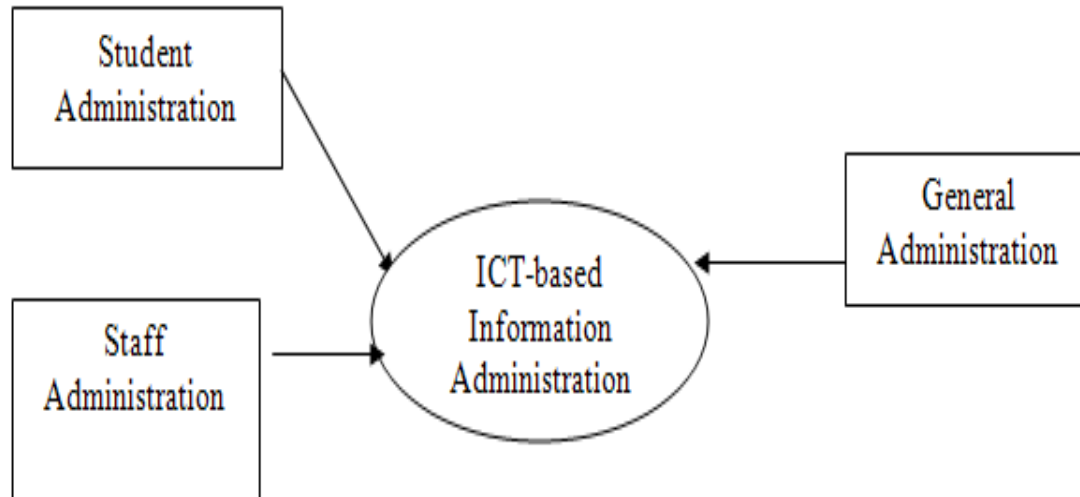


Figure 1: Theoretical model for Information Administration.

Source: Adapted from Christian Maki (2008). "Information and Communication Technology for Administration and Management for Secondary Schools in Cyprus".

Purpose of the Study

The major purpose for carrying out this study was to compare the availability and utilization of ICT facilities for administrative purposes in selected private and public secondary schools in Ilorin Metropolis of Kwara State. Specifically, the study compared the:

- i. ICT facilities available in private and public secondary schools for administrative purposes in Ilorin metropolis of Kwara State.
- ii. level of utilization of ICT facilities in private and public secondary schools for administrative purposes in Ilorin metropolis of Kwara State.

Research Questions

For the study to have a focus, two research questions were raised for the study.

- i. What are the ICT facilities available for administrative purposes in the two schools under consideration?
- ii. What is the level of utilization of ICT facilities for administrative purposes in the two schools under consideration?

Research Hypotheses

Ho1: There is no significant difference in the ICT facilities available for administrative purposes in Private and Public Secondary Schools in Kwara State.

Ho2: There is no significant difference in the level of utilization of ICT facilities for administrative purposes in Private and Public Secondary Schools in Kwara State.

Methodology

Research Design

The design found most suitable for this study was a descriptive survey design because it established the difference between the availability and utilization of ICT facilities in the two independent groups i.e. private and public secondary schools in Ilorin Metropolis, Kwara State. All the secondary schools in Ilorin Metropolis constituted the population of the study. A simple random sampling technique was employed to select 10 public and 10 private secondary schools in Ilorin metropolis. The school principals and their assistants were purposively selected and used as respondents that answered the items of the questionnaire. In all 100 respondents participated in this study that is 50 from the private and 50 from public secondary schools.

A researcher-designed questionnaire titled “Availability and Utilization of ICT Facilities Questionnaire” (AUICTFQ) was developed and used for data collection for this study. The questionnaire was made up of three sections in line with the objectives of the study. Section A sought information on the type of the school of the respondents while Section B contained statements on the ICT facilities available for administrative purposes. Section C contained statements on the level of utilization of ICT facilities for administrative purposes. The rating scale adopted for section B was “Available, Fairly Available and Not Available” while the rating scale for section C was “Most Often Utilized, Often Utilized, Rarely Utilized and Not Utilized. This instrument was validated by lecturers in the Department of Educational Management, University of Ilorin for both face and content validities. Thereafter, the reliability of the instrument was carried out by using test re-test method by administering copies of the questionnaire to respondents of secondary school outside the sampled schools at an interval of two weeks. The co-efficient of reliability obtained was 0.58. Analysis of data was carried out using frequency and percentage, mean and t-test statistics at 0.05 alpha level.

Results

Research Question 1: What are the ICT facilities available for administrative purpose in private and public secondary schools in Ilorin Metropolis of Kwara State?

