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INSTITUTIONAL AND SOCIETAL CHALLENGES IN THE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) FOR TRANSFORMATION OF SENIOR SECONDARY EDUCATION IN RIVERS STATE

Ihua-Jonathan Nwovuhoma (Ph.D.)

Institute of Education, Rivers State University.

Email: nwovuhoma.ihua-jonathan@ust.edu.ng

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ABSTRACT: *The study examined Institutional and Societal Challenges in the Utilization of Information and Communication Technology (ICT) for transformation of Senior Secondary Education in Rivers State. Three research questions and hypotheses guided the study. Descriptive survey design was adopted with a population of 6859 teachers and principals in public senior secondary schools in Rivers State. The sample of the study was 823 which represents 12% of the entire population. A 4-point Likert scale self-structured questionnaire titled Societal and Institutional Challenges to the Utilization of Information and Technology for Secondary Education Questionnaire (SICUICTQ) was used for the study. The instrument which was made up of 30 items had its face and the content validity determined by three experts from the Department of measurement and evaluations while the reliability of the instrument was estimated to be 0.89 using Cronbach alpha coefficient. The data collected were analyzed using mean and standard deviation to answer all research questions while the z test was used to test the hypothesis at 0.05 level significance. A criterion mean of 2.50 was used as the cut-off mean. Any mean greater than 2.50 was regarded as high extent while mean less than 2.50 was low extent. Findings of the study revealed that the availability of ICT facilities in secondary schools was to a low extent, ICT utilization was to a low extent due to lack of training, funding and that funding challenges affect the utilization of ICT for secondary Education Transformation in Rivers State to a high extent. The study recommended amongst others that for the transformation of the secondary educational system, the government and stakeholders of secondary education should provide ICT facilities in schools as well as look into the challenges of utilizing ICT for enhanced utilization of ICT for secondary education transformation.*

KEYWORDS: Institutional and Societal Challenges, Transformation, Information and Communication Technology (ICT).

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INTRODUCTION

Information and Communication Technology (ICT) has emerged as a transformative force, offering unprecedented opportunities to revolutionize secondary education. ICT according to Ofodu (2007) is an electronic or computerized instrument that is backed by interactive and human resources that may be utilized for a variety of purposes, including education, learning, and personal use. Hence, information and communication technology (ICT) can be seen as a channel through which information can be exchanged using different electronic devices. The presence of ICT could be felt in almost every area of human endeavor of which the school system is not left out. In fact, one can conveniently state that ICT has infiltrated deep into the educational system. This can be seen in the administration, management, devising and execution of educational policies most especially in secondary schools which need computers, internet and other telecommunication technologies and applications in teaching and learning. ICT as we all know has been prioritized in international education, and Nigeria is not an exception. No wonder Abifarin (2015) posits that ICTs are gradually playing an important role in organizations and in society at large especially in the aspect of producing, accessing, adopting, retrieving and applying information as at when due. It has also been recognized as the tool for the post-industrial age and the foundations for a knowledge economy due to its ability to facilitate the transfer and acquisition of knowledge. Undoubtedly, Bashire and Dare (2013) stated that ICT has influenced positively on the quality and quantity of teaching, learning and research in our educational system. In precise terms, ICT has the potential of accelerating, deepening, enriching, motivating and engaging students in learning. It can make the educational system more effective and efficient, thereby engendering the utilization of various tools to enhance and facilitate teaching, learning and overall implementation of educational planning policies in secondary schools.

Conclusively, one can rightly say that the introduction of ICT in our school system has the tendency to transform the teaching and learning process so that the actualization of the goals of education can be achieved. In this context, the author suggests that ICT as a matter of fact has to do with simple distribution and easily retrieving data from gadgets. Having known that ICT was introduced in schools for the acquisition of skills as well for efficiency and effectiveness in the school system and its environment in the 21st century, the realization of this potential is not without its challenges, as institutional and societal barriers hinder the seamless integration and effective utilization of ICT for secondary education transformation. These challenges could spur from dilapidated infrastructures, lack of funds, curriculum integration, teacher training and professional development, policy and governance, digital divide, cultural attitude, parental involvement, perceived relevance, privacy and security concerns etc. This research aims to shed light on the multifaceted nature of the challenges posed by societal and institutional constraints in the utilization of ICT for secondary education transformation in Rivers State.

