Utilization of Information and Communication Technology Facilities for Administration of Public Secondary Schools in Rivers State

WOKOCHA, Kelechi D-k, BABALOLA, James O. & APPAH, Courage N.

Department of Business Education,
Faculty of Technical and Science Education,
Rivers State University,
Port Harcourt, Nigeria
07063743118
kelechiwokocha@yahoo.ca

ABSTRACT
The study examined the utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State. The research adopted a descriptive survey design. Two research questions and two hypotheses were posed to guide the study. The population for the study was 245 principals of public secondary schools in Rivers State. No sampling technique was used since the population was manageable. The Instrument used for data collection was a structured questionnaire titled "Utilization of Information and Communication Technology for Administration Questionnaire" (UICTAQ). The reliability of the research instrument was obtained using Cronbach alpha method and a reliability coefficient of .86 was established. The instrument was validated by three experts; two from the Department of Educational Management and one from Measurement and Evaluation, all of Faculty of Technical and Science Education, Rivers State University. 200 copies of the questionnaire only, were retrieved and analyzed using mean for the research questions and t-test for the hypothesis at .05 level of significance. The results obtained indicated that the utilization of Information and Communication Technology facilities for administration of secondary schools in Rivers State is very low. Thus, the study recommended that principals should adopt the use of ICT facilities for administration and that government and relevant stakeholders should adequately fund secondary education to encourage the use of Information and Communication Technology facilities.
Keywords: Information and Communication Technology, Administration, Secondary School and Utilization.

INTRODUCTION
Information and Communication Technology (ICT) encompasses a combination of technologies for collecting, storing, processing, communicating and delivering of information related to teaching and learning processes (Johnson, 2007). Information and Communication Technology facilities are high-tech equipment's that aid efficient communication. According to Iboro (2016), Information and Communication technology (ICT) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computers and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. Information and Communication Technology can therefore be viewed as the advancement in communication by the application of sophisticated machines such as computers and other software's. The application of Information and Communication Technology

has actually changed the way and manner we do things in all aspects of life. Ololube, Ubogu and Ossai (2007) revealed that Information and Communication Technology usage, integration and diffusion has initiated a new age in educational methodologies, thus it has radically changed traditional method of information delivery and usage patterns in the domain as well as offering contemporary learning experience for both instructors and students. Accordingly, Ubulom, Enyiket and Onukwe (2011), the emergence of Information and Communication Technology has totally re-volutionalized the way we access, process, store, retrieve and disseminate information within organizations or across the globe. Thus, the use of Information and Communication Technology facilities for administration in the education sector cannot be overemphasized; especially as it has to do with administration of secondary schools.

Secondary Education is a six-year post education which children receive after primary school in order to proceed to tertiary level of education. Secondary education is the form of education attended by children after primary education and before tertiary education with the aim of preparing individual for useful living within the society and for tertiary education (FRN, 2013). The broad goals of secondary education according to FRN (2013) shall be to prepare the individual for; Useful living within the society and Higher education. Specifically, secondary education shall:-

      (a)   Provide all primary school leavers with the opportunity for education of a higher level irrespective of sex, social status, religious or ethnic background.

      (b)   Offer diversified curriculum to cater for the differences in talents, opportunities and future roles;

      (c)   Provide trained manpower in the applied science technology and commerce at sub-professional grades;

      (d)   Develop and promote Nigeria languages, art and culture in the context of world's cultural heritage;

      (e)   Inspire students with a desire for self-improvement and achievement of excellence;

      (f)   Foster national unity with emphasis on the common ties that unite us in our diversity;

      (g)   Raise a generation of people who can think for themselves, respect the view and feelings of others respect the dignity of labour, appreciate those values specified under our broad national goals and live as good citizens;

      (h)   Provide technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development.

The achievement of the above mandate can only take place amidst proper administration and management. Information and Communication Technology applications for education are also made for classroom management, timetabling, activity planning, personnel administration, and communications with parents (Iboro, 2016). School administrators are therefore required to utilize all human and material resources such as Information and Communication Technology facilities, to see that they achieve the set objectives.