Table 1: Percentages and Mean Showing the ICT Facilities Available in private and public secondary schools in Ilorin Metropolis of Kwara State

S/N	Variable	A	Private		$\bar{X}$
			FA	NA	
1	Computer	43 (86%)	3 (6%)	4 (8%)	3.98
2	Laptop	15 (30%)	3 (6%)	32 (64%)	1.66
3	Scanner	33 (66%)	6 (12%)	11 (22%)	2.74
4	Photocopier	38 (76%)	4 (8%)	8 (16%)	2.68
5	Printer	38 (76%)	6 (12%)	6 (12%)	2.64
6	Projector	28 (56%)	6 (12%)	16 (32%)	2.58
7	Internet	20 (40%)	6 (12%)	24 (48%)	1.92
	Grand Mean				2.55
Public					
1	Computer	34 (68%)	11 (22%)	5 (10%)	2.58
2	Laptop	10 (20%)	1 (2%)	39 (78%)	1.42
3	Scanner	14 (28%)	7 (14%)	29 (58%)	1.70
4	Photocopier	22 (44%)	13 (26%)	15 (30%)	2.66
5	Printer	21 (42%)	12 (24%)	17 (34%)	2.59
6	Projector	7 (14%)	5 (10%)	38 (76%)	1.38
7	Internet	11 (22%)	6 (12%)	33 (66%)	1.56
	Grand Mean				1.98

Source: Fieldwork, 2018

Key: A (Available), FA (Fairly Available) and NA (Not Available)

Table 1 shows the percentage and mean of the information and communication technology facilities available for administrative purpose in private and public secondary school schools in Ilorin Metropolis of Kwara State. It is evidenced from the findings that computer, scanner, photocopier, printer and projector with a mean scores of 3.98, 274, 268, 2.64 and 2.58 were found to be available in private secondary schools in Ilorin Metropolis of Kwara State while laptop and internet were found to not be available in private secondary schools in Ilorin Metropolis of Kwara State. Also, ICT facilities in computer, photocopier and printer were found to be available while laptop, scanner, projector and internet were found not be available. Hence, the ICT facilities availability in both private and public secondary schools cannot be comparable because it is evidenced from the above findings that those facilities were adequately available in private which have significance impact on the academic of students.

Research Question 2: What is the level of utilization of ICT for administrative purpose in private and public secondary school schools in Ilorin Metropolis of Kwara State?

Table 2: Percentages and Mean Showing the Level of Utilization of ICT for administrative purpose in private and public secondary school schools in Ilorin Metropolis of Kwara State

Private					
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S/N	Variable	U	FU	NU	X
1	Computer	35 (70%)	8 (16%)	7 (14%)	3.56
2	Laptop	12 (24%)	12 (24%)	26 (52%)	1.72
3	Scanner	21 (42%)	14 (28%)	15 (30%)	2.62
4	Photocopier	30 (60%)	9 (18%)	11 (22%)	2.97
5	Printer	30 (60%)	14 (28%)	6 (12%)	2.64
6	Projector	21 (42%)	11 (22%)	18 (36%)	2.51
7	Internet	20 (40%)	10 (20%)	20 (40%)	1.89
	Grand Mean				2.56
Public					
1	Computer	32 (64%)	11 (22%)	7 (14%)	2.60
2	Laptop	8 (16%)	4 (8%)	38 (76%)	1.40
3	Scanner	8 (16%)	8 (16%)	34 (68%)	1.48
4	Photocopier	22 (44%)	13 (26%)	15 (30%)	2.56
5	Printer	28 (56%)	6 (12%)	16 (32%)	2.58
6	Projector	4 (8%)	10 (20%)	36 (72%)	1.36
7	Internet	10 (20%)	11 (22%)	29 (58%)	1.62
	Grand Mean				1.94

Source: Fieldwork, 2018

Key: U (Utilized), FU (Fairly Utilized) and NU (Not Utilized)

Table 2 shows the percentage and mean of the level of utilization of ICT for administrative purpose in private and public secondary school schools in Ilorin Metropolis of Kwara State. It is evidenced from the findings that computer, scanner, photocopier, printer and projector with mean scores of 3.56, 2.62, 2.97, 2.64 and 2.51 were found to be well utilized in private secondary schools in Ilorin Metropolis of Kwara State while laptop and internet were found to not be utilized in private secondary schools in Ilorin Metropolis of Kwara State. Also, ICT facilities in computer, photocopier and printer were found to be well utilized while laptop, scanner, projector and internet were found not be utilized. Hence, the ICT utilization in both private and public secondary schools cannot be comparable because it is evidenced from the above findings that those facilities were well utilized in private which have significance impact on the academic of students.

Ho₁: There is no significant difference in the ICT facilities available for administrative purposes in private and public secondary schools in Ilorin Metropolis of Kwara State.

