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### Utilization of Information and Communication Technology and Students' Learning Activities in Secondary School Libraries in Emohua Local Government Area, Rivers State, Nigeria

#### Abstract

The study examined the relationship between utilization of Information and Communications Technology tools and resources and students' learning activities in secondary schools' libraries in Emohua Local Government Area, Rivers state Nigeria. It adopted the survey research design and a questionnaire validated and tested with a reliability coefficient of 0.79, as research instrument. The population of the study consisted of all the students in public secondary schools in Emohua L.G.A from JSS 1 to SS 3. A sample size of 380 was drawn from a population of 7,600 students using the Taro Yamane statistical formula, while descriptive and inferential statistics were used to analyze the data. The findings revealed that there is a significant relationship between students' utilization of ICT tools and resources in secondary schools libraries and their information searching activities, preparations for tests, examinations, assignments and class activities. ICT tools and resources use also had a significant relationship with the technical skills of the students in online learning activities, an important aspect of modern pedagogy and learning. However, some challenges encountered by the respondents, such as: in adequate skill on the use of ICT tools and resources; the non-preservation of ICT tools and resources; and, inadequate availability of ICT tools and resources in the school library, posed as inhibitors to the overall effectiveness of their learning activities through the use of ICT tools and resources. The study recommends that the acquisition and maintenance of ICT resources in the school libraries should be prioritized; periodic training and seminars should be organized for teachers, library staff and even for the students in line with new technological innovations as regards to ICT tools and resources utilization in learning activities; a need for the relevant authorities to provide sufficient policy, technical guidance and support in the provision and use of ICT tools and resources in school libraries; and, the employment of experienced digital librarians which is necessary for enhancing the students' skills in the use of ICT tools and resources, given the relevance in learning activities.

**Keywords:** ICT, students, learning activities, school libraries

**Kate Nnenna Okonu**  
Rivers State Polytechnic Library  
Bori, Rivers State

And

**Samuel K. Ibenne Ph.D.**  
Department of Library and  
Information Science  
Abia State University Uturu  
samuel.ibenne@abiastate  
university.edu.ng

#### 1.1 Introduction

The bedrock of education is the pre-primary and primary levels. This stage of education is crucial for the development of

future adult citizens and workers. Just as a child cannot stand up and walk from birth, one cannot develop without primary education. Usoro and Usanga (2007) considers this stage

as the foundation upon which the rest of our educational system is built, while also pointing out that, in underscoring the value of basic education, the Federal Government of Nigeria on September 30, 1999 launched the Universal Basic Education (UBE) programme, which is aimed at promoting literacy in Nigeria. The blueprint for UBE defines it as the foundation for sustainable lifelong learning that provides reading, writing, and numeracy skills. It makes provision for a wide variety of formal and informal activities and programmes designed to enable learners to acquire functional literacy. Moreover, it meant to prepare the children for the future, with the ability to think rationally and to solve problems creatively, to manage and retrieve information, in addition to communicating effectively. It is also designed to instill lifelong learning as a habit, since lifelong learning is the organizing principle for education. The mission of education for children and youth is the development of skills for self-directed enquiry rather than the mere inculcation of subject matter.

Keith (2004) opines that the mission of education can only be achieved through a well-equipped library and users must be educated on how to retrieve and use the available library resources to meet their information needs. Pupils and their teachers need library resources and the expertise of a librarian to succeed. School libraries help teachers teach students as it is commonly said that information is power and access to information is indispensable to individual advancement as well as corporate educational development.

The library according to Ibenne (2021) is a channel of delivering information. The rigid nature of the traditional role in providing information services to its respective users have been revolutionized by the advancement in information communication technologies. The library is also seen by Olayinka (2005) as the central unit of a dynamic system that involves information storage and retrieval. Ikegbune (1994), opines that library is a

collection of written, printed or other graphic materials (including films, slides, photography, records and other tapes) housed, organized and interpreted to meet broad and varying needs of people for information, knowledge, recreation and aesthetics. Reitz (2004) defined library as a collection or group of collections of books and other print or non-print materials organized and maintained for use (reading, consultation, study, research, etc.).