Secondary school administration, according to Okeke (2014) involves the provision and maintenance of the necessary manpower to those who teach children with a view to bring about the desired change in the children's behaviour. This vital task of administration lies within the purview of the principal. It is the responsibility of the principal to apply necessary facilities that will bring about success in administration. According to Etuk (2007), the functions of school administration include staff personnel administration, student personnel administration, finance and physical resources, and school community relationship management and this can only be achieved with best practices. Thus, it was the interest of the researcher to examine the utilization of Information and Communication Technology facilities for administration of secondary schools in Rivers State.

Statement of Problem
The globalization of the 21st century and the revolution in technology has led to a groundswell interest on how computers and internet can best be harnessed to improve the efficiency and effectiveness of education at all levels. However, the use of computer and internet is still in its infancy in Nigeria and other developing nations and if even they are used, its usage is confronted with limited infrastructure and attendant high costs of access, attitude, awareness and orientation as revealed by (Iboro, 2016). He further argued that even when the relevance of ICT in pedagogy has become so apparent, the penetration of the technology in schools, measured in terms of availability of computer, printers, digital cameras, projectors, scanners, and whiteboards are quite unrealistic in Nigerian schools. This, according to Amanchukwu and Ololube (2015) is attributed to acute shortages of finances, gross misappropriation of public funds and misplaced priorities in the education sector as the case may be in Rivers State. Thus, it was the desire of the researchers to examine the utilization of Information and Communication Technology facilities for administration in public secondary schools in Rivers State.

Purpose of the Study
The purpose of this study was to examine the utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State.
Specifically the study sought to:
1. Determine the extent of utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State.
2. Determine the extent to which certain challenges affect utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State.

Research Questions
The following research questions were answered:
1. What is the extent of utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State?
2. To What extent do certain challenges affect the utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State?

Hypotheses
The following null hypotheses were tested:
1. There is no significant difference in the mean ratings of the respondents on extent of utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State.
2. There is no significant difference in the mean ratings of the respondents on extent to which certain challenges affect the utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State.

METHODOLOGY
The descriptive survey research design was adopted for this study. The population for the study was 245 principals drawn from the 245 public secondary schools across the 23 local government areas in Rivers State, Nigeria.

Table 1: Population Distribution

S/N	Principals	Total
1.	Male	127
2.	Female	118
GRAND TOTAL		**245**

Source: Rivers State Ministry of Education, 2017.

No sampling technique was used for the study, since the population was manageable. The instrument used for data collection was a structured questionnaire titled "Utilization of Information and Communication Technology Facilities for Administration Questionnaire" (UICTFAQ). The instrument provided response to the two research questions with 15 items; Item 1-7 answering research question one and item 8-15 answering research question two in a 4-point rating scale weighted, "Very High Extent" (VHE) – 4 points, "High Extent" (HE) – 3 points, "Low Extent" (LE) – 2 points and "Very Low Extent" (VLE) – 1 point for all items. To establish the validity of the instrument, the questionnaire was subjected to face and content validity by three experts; two from the Department of Educational Management and one from Measurement and Evaluation, all of Faculty of Technical and Science Education in Rivers State University. To ensure the consistency of the instrument, the Cronbach alpha method was used to establish a reliability coefficient of .86. 200 copies of the questionnaire only, were retrieved and used for the study. This represents 82 per cent of the total distributed. The data analysis was done using the mean to analyze the research questions while t-test was used to test the hypothesis. The mean was obtained by the summation of all responses as assigned to a rating scale in an item divided by the total number of responses: $4+3+2+1/4 = 2.50$. The mean score of 2.50 and above was accepted, while those below 2.50 were rejected.

RESULTS
Research Question 1
What is the extent of utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State?

Table 2: **Mean Rating on Extent of Utilization of Information and Communication Technology facilities for Administration of Public Secondary Schools in Rivers State.**