Table 3: Results of t-test comparing private and public secondary schools on ICT facilities available

Variable	N	$\bar{X}$	SD	Df	t-cal	t-crit	Sig(2-tail)	Decision
Public	50	2.30	.56	98	4.701	1.96	.003	Ho ₁ Rejected
Private	50	2.25	.57					

Table 3 showed a calculated t-value of 4.701 and critical t-value of 1.96. Since the calculated t-value is greater than the critical t-value, hence, the hypothesis which states that there is no significant difference in the ICT facilities available for administrative purposes in private and public secondary schools in Ilorin Metropolis of Kwara State is rejected. This means that there is

significant difference in the ICT facilities available for administrative purposes in private and public secondary schools in Ilorin Metropolis of Kwara State.

H₀₂: There is no significant difference in the level of utilization of ICT facilities available for administrative purposes in private and public secondary schools in Ilorin Metropolis of Kwara State

Table 4: Results of t-test comparing public and private secondary schools on utilization of ICT facilities

Variable	N	$\bar{X}$	SD	Df	t-cal	t-crit	Sig(2-tail)	Decision
Public	50	2.18	.57	98	3.492	1.96	.001	H ₀₂
Private	50	2.12	.57					Rejected

Table 4 showed a calculated t-value of 3.492 and critical t-value of 1.96. Since the calculated t-value is greater than the critical t-value, hence, the hypothesis which states there is no significant difference in the level of utilization of ICT facilities available for administrative purposes in private and public secondary schools in Ilorin Metropolis of Kwara State is rejected. This means that there is significant difference in the level of utilization of ICT facilities available for administrative purposes in private and public secondary schools in Ilorin Metropolis of Kwara State.

Discussion of Findings

The findings of this study revealed the availability and utilization of ICT facilities in private and public secondary schools in Ilorin metropolis of Kwara State. The finding also revealed the influence of school type on the availability and utilization of ICT facilities. The findings of research question one revealed that ICT facilities such as Computer, Laptop, Photocopying machine, and Printer are highly available in Public and Private Secondary Schools while ICT facilities such as Projector and Scanner are less available. The results of this findings is similar to the findings of Ochuku, Amakaino and Chamberlain (2013), who carried out a study to find out the extent of availability and utilization of ICTs for instructional delivery in Secondary schools in Delta State Nigeria. The authors found out that various ICTs technologies and applications are available for utilization in education for instructional delivery but were little utilized. However, the findings of this study negates the findings of a study conducted by Ayeni (2010) on Ondo State Secondary schools which revealed that 54.2% of the schools lack ICT facilities such as well-equipped Computer laboratory, Printer, Photocopier etc. consequently making many schools unable to meet the standard of ICT facilities needed for effective curriculum delivery.

The findings on research question two showed that Computer, Photocopying machine and Printer are the most often utilized ICT facilities in public and private secondary schools while ICT facilities like Projector are rarely utilized in public and private secondary schools. This finding is similar to the findings of Chukwu, Ajere and Afolabi (2003) who reported that teachers make frequent use of the ICT facilities especially the Computer. It is also worth noting that positive attitudes towards ICT use are widely recognized as necessary condition for effective and frequent ICT use in learning (Rhoda & Gerald, 2000).

The findings on hypothesis one revealed that a significant difference exists between the availability of ICT facilities in public and private secondary schools. This implies that the level of availability of ICT facilities in Private Schools differs from the level of availability in Public Schools, as these facilities are more available in Private Schools than they are in Public Schools. This result agrees with the findings of Subair and Bada (2014) who noted that only few Public Secondary Schools have ICT resources available.

Hypothesis two examines the influence of school type on the utilization of ICT facilities for teaching and learning in Secondary Schools. The findings of this study revealed that school type has a significant difference on the utilization of ICT facilities as frequency of utilizing ICT facilities by Public and Private Schools are not the same. From the findings, it shows that Private Schools often use ICT facilities for teaching and learning than Public Schools. This result is similar to the findings of Afzaal (2012) who found that school administrators use ICT for administrative purposes. This finding also agree with the study of Ajayi and Ekundayo (2009) that teachers in Public Schools have little exposure to the use of ICT which is an indication that the use of ICT for teaching in Public Secondary Schools is at a low level.

Conclusion

The availability and utilization of ICT facilities is to improve effectiveness and efficiency of school administration. The non availability of ICT facilities in some of the schools under study can be inimical to the effectiveness of the school administration. It is evident from the findings of this study that the utilization of ICT facilities for administrative purposes in secondary schools is a means of improving the efficiency of the school. In most of the schools under study, it was revealed that the utilization of ICT brings about increase productivity and also helps in facilitating effective administrative functions in the school.

Recommendations

The following recommendations were put forth based on the findings that emanated from the study.

- ICT facilities that aid administrative purposes that are lacking in most of the secondary schools should be provided by the authorities concerned.
- School administrators and staff should be made to undergo training on how to utilize the available ICT facilities for the improvement of administrative operations within the school.
- Internet facilities should be provided in schools so as to fully tap into the array of opportunities that ICT offers.

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