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Meaning of Secondary Education Transformation

Secondary education transformation means different things to different people. It refers to the systematic changes in the prevailing secondary educational model (Pepe 2021). That is to say that secondary education transformation has to do with fundamental and comprehensive changes in the way secondary education is considered, perceived, delivered and evaluated. It has to do with bringing innovative thinking into the teaching and learning processes for enhanced productivity and these can be done through adopting new methods of teaching and learning, integrating technologies into the school system, curriculum revising to be more relevant and promoting innovation in the system. So, integrating ICT is one of the transformations into the mainstream of secondary education. Integrating ICT into secondary education can help to transform secondary education through enhance learning opportunities, personalized learning, collaborative learning, increased engagements of both students and teachers, global connectivity, teacher professional development and administrative effective

Types of ICT Gadgets

Kuyoro, Awodele and Okolie (2012) mentioned the following as the ICT gadgets found in schools; interactive television, cybernetic, cell phones, cable television, education software, projector machine, general computer network, and communication satellite, among others. However, Nwamara (2022) is of the opinion that though these gadgets are very important in schools however, they are not available in most of the secondary schools and even the few that are available are not properly utilized or maintained in the school system.

Importance of Integrating ICT for Secondary Education Transformation

The importance of integrating ICT into the educational system cannot be overemphasized. Aguilar (2012) aver that ICT is an educational tool that has the tendency to improve quality of students as well as transform the way information is gotten, managed and understood. It is important to state that schools that are digitized enhance students' access to resources that ordinarily would have been very difficult to get. Skills such as bookkeeping, clerical and administrative jobs, stocktaking, and so on, are now a collection of computerized tasks that make up the core IT skills package: spreadsheets, word processors, and databases (Reffell & Whitworth, 2010).

Ogedegbe and Oyaniyi (2010) affirmed that the advantages of using ICT in school system include access to education, guarantee fairness and equitable access to education, lifelong learning and education for all, enhance global learning culture, ensure equity and equality of educational opportunities, improve lifetime learning and universal education, give the culture of global learning more traction, offer educational resources by utilizing ICTs extensively, and offer high-quality instructional materials, lower the price, difficulties, and burdens associated with obtaining and receiving education. It also increases the number of people who can access education, as it offers students classes seven days a week, twenty-four hours a day which draws working class students to school.

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Institutional and Societal Challenges to the Utilization of Information and Communication Technology in Secondary Schools

The adoption and use of Information and Communication Technology (ICT) in society and institutions are often influenced by various constraints which has led to the utilization of ICT at a very reduced rate. These constraints include digital divide, lack of digital literacy, cultural and language barriers, privacy concerns, resistance to change, economic disparities, budgetary restraints, deficiency of skilled personnel, outdated policies and regulations, infrastructure constraints, stakeholders' resistance, institutional culture, security concerns. In view of the above, Eniekebi (2021) asserts that the hindrances to the utilization of ICT in schools include: inadequate fund, lack of electricity supply, insufficient equipment, weak ICT policy, lack of qualified personnel, lack of maintenance culture, inadequate technology, high cost of ICT gadgets, lack of interest on both the students and teachers, poor management by school administrators and government, burglary, computer shortage, lack of internet or weak connectivity, cyber bullying, moral deterioration, and other anti-social vices.

Ugwu and Obegulem (2011) observed that there is a serious shortage of trained personnel in the area of servicing and repair of computers. Those who are designated to use ICT facilities may not have received adequate training that will make them rationally fit for the job and at worst, may not have received any training at all necessary for the work. This has made the utilization of ICT gadgets in schools not to be effective and efficient. In Nigeria, most secondary school teachers lack the skills to fully utilize technology in curriculum implementation; hence the traditional chalk and duster approach still dominates in tertiary institution pedagogy. Information transfer using ICT is minimal in secondary schools in Nigeria.

Eze and Aja (2014) listed some factors impeding the utilization of ICT in schools to include: poverty, low literacy level, lack of IT skills, poor internet access, low bandwidth, high cost of ICT services, and lack of investments. In the same vein, Jegede (2013) stated that the level of implementation of modernized management information systems may be affected by lack of equipment and funds, poor government support, burglary and vandalization, irregular power supply, lack of facilities, high cost of innovations and the year of record exposure.

Similarly, Eseyin, Lenee and Ubani-Sunday (2013) affirmed that inadequate internet connectivity and bandwidth, expensive ICT services, a dearth of research on ICT facilities in secondary schools, non-availability of computers and other devices lack of support facility and equipment, lack of fund, misappropriation of funds, increase in population, staff ineffectiveness, inequitable distribution of funds, and increase in population were factors that lead to non-usage of ICT in schools. In the same vein, Nwamare (2017) and Okerieocha et al. mentioned the following as obstacles in ICT usage. These according to them include scarcity of ICT skilled personnel for both teaching and repairs, inadequate power supply, inadequate ICT amenities, paucity of after sales services, dearth of internet access in schools, mismanagement of fund, nervousness by educators in computer usage, not being self-confident by educators, and lack of ICT skills by the educators, among others. Though the utilization of ICT in every sector of the economy has improved over the years, funding is a major constraint. Fund as we all know refers to the amount of money needed to finance a project; it is actually very difficult to carry out any project without funds in any system. In essence, no institution whether corporate or private can function effectively without funds especially in the aspects of incurring a school plan of which ICT facilities and gadgets are inclusive.

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Hornby (2010) defined funding as the process of providing money for a project on a continuous basis. For Nwosu and Ibe (2015), funding has to do with provision of capital in its adequacy to ensure that organizations move forward. Funding plays vital roles in every educational institution, so; its inadequacy can affect teaching and learning processes. The integration of Information and Communication Technology for secondary education transformation in schools can be significantly affected by insufficient funds in several ways. Nwaiwu, Dikeocha and Nwagu (2015) affirmed that no institutional program can be implemented efficiently without funds. So, finance (fund) is very important in schools if transformation is needed. In view of this, Akinfolarin, Ajayi and Oloruntogbe (2012) opined that insufficient or inadequate funding could lead to non-availability or absence of school plants such as ICT gadgets.

For Gbadamosi (2006), inadequate funding has been a major setback in running any given organization such as the school system especially in terms of procurement of technological infrastructure, teachers training and re-training, development and maintenance of software packages and electricity. Gbadamosi (2006) went further to state that the reduced allocation of budgets in the educational sector is a major issue against the provision of equipment and plants needed in institutions of learning. Nwachoker and Udoye (2015) acknowledged that lack of funds was a major constraint in making ICT gadgets available for teaching and learning in Institutions of higher learning. Conclusively, one can say that lack of fund in any organization can impede the effective integration of ICT in schools by limiting access to technology, hindering infrastructure development, restricting teacher-training, reducing the availability of educational resources, increasing maintenance challenges, and exacerbating inequalities in access to technology-enabled learning experiences. Addressing these societal and institutional constraints requires a comprehensive approach that involves knowing the strategies to curb them.

Ways of Addressing Institutional and Societal Constraints in Utilization of Information and Communication Technology for Secondary Education Transformation in Rivers State

Addressing the limitation on the use of ICT in schools for secondary education transformation entails using a holistic method that encompasses alliance between stakeholders of education. stakeholders. Prakash (2022) enumerated the following as approaches to handle these hurdles caused by institutional and societal constraints:

1. The Ministry of Eand managers of schools should make ICTs compulsory in the mainstream of teaching and learning.

2. Schools should identify the challenges faced in incorporating ICT into the system and offer suggestions for improvements.

3. Teachers should be made to take the role of a learner so that they can effectively learn how to use ICT gadgets well.

4. Identified challenges in the system should be seen as chances to grow rather than seen as a killer of motivation.

5. Co-workers who are good in ICT usage can take the role of teaching others in the system.

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6. The school should make time for teachers to enhance their ICT skills in the school.

In support of this, Nwamara (2022) in a work titled *Challenges in the Use of Information and Communication Technology in Teaching and Learning in Secondary Schools in Nigeria* suggested that for institutional and societal challenges in utilizing ICT for secondary education transformation to be combated, there should be periodic training and retraining of all staff, provision of funds for maintenance of ICT, provision of regular or alternative power supply in the school system, scheduled maintenance culture by ICT center managers, routine and constant supervision of facilities, provision of internet facilities, and encouragement of staff to use online process in service delivery, among others.

Nwana, Ofoegbu and Egbe (2017) in a work titled *Availability and Utilization of ICT in Teaching Computer Education in Secondary Schools in Anambra State, Nigeria*. The aim of the study was to investigate the availability and utilization of ICT resources in the teaching of Computer Education among Secondary School Teachers in Anambra State. Two research questions guided the study. The study population was 450 ICT educators. Findings of the study showed that ICT facilities were not available in schools. The study also discovered that most of the ICT gadgets needed for teaching ICT in schools were not in use. The study recommended that government and other stakeholders should provide adequate ICT resources and facilities in schools for efficiency and effectiveness, and training and retraining of staff should be encouraged, among others.

Olusesan and Adu (2016) in a work titled *Availability and Utilization of Information and Communication Technology ICT Facilities for Effective Teaching and Learning in Universities.* The population of the study was 100 lecturers in public and private schools in Oyo State, Nigeria. Findings of the study revealed that ICT facilities were not available in the schools. The study recommended amongst others that for efficiency and effectiveness in school, all university lecturers should be encouraged to make use of ICT facilities in schools; however, the government and other stakeholders should make provision for other ICT facilities needed for teaching and learning as well as provision of functional cyber-café in the school system to ensure access to internet. If secondary schools can identify these challenges and apply some of the strategies mentioned above. It will create an environment that fosters the effective use of ICT in schools that will benefit the teacher, student and the wider society benefiting both students.

Statement of the Problem

The poor performance of students in both the internal and external examination has become an issue of high concern to stake holders of secondary education. Most individuals put the blame on the government while others on the administrators of secondary education on the ostensible insufficient facilities such as ICT facilities needed to enhance teaching and learning process as well as for the transformation of secondary education. Could this be the case of secondary schools in Rivers State? Could the provision of ICT in schools transform the secondary education where teachers can put in their best and student's will be willing to settle down to learn and do well in both their internal and external examination? Could the provision of ICT in schools enhance educators to explore more as well as communicate with the outside world for efficiency and effectiveness in the system? These and other issues made the researcher explore societal and institutional constraints on the utilization of information and communication technology (ICT) for secondary education transformation in Rivers State.

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Purpose of the Study

The main aim of this study was to investigate societal and institutional challenges to the utilization of information and communication technology for secondary education transformation in Rivers State. Specifically, the study sought to examine:

1. the extent to which ICT facilities are available in schools for secondary education transformation in public secondary schools in Rivers State;

2. the extent to which ICT facilities are utilized for secondary education transformation in Rivers State; and

3. the extent to which funding challenges affect the utilization of ICT for secondary education transformation.

Research Questions

1. To what extent are ICT facilities available in schools for secondary education transformation in public secondary schools in Rivers State?

2. To what extent are ICT facilities utilized for secondary education transformation in Rivers State?

3. To what extent do funding challenges affect the utilization of ICT for secondary Education Transformation in Rivers State?

Hypotheses

The following hypotheses were tested at 0.05 level of significance:

1. There is no significant difference in the mean rating on male and female respondents on the types of ICT facilities available for secondary education transformation in public secondary schools in Rivers State.

2. There is no significant difference in the mean ratings of male and female respondents on the extent of utilization of ICT facilities for secondary education transformation in Rivers State.

3. There is no significant difference in the mean ratings of male and female respondents on the societal and institutional challenges on the utilization of ICT for secondary education transformation in Rivers State**.**

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METHODOLOGY

The design adopted for the study was descriptive survey design and the population of the study consisted of 6859 teachers and principals in public senior secondary schools in Rivers State. The sample of the study was 823 which represents 12% of the entire population. Three research questions and hypotheses guided the study. A 4-point likert scale self-structured questionnaire titled Societal and Institutional Challenges to the Utilization of Information and Technology for Secondary Education Questionnaire (SICUICTQ) was used for the study. The instrument was made up of 30 items. The face and the content validity of the instrument were determined by three experts from the Department of Measurement and Evaluation while the reliability of the instrument was estimated to be 0.89 using Cronbach alpha coefficient. The data collected were analyzed using mean and standard deviation to answer all research questions while the z test was used to test the hypothesis at 0.05 level significance. A criterion mean of 2.50 was used as the cut-off mean. Any mean greater than 2.50 was regarded as high extent while mean less than 2.50 was low extent.

RESULTS AND ANALYSIS

Research Question 1: To what extent are ICT facilities available in schools for secondary education transformation in public secondary schools in Rivers State?

Table 1: Availability of ICT Facilities in Schools for Secondary Education Transformation in Rivers State

S/N	Item	Male n – 300		Female N = 523		$\underline{N}$ of x^2	Remark
		$\underline{N}$	SD	$\underline{N}$	SD		
1	Computer m	2.35	1.01	2.41	1.00	2.38	Low extent
2	Electronic library	2.21	1.11	2.22	1.11	2.11	Low extent
3	Television	2.01	1.41	2.00	1.24	2.00	Low extent
4	Projector	2.11	1.11	2.41	0.14	2.26	Low extent
5	Electronic board	2.28	0.10	2.22	1.33	2.25	Low extent
6	Projectors	2.19	1.32	2.31	1.00	2.25	Low extent
7	Modems	2.22	1.00	2.33	0.10	2.27	Low extent
8	Video recorder	2.21	1.45	2.22	0.21	2.21	Low extent
9	Scanners	2.30	1.23	2.41	2.33	2.36	Low extent
10	Internet	2.16	1.10	2.10	2.14	2.13	Low extent
	Aggregate Mean	**2.20**	**1.08**	**2.26**	**0.66**	**2.23**	**Low extent**

Data in table 1 above revealed the respondents rating on the extent of availability of ICT facilities for secondary education transformation. The above result is so alarming because all 10 items showed a low extent of availability of ICT facilities. With an aggregate of 2.23 which falls within the range of low extent, it shows that the respondents agreed that items 1-10 are available at a very low extent in public secondary schools in Rivers State.

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Research Question 2: To what extent is the utilization of ICT For Secondary Education Transformation in Rivers State?

Table 2: Extent of Utilization of ICT facilities for Secondary Education Transformation in Rivers State

S/N	Item	Male n – 300		Female N = 523		$\underline{X}$ of $\underline{X}^5$	Remark
		$\underline{N}$	SD	$\underline{N}$	SD		Low extent
11	Computer	2.50	1.25	2.65	0.14	2.57	Low extent
12	Electronic library	2.30	1.44	2.42	0.41	2.36	Low extent
13	Television	2.20	0.08	2.30	0.22	2.25	Low extent
14	Projector	2.41	0.89	2.41	0.45	2.41	Low extent
15	Electronic board	2.00	1.23	2.50	0.48	2.25	Low extent
16	Projectors	2.10	1.45	2.31	0.36	2.20	Low extent
17	Modems	2.00	1.46	2.41	1.22	2.20	Low extent
18	Video recorder	2.45	0.30	2.20	0.14	2.32	Low extent
19	Scanners	2.10	0.41	2.23	0.34	2.16	Low extent
20	Internet / Reuter	2.30	0.43	2.59	0.33	2.54	Low extent
	Aggregate Mean	**2.25**	**0.89**	**2.62**	**0.51**	**2.43**	**Low extent**

Table 2 above shows the respondents rating on the extent of ICT utilization for secondary education transformation. From the table above, both male and female respondents agreed that computers and the internet were utilized to a high extent with an aggregate of 2.57 and 2.54 respectively. However, other items like electronic library, projector, modems, video recorder, and scanners showed low extent of utilization since the scores were below the criteria mean of 2.50. The aggregate mean of 2.43 also revealed that the respondents agreed that the items in table 2 above were all utilized at a low extent since the aggregate mean was 2.43 which is below the cut of mean of 2.50.

Research Question 3: To what extent do funding challenges have on the utilization of ICT for secondary Education Transformation in Rivers State?

Table 3: Extent of Funding Challenges on ICT Utilization for Secondary Education Transformation in Rivers State

S/N	Item	Male n – 300		Female N = 523		$\underline{X}$ of $\underline{X}^2$	Remark
		$\underline{N}$	SD	$\underline{N}$	SD		
21	It leads to non-availability of ICT facilities	2.56	0.10	3.10	0.36	2.83	High extent
22	It includes ICT training	2.84	0.38	3.24	0.41	3.04	High extent
23	It hinders maintenance of ICT gadgets.	2.66	1.41	3.33	0.33	2.99	High extent
24	It demoralizes the teachers	2.76	0.32	2.58	0.44	2.67	High extent
25	It leads to employment of non skilled staff.	2.51	0.41	2.61	0.96	2.56	High extent
26	It could lead to non-availability of reading materials	3.33	0.19	3.41	0.76	3.37	High extent

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27	It limits learning opportunities	3.36	0.24	3.01	1.89	3.18	High extent
28	Missed opportunities for innovation	3.20	0.96	3.41	1.66	2.30	High extent
29	It leads to outdated infrastructure	3.30	0.84	2.89	1.78	3.09	High extent
30	It leads to lack of professional development	2.69	0.39	2.88	1.89	2.78	High extent
	Aggregate Mean	**2.92**	**0.52**	**3.04**	**1.04**	**2.98**	**High extent**

Table 3 above shows the extent of funding challenges on the utilization of ICT for secondary education transformation in Rivers States. The result from this table is so alarming because all the items on the table showed a high extent on the funding challenges on the utilization of ICT for secondary education transformation. The aggregate mean of 2.98 is greater than the threshold mean of 2.50, therefore the analysis indicates the high extent of the influence of funding challenges on the utilization of ICT for secondary education transformation in Rivers State.

Test of Hypotheses

Hypothesis 1: There is no significant difference between the respondents on the availability of ICT facilities for secondary education transformation in Rivers State.

Table 4: Test of Difference Between the Opinion Mean of the Respondents on Availability of ICT Facilities for Secondary Education Transformation in Rivers State.

Status	N	$\underline{X}$	SD	Df	Z-cal	Z-tab	P-value	Decision
Male	300	2.20						
			0.84	821	0.98	1.96	0.05	Fail to reject
Female	523	2.26						

Table 4 revealed the z-test of difference on the mean rating of male and female respondents on the availability of ICT facilities for secondary education transformation. The z-cal value was 0.98 while the z-tabulated value was 1.96 using 821 degrees of freedom at 0.05 level significance. Hence the null hypothesis is retained since the z-tabulated is greater than the z-calculated. Therefore, there is no significant difference on the mean rating of the respondent on the availability of ICT facilities for secondary education transformation in Rivers State.

Hypothesis 2: There is no significant difference between the opinion of male and female respondents on the utilization of ICT facilities for secondary education transformation in Rivers State.

Table 5. Z-test of Significant Difference on the Opinion of Male and Female Respondents on Utilization of ICT Facilities for Secondary Education Transformation in Rivers State

Status	N	$\underline{X}$	SD	Df	Z-cal	Z-tab	P-value	Decision
Male	300	2.20	0.89					
				821	0.56	1.96	0.05	Retained
Female	523	2.26	0.51					

Table 5 revealed the z-test of difference on the mean rating of the respondents on the utilization of ICT facilities for secondary education transformation. The z-cal value was 0.56 while the z-tabulated value was 1.96 using 821 degrees of freedom at 0.05 level significance. Hence, the null hypothesis is retained since the z-tabulated is greater than the z-calculated. Therefore, there

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is no significant difference in the mean rating of the respondents on the utilization of ICT facilities for secondary education transformation in Rivers State.

Hypothesis 3: There is no significant difference in the mean rating of the respondent on the extent of funding challenges in the utilization of ICT facilities for secondary education transformation in Rivers State.

Table 6: Test of Difference between the Male and Female Respondents on the Extent of Funding Challenges in the Utilization of ICT facilities for Secondary Education Transformation in Rivers State

Status	N	$\underline{X}$	SD	Df	Z-cal	Z-tab	P-value	Decision
Male	300	2.92	0.52					
				821	0.44	1.96	0.05	Fail to reject
Female	523	3.04	1.04					

Table 6 above revealed the z-test of difference on the mean rating of male and female respondents on the extent of the effect of funding challenges on the utilization of ICT facilities for secondary education transformation in Rivers State. The z-cal value was 0.44 value. The z-tabulated value is 1.96 using 821 degrees of freedom at 0.05 level of significance. Hence, the null hypothesis is retained since the z-tab value of 1.96 is greater than the z-calculated value of 0.44. Therefore, there is no significant difference in the mean rating on the extent of funding challenges in the utilization of ICT facilities for secondary education transformation in Rivers State.

DISCUSSION OF FINDINGS

The results of this study shall be discussed under each research question.

The Extent of Availability of ICT for Secondary Education Transformation in Rivers State.

The findings of this study revealed that the availability of ICT facilities for secondary education is at a low extent. This finding is in line with the findings of Oluseun and Adu (2016) who affirmed that ICT facilities were available in schools. This finding is also in line with Nwamana (2022) who said that ICT facilities such as computers, electronic library, and television projectors are very important in schools, especially in the aspect of transformation of schools; however, these facilities or gadgets were currently not available in most secondary schools.

Extent of Utilization of ICT Facilities for Secondary Education Transformation in Rivers State

The findings also revealed that ICT facilities were actually utilized at a very low extent in secondary schools for secondary education transformation. This is in line with the findings of Nwanna, Ofoebu and Egbe (2017) who say that most ICT facilities and gadgets needed for teaching ICT in schools were not utilized. This finding is also in line with Nwanmana (2022) who stated that though ICT facilities are very important in schools however, these facilities were currently not available in schools and even the few that were available were not properly

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utilized in schools due to lack of training, lack of fund, low electricity power supply, lack of maintenance.

Extent of Societal and Institutional Challenges on the Utilization of ICT for Secondary Education Transformation in Rivers State

The findings of this study also revealed the extent of societal and institutional challenges on the utilization of ICT for secondary education transformation to be high. This finding is in line with the findings of Eseyin, Lenee and Ubani (2013) who affirmed that inadequate internet connectivity and bandwidth, expensive ICT services, and the dearth of research on ICT facilities were factors that led to difficulties in utilization of ICT in schools. This finding is also in line with Jegede (2013) who stated that the level of implementation of modernized ICT may be affected by lack of funds, equipment, poor government support, irregular power supply, lack of facilities.

SUMMARY OF FINDINGS

1. The respondents rated the extent of availability of ICT facilities for secondary education transformation to low extent.

2. The utilization of ICT facilities for secondary education transformation was rated low by the respondents

3. Finding challenges on the utilization of ICT facilities was rated high by the respondents.

4. The results of the three hypotheses were accepted; showing no significant difference.

CONCLUSION

The study concludes that though the introduction and utilization of ICT for secondary education transformation will enhance teaching and learning processes, lack of funds is a major challenge that should be looked into.

RECOMMENDATIONS

1. Government and stakeholders of education should provide ICT facilities in schools for secondary education transformation in Rivers State.

2. Teachers, students and other school personnel should be given regular training and re-training for effective utilization of ICT for secondary education transformation.

3. Government and stakeholders of education should find the educational system by allocating more funds in infrastructure development such as ICT for efficiency and effectiveness in this school system.

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