S/N	Statements	Male (102)		Female (98)		Mean	Std. Dev.	Remarks
		$\overline{X}$	STD	$\overline{X}$	STD			
1.	I use ICT facilities to communicate with teachers.	1.50	0.91	1.49	0.86	1.50	0.89	VLE
2.	I use ICT facilities to communicate with parents and other stakeholders.	1.45	0.86	1.42	0.82	1.44	0.84	VLE
3.	I use ICT facilities for reporting.	1.59	0.94	1.57	1.00	1.58	0.97	VLE
4.	I use ICT facilities for information gathering.	1.53	0.91	1.48	0.92	1.51	0.92	VLE
5.	I use ICT facilities for records production and storing.	1.43	0.81	1.46	0.86	1.45	0.84	VLE
6.	I use ICT facilities to develop team work amongst teachers and students.	1.50	0.91	1.48	0.92	1.49	0.92	VLE
7.	I use ICT facilities for evaluation	1.43	0.81	1.42	0.82	1.43	0.82	VLE
	Total Mean/SD	**10.43**	**6.15**	**10.32**	**6.20**	**10.40**	**6.20**	
	Grand Mean/SD	**1.49**	**0.88**	**1.47**	**0.89**	**1.49**	**0.89**	**VLE**

Source: Survey Data, 2017

The data presented in table 2 shows that the responses of the respondents was very low for all the items number 1 - 7 with various mean scores of 1.50, 1.44, 1.58, 1.51, 1.45, 1.49 and 1.43 which indicated that principals poorly utilize ICT facilities for communication with students, teachers and stakeholders and that they poorly utilize ICT facilities for reporting, information gathering, production and storage of information, team work and evaluation. Also, the grand mean of 1.49 and a grand standard deviation of 0.89 indicated that there is a low extent of utilization of Information and Communication Technology facilities for Administration of public secondary schools in Rivers State.

Research Question 2

To What extent do certain challenges affect the utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State?

Table 3: **Mean Rating on Extent to which certain Challenges affect the Utilization of Information and Communication Technology facilities for Administration of Public Secondary Schools in Rivers State.**

S/N	Statements	Male (102)		Female (98)		Mean	Std. Dev.	Remarks
		$\overline{X}$	STD	$\overline{X}$	STD			
8.	Poor funding of public secondary schools is a major setback.	2.55	1.16	2.50	0.99	2.53	1.08	HE
9.	Poor power supply.	2.82	1.11	2.73	0.96	2.78	1.04	HE
10.	Poor maintenance culture.	2.55	0.99	2.53	1.02	2.54	1.01	HE
11.	Principals are incompetent in the use of ICT.	1.50	0.91	1.49	0.86	1.50	0.89	VLE
12.	ICT is difficult to integrate into the administration of schools.	1.45	0.86	1.42	0.82	1.44	0.84	VLE
13.	Principals lack the will to utilize ICT for administration.	1.59	0.94	1.57	1.00	1.58	0.97	VLE
14.	Teachers, students and other stakeholders that communicate with principals are not ICT compliant.	1.53	0.91	1.48	0.92	1.51	0.92	VLE
15.	Principals' perception of technology.	1.43	0.81	1.46	0.86	1.45	0.84	VLE
	Total Mean/SD	**15.42**	**7.69**	**15.18**	**7.43**	**15.33**	**7.59**	
	Grand Mean/SD	**1.93**	**0.96**	**1.90**	**0.93**	**1.92**	**0.95**	**VLE**

Source: Survey Data, 2017

The data presented in table 3 shows the responses of the respondents for items number 1-3 with various mean scores of 2.53, 2.78 and 2.54 which indicated that poor funding of secondary schools, poor power supply and poor maintenance culture highly affects ICT facilities utilization for administration. However, items 4 – 8 with various mean scores of 1.50, 1.44, 1.58, 1.51 and 1.45 implies that lack of ICT competencies, difficulty in integration of ICT, poor will, non ICT compliant audience and principals perception are not major challenges to ICT facilities utilization for administration . However, the grand mean of 1.92 and a grand standard deviation of 0.95 indicated a low extent to which certain challenges affect the utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State universities.

Hypothesis 1

There is no significant difference in the mean ratings of the respondents on extent of utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State.

Table 4: **t-test result of the difference in mean ratings of the respondents on extent of utilization of ICT facilities for administration of public secondary schools in Rivers State.**

Group	N	Mean	SD	Df	L/significance	t-cal	t-tab	Remark
Male	102	1.49	0.88					
				198	.05	0.06	1.96	Accepted
Female	98	1.47	0.89					

Source: Survey Data, 2017.

The data in table 4 shows that at 5% level of significance with 198 degree of freedom, the calculated t value of 0.06 is less than the table value of 1.96. Hence, the null hypothesis is accepted, meaning that there is no significant difference in the mean ratings of the respondents on of utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State.

Hypothesis 2

There is no significant difference in the mean ratings of the respondents on extent to which certain challenges affect the utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State.

Table 5: t-test result of the difference in mean ratings of the respondents on extent to which certain challenges affect the utilization of ICT facilities for administration of public secondary schools in Rivers State.

Group	N	Mean	SD	Df	L/significance	t-cal	t-tab	Remark
Male	102	1.96	0.93					
				198	.05	0.18	1.96	Accepted
Female	98	1.90	0.93					

Source: Survey Data, 2017.

The data in table 5 shows that at 5% level of significance with 196 degree of freedom, the calculated t value of 0.18 is less than the table value of 1.96. Hence, the null hypothesis is accepted, meaning that there is no significant difference in the mean ratings of the respondent institutions on extent to which certain challenges affect the utilization of Information and Communication Technology facilities for administration of public secondary schools in Rivers State.

DISCUSSION OF FINDINGS
One of the findings of this study was that principals poorly utilize ICT facilities for communication with students, teachers and other stakeholders and that they poorly utilize ICT facilities for reporting, information gathering, production and storage of information, team work as well as evaluation. This finding aligns with that of Iboro (2016) who revealed that even when the relevance of ICT in pedagogy has become so apparent, the penetration of the technology in schools as measured in terms of availability of computer, printers, digital cameras, projectors, scanners, and whiteboards are quite unrealistic in Nigerian schools and that the use of ICT facilities is still in its infancy in Nigeria and other developing nations. The study also revealed that poor funding of secondary schools, poor power supply and poor maintenance culture highly affects ICT facilities utilization for administration but that lack of ICT competencies, difficulty in integration of ICT, poor will, non ICT compliant audience and principals perception are not major challenges to ICT facilities utilization for administration in public secondary schools in Rivers State. This finding supports that of Amanchukwu and Ololube (2015) who asserted that the challenges confronting the utilization of ICT facilities includes acute shortages of finances, gross misappropriation of public funds and misplaced priorities in the education sector as the case may be in Rivers State.

CONCLUSION
The study revealed that Information and Communication Technology (ICT) are very important for administration. However, it is yet to be fully utilized for administration in public secondary schools in Rivers State as a result of certain challenges confronting its utilization.

RECOMMENDATIONS
Based on the findings of this study, the following recommendations were made;
1. Government and other relevant authorities should insist in the application of Information and Communication Technology facilities for administration of public secondary schools.
2. Government and other stakeholders should endeavour to make available the necessary ICT facilities as this will encourage its utilization by secondary school administrators.

REFERENCES

Amanchukwu, R. N. & Ololube, N. P. (2015). Managing School Plant for Effective Service Delivery in Public Secondary Schools in Rivers State of Nigeria. Human *Resource Management Research,* 5(4), 95 – 102.

Etuk, S. E. (2007). Provision and management of facilities in primary and secondary schools. *International Journal of Educational Planning and Administration*, *1*(3), 7-16.

Federal Republic of Nigeria. (2013). National Policy on Education. (4th Edition). Lagos: NERDC.

Iboro, O. U. (2016). Examination of ICT Compliance and Utilization for Curriculum Delivery among Social Studies Teachers in Nigeria. *International Journal of Education, Learning and Development,* 4(7), 1 -10.

Johnson, O. A. (2007). Enhancing Quality in Higher Education through Information and Communication Technology in Nigeria. In J. B. Babalola, G. O. Akpa, A. O. Ayeni& S. O. Adedeji (eds.). Access, Equity and Quality in Higher Education.NAEAP Publication.

Okeke, F. N. (2013). Management of Facilities in the Classroom. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*. 4(1): 100-104

Ololube, N.P., Ubogu, A.E. &Ossai, A.G. (2007).*ICT and Distance Education in Nigeria, A Review of Literature and Accounts.* International Open and Distance Learning (IODL) Symposium.

Ubulom W. J., Enyiket E. O &Onukwe F. A. (2011).Analysis of ICT Accessibility and Utilization in Teaching of Business Studies in Secondary Schools in Andoni Local Government Area of Rivers State.*Academic Research International,*.1(3), 349-354.