Information and Communication Technology has revolutionized the methods of information storage and retrieval in school libraries. In this Internet era more and more libraries in the world make use of these new technologies for storage, retrieval and dissemination of information in more effective way. Libraries can store huge amount of information using new technologies and transmit this information to any where anytime without any geographical barrier. With the application of ICTs in libraries, access to information has become more dynamic for the scholars who need to gain specialized knowledge. Modern ICT tools have changed traditional teaching methods and made distance learning education more effective and efficient by providing multimedia data repositories which can serve to continuously up-to-date information. ICTs facilitate closer cooperation among libraries and distant learning communities. Therefore, it improves quality of people's life providing easy access to range of information which need for their day to day lives. ICTs in school libraries have become more effective tool into the dissemination of information to the scholarly communities in the developing countries. Technology is a must for e-learning. There is no e-learning without technology infrastructure. Lack of IT knowledge is also a barrier to e-learning. Therefore scholars should be familiar with new technologies. Scholars can do e-learning at anytime, anywhere that suited their convenience. And also, e-learning is different from class room learning. ICTs have

dramatically changed the world of learning and teaching in this digital era.

From the foregoing, it can be observed that the relevance of a library lies in the availability, accessibility and utilization of its resources as it plays an essential role towards students' self directed learning in various ways. However this study seeks to find out the influence of the Utilization of Information and Communication Technology on Students' learning in Secondary School libraries in Emohua Local Government Area of Rivers State.

### 1.2 Statement of the Problem

The relevance of a library lies in the availability, accessibility and utilization of its resources especially in this modern age that the information and communication technology is seen as an essential tool that meets the learning needs of library users in teaching, learning, knowledge searching and research. However, despite the importance of ICT in these areas for students in secondary schools, it appears there is inadequate utilization of ICT by the students. Factors that could be attributable to this inadequacy might be lack of inculcation of relevant skills for ICT utilization in the students, as well as the inability of the system to properly train and guide both teachers and students on acquiring relevant ICT skills for conducting research from digital devices in their own pace and convenience. It is suspected that any low utilization of ICT tools in the library by the students in secondary schools may lead to poor quality in learning and research given the centrality of ICT in modern learning culture. This study therefore, assesses the relationship between Utilization of Information and Communication Technology and Students' learning activities in Secondary School libraries in Emohua Local Government Area of Rivers State.

### 1.3 Research Questions

The following research questions were answered by this study.

- i. What is the relationship between students' utilization of Information Communication Technology tools and resources in secondary schools libraries in Emohua Local Government Area, and their information searching activities?
- ii. What is the relationship between the students' utilization of Information Communication Technology tools and resources, and their assignment activities?
- iii. What relationship exists between the students use of Information Communication Technology tools and resources for learning and effectiveness in their examinations?
- iv. What is the relationship between the students use of Information Communication Technology tools and resource and their effectiveness in their test activities?
- v. What relationship exists between the students use of Information Communication Technology tools and resources and their technical skills in online learning activities?
- vi. What is the relationship between the challenges encountered by the students in the use of Information Communication Technology tools and resources and the effectiveness of their learning activities?

### 1.4 Hypothesis

The study tested one null hypothesis at 0.05 level of significance

- i. There is no significant relationship between utilization of information and communication technology (ICT), and students' learning activities in secondary schools libraries in Emohua LGA, Rivers State, Nigeria.

### **1.5 Scope of the study**

The research is limited to students in government owned secondary schools in Emohua Local Government Area. The study also focuses on the utilization of Information Communication Technology resources by students in selected secondary schools in Emohua Local Government Area. Students' learning activities such as information search, assignments, examinations, tests,

### **2.1 Literature Review**

A school library is a type of library that supports school programs as well as the teaching and learning process. School libraries serve students by providing materials to meet their various needs and encouraging reading and the use of libraries (Clarke 1999). Martin (2000) notes that "research shows that the reading scores for students in schools that focus on improving their library programs are on average of eight to twenty one percent, higher than similar schools with no such development." School libraries help children to discover for themselves by independent study and learning how to ask questions.

Ilogho (2011) observes that in most Nigerian schools, youths or students are hardly seen around reading except for reasons of test, examination or homework. They are not easily given to reading for the love of doing so. Instead most engage in group discussions or gossip, cracking of jokes, indoor games e.g. cards, ludo, chest etc during free periods. They also use break periods to play football and other outdoor games. Furthermore, students who have access to computers and internet facilities prefer to browse, chat, send email, sms, face-book, yahoo messenger, play computer games. While at home students most times play football, watch Television entertainment programmes such as drama, films, comedies, listening to music, watch dancing competitions and so on in the absence of house hold chores.

Usoro and Usanga (2007) identified that in some parts of Nigeria, most children (especially those from rural areas or economically disadvantaged backgrounds) first meet books and reading materials in school, and have limited access to them in the home and in the community. The school library encourages its users to fully accept the responsibility for education and development. School libraries give individualized service, making sure that every library user gets information that meets his or her particular need. It also serve as a laboratory for it users to practice the skills of using indexes, abstracts, bibliographies, and catalogues; school libraries are being assisted by proper funding to acquire relevant and varied materials for these purposes. Books and non-book materials are provided which are well organized, and the right calibers of staff are put in place to disseminate information directly or give assistance to those seeking information on their own.

There are different types of libraries and their aims and objectives are determined by the organization they are established to serve. The concept of librarianship is based on the provision of relevant, accurate and timely information services for the purpose of utilization by the clientele to achieve the objectives of their institutions. School libraries are established in academic institutions to provide information resources and services to meet the information needs of the clientele (staff and students). Libraries established to provide information resources and services to support teaching; learning and research in academic institutions such as universities, polytechnics, colleges of education, secondary schools and other similar institutions are referred to as school libraries.

Abubakar (2011) opines that school libraries are at the forefront of providing information services to their respective communities which comprise of students, lecturers, and researchers to support teaching,

learning and research. To further give credence to the importance of libraries to academics, Weiner (2005) asserted that responsiveness to students and faculty needs, quality of service, and resilience is the hallmark of school libraries. It is the core mandate of school libraries to acquire information resources (print and electronic) to provide information services to aid teaching and learning of students.

Libraries are as important for children as education itself. Library services imply both availability and accessibility of library facilities and services to the user and the willingness and ability of readers to use the facilities and services. The objectives of library services are: to promote in-service education, to develop, assess and improve educational programmes, to enhance teaching and improve competence of teachers, to make learning more meaningful for children, to reduce educational cost, to develop and promote an effective use of innovative materials in schools.

The Library has different resources which is an organized collection of printed and other forms of recorded knowledge that satisfy the information needs of both present and future users. Such library resources include textbooks, journals, indexes and abstracts, ICT, monographs, theses and dissertations, newspapers and magazines, government publications, research and technical reports, encyclopedias, manuscripts, publications of international organizations, patents and standards as well as microforms. Awolola (2000), sees resources as human and material devices which can be used for effective communication. Going by these definitions of resources, it means any resources that supply information which are to be used in future, must be reserved or stored somewhere from where it can be assessed anytime it is needed and ICT remains one of the most important resources needed in the academic library.

Asabere and Enguah (2012) asserted that information and communication technology can be broadly defined as the resources and equipment that provide the required environment with the physical infrastructure and the services for the generation, transmission, processing, storing and dissemination of information in all forms including voice, text, data and graphics. Information and Communication Technology (ICT) simply refers to those machines and components used in the generation, processing, storage, retrieval and dissemination of information. They include those technologies as new media, new technologies in the field of information service; the most common of these machines is the computer and its accessories. Information and Communication Technology is noted to be an electronic or computerized device, assisted by human and interactive materials that can be used to enhance teaching, learