

AVAILABILITY AND UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGIES FOR THE MANAGEMENT OF SECONDARY SCHOOLS IN ENUGU STATE, NIGERIA

Fidelia Chinyelugo Agada (Ph.D) and Thecla Amogechukwu Eze (Ph.D)

Department of Educational Management, Enugu State University of Science and Technology, (ESUT), Agbani. Enugu State.

nyelugo92@gmail.com, Eze.thecla@gmail.com

+2348038200448, +2347038659420

Keywords:

Availability, utilization, management, information and communication technologies and secondary schools.

Abstract: The study examined the availability and utilization of Information and communication technologies for the management of secondary schools in Enugu State, Nigeria. Descriptive survey research was used for this study. Two research questions and one null hypothesis guided the study. Researchers' developed instrument tagged, "Availability and Utilization of ICTs for Managing Secondary Schools Questionnaire" (AUMSSQ) was used for data collection. This instrument was validated by three experts; two in Educational Management, and one in Science and Computer Education, (Measurement and Evaluation option) all in Enugu State University of Science and Technology, Agbani, Enugu State. The reliability of the instrument was obtained using Cronbach Alpha method and a value of 0.78, indicating a high reliability of the instrument. The instrument was administered to all the 314 principals in secondary schools in Enugu State. There was no sampling as the number was manageable. 256 copies of the questionnaire were retrieved. Results from data analysis indicated a near to total lack of ICTs and non-utilization of such for the management of secondary schools in Enugu State, Nigeria. Recommendations were made among others that governments provide ICTs tools for the management of secondary schools and also the training and retraining of the principals to acquire the necessary ICT skills.

Introduction

Management is as old as time. Management has been carried out in varied ways with different methods in schools. All these seem to be centered on both the human and materials resources. Human resources management in secondary schools includes: the management of staff and students, while that of material resources involves school plant management. In time past, the management of human and material resources were done manually (mechanically) by principals.

Management has been variously defined by many authors. Nwadiani in Ogonor (2004) sees management as a variety of sequential and related activities which are designed and carried out so that the goals of teaching and learning can be effectively and efficiently met in relation to the dynamic needs of society. Management involves the utilization of available resources to accomplish educational goals. With the advent of technology, this

role is gradually being replaced by the application of information and communication technologies, (ICTs).

Information and communication technologies according to Onwuagboke in Amuchie (2015) refers to a systematic process of gathering, processing, storing, sending and retrieving of information through the print, broadcast, computing and telecommunications media. Adomi and Kpangban (2010) defined it as electronic technologies used for information storage and retrieval. ICTs are electronic devices that aids information collection, processing and dissemination easily.

The Federal Ministry of Education (2010) defines ICT as the art and applied sciences that deal with data and information. Going further, it explains that it encompasses all (equipment including computational machinery – computers, hardware, software, firmware etc., tools, methods, practices, processes, procedures, concepts, principles and the sciences) that come into play

Agada, F. C., & Eze, T. A. (2022).

Journal of Continuing and Development Education| ISSN: 2714-3376

<https://journalcde.com/index.php/jcde/index>

K-INJO: 112

in the conduct of information activities: acquisition, representation, processing, presentation, security, interchange, transfer, management, organization, storage and retrieval of data and information.

Principals use ICT application in preparing time-tables, teaching plan, scheme of work and school reports. Principals can apply power-point presentation to give instruction to teachers and in the training of newly employed staff.

The ability to use computers effectively has become an essential part of life because computer usage is applied in virtually all aspects of life. Goshit in Ukpoma (2019), unfortunately observed that most schools both private and government, do not offer ICT training programmes. The author further observed that the use of computers and internet is still in its infancy in developing countries. This could be attributed to the limited infrastructure and high cost.

The Federal Government of Nigeria (2010), in the ICT Policy in Education states that government shall establish and sustain a common ICT infrastructure platform for education and encourage the development of a National Education and Research Infrastructure (NERI). Despite this, the government acknowledged the dearth of ICT infrastructure in the country in general and the education sector in particular.

The importance of ICTs for the management of secondary schools cannot be overemphasized. In the context of education, it is critical towards the attainment of the national vision, Sustainable Development Goals (SDGs) and Education For All (EFA). Makewa, Meremo, Role and Role (2013) also stated that principals and teachers rated the use of ICT in school administration as important. The use of ICT application by principals according to Ukpoma (2019) will help them to achieve their goals easily. Zainally in Makewa and et. al (2013) suggest that it provides several facilities and possibilities for educational administrators to perform their tasks.

In a research by Aja and Eze (2016), they revealed the inadequacy of the availability of these ICT devices. Similarly other authors, (Amuchie 2015, Subair and Bada (2014) and Ikediugwu, Eze & Agada 2017), reported the unavailability of ICTs in most secondary schools in Enugu State. These corroborates the statement by the Federal Government of Nigeria.

In more recent studies, Mahamoud, (2020) and Hama, Dambam & Kanda (2021), write that the problem facing the application of ICT for effective administration include inadequate ICT facilities. Hama et.al. (2021), also reported the lack of ICT skills as another challenge affecting its usage in the effective management of schools.

Statement of the Problem

The work load of the principal is continually on the increase with limited time available to do the needful. The demand on the principal to deliver on the increasing volume of work has made it expedient that the principal needs to carry out school management in a more efficient way. With the introduction of technology in solving problems in all areas of human endeavour, this study therefore sought to determine the availability and utilization of ICTs for managing secondary schools in Enugu State, Nigeria.

Purpose of the Study

The purpose of this study was to ascertain the availability and utilization of information and communications technologies in the management of secondary schools in Enugu State, Nigeria.

Specifically the study sought to:

1. Ascertain the availability of ICTs in secondary schools in Enugu State.
2. Assess the extent of utilization of ICTs for the management of secondary schools in Enugu State.

Research Questions

1. Are ICTs available in secondary schools in Enugu State?
2. To what extent are ICTs utilized in the management of secondary schools in Enugu State?

Hypothesis

1. There is no significant difference between the mean perception of male and female principals on the extent of utilization of ICTs for the management of secondary schools in Enugu State.

Methodology

The study adopted a descriptive research survey design. Researchers developed questionnaire titled, "Availability and Utilization of ICTs for the Management

of Secondary Schools Questionnaire” (AUIMSSQ) was used to collect relevant data. Two research questions and one null hypothesis guided the study. The instrument was validated by two experts in Educational Management and one from Science and Computer (Measurement and Evaluation option), all from Enugu State University of Science and Technology, Agbani, Enugu State. The reliability of 0.78 Of the instrument was obtained using Cronbach Alpha. The instrument was distributed to all the 314 principals in secondary schools in the state. There was no sampling as all the principals were used. A total of 256 copies of the questionnaire were found usable after return; giving a 73% return. Mean and standard deviation were used to answer the research questions while z-test

statistics was used to test the null hypothesis at .05 level of significance.

Results:

Table 1: Percentage Availability of ICTs in Secondary Schools in Enugu State

Gender	N	No with ICTs	% Availability of ICTs
Male	96	22	23%
Female	160	30	19%

The result from table 1 shows that out of the total number of 256 respondents, made up of 96 male and 160 female principals only 52 had ICTs in their schools, 22 male and 30 female principals respectively.

Table 2: Mean responses of male and female principals on the utilization of ICTs for the Management of Secondary Schools in Enugu State.

S/N	ITEMS	Male			Female		
	To what extent is the following utilized in the management of your school?	X ₁	SD ₁	Decision	X ₂	SD ₂	Decision
1	Computers	2.406	1.57	LE	1.906	1.069	VLE
2	Internet	1.563	0.960	VLE	1.894	1.142	VLE
3	CCTv	1.563	0.831	VLE	1.425	0.859	VLE
4	Cellphones	2.365	1.291	LE	1.581	1.019	VLE
5	Scanners	1.417	0.777	VLE	1.144	0.352	VLE
6	Whatsapp	1.427	0.867	VLE	1.500	0.904	VLE
7	Email	1.229	0.552	VLE	1.281	0.585	VLE
8	Typewriters	1.833	1.130	VLE	1.519	0.793	VLE
9	Projectors	1.229	0.640	VLE	1.394	0.978	VLE
10	Power Plant	1.365	0.860	VLE	1.700	1.021	VLE
ΣX 1.640 0.907 VLE		1.534 0.852 VLE			VLE		

Result from table 2 shows that all the items have means below the 2.50 benchmark. Male principals had a grand mean of 1.640 while that of the female principals was 1.534. This demonstrates that irrespective of the gender of the principal, they agreed that the utilization of ICTs for the management of secondary schools in Enugu State is very low.

Table 3: Result of the null hypothesis

Gender	X	SD	N	Df	Standard Error	z-cal	z-critical	Decision
Male	1.64	0.91	96	254	0.014	0.083	1.096	Accept
Female	1.53	0.85	160					

From the data on Table 3, $z\text{-cal} < z\text{-critical}$, therefore the null hypothesis is accepted. This means that both the male and female principals are of the opinion that utilization of

ICTs for the management of secondary schools is very low.

Discussion of Results

Information and communication technology equipment are not available in majority of the secondary schools in Enugu State as attested to by the principals. This tallies with the studies of Ukpoma (2019) and Mahamoud (2020). The fact that these ICTs are lacking negates the aims of government on the Policy on ICT in Education. It is also very worrisome and disturbing for leveraging and competing in the global arena.

It was also revealed a very low utilization of these equipment by principals for managing schools. This is in line with that of Mahamoud (2020). The utilization/ non utilization of the very few available ones

are dependent on so many factors like knowledge and skills in its utilization by the principals concerned.

Conclusion

It is concluded that information and communication technologies (ICTs) availability in secondary schools in Enugu State is very low. Furthermore, the few available ones are not being utilized for the management of their schools.

Recommendations

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

1. Concerted effort should be made to provide ICT equipment by the government so that the principals will be properly acquainted with them to enable them be very competent in their usage.
2. As a matter of policy, ICT literacy should be a sine quanon in the initial appointment as a principal.
3. Those who are already principals should be trained and retrained to acquire the necessary ICT skills through seminars and workshops.

References

- Adomi, E. E. & Kpangban, E. (2010). Application of ICTs in Nigerian secondary schools. *Library, Philosophy and Practice*.
- Aja, S. N. & Eze, P. I. (2016). Use of information and communication technology (ICT) devices for instructional delivery in secondary schools in Ebonyi State of Nigeria. *European Scientific Journal*. 12(4), 222-230.
- Amuchie, A.A. (2015). Availability and utilization of ICT resources in teaching and learning in secondary schools in Ardo-Kola and Jalingo, Taraba State. *Journal of Poverty, Investment and development*. 8, 94-100.
- Ezeuwa, I. (2014). Availability and utilization of ICT facilities as panacea for effective management of education in Ebonyi State secondary schools. *Knowledge Review*. 31(2)
- Federal Ministry of Education. (2010). National policy on information and communication technologies (ICT) in education.
- Hamma, H.M.D., Dambam, U.M., & Kanda, I.U. (2021). Application of information and communication technology (ICT) for effective administration in Nigerian secondary schools. *African Scholar Journal of Humanities and Social Sciences (JHSS-6)*. 20(6), 59-68.
- Ikediegwu, N.P., Eze, T.A. & Agada, F. C. (2017). Principals' perception of information and communication technology (ICT) enabled education in secondary schools in Enugu State, Nigeria. *International Journal of Contemporary Applied Sciences*. 4(2),21-28.
- Makewa, L., Meremo, 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.
- Mohamoud, A. J. (2020). The influence of information and communication technologies on administrative effectiveness of secondary schools in Mogadishu. *Mogadishu University Journal*. 3, 99-122.
- Ukpoma, E. (2019). Use of ICT applications for secondary schools administration in ADECT (2019) Proceedings.
- Subair, S. T. & Bada, T. A. (2014). Information and communication technology and Public school administration in Osun State, Nigeria. *International Journal of Social Science and Education*. 4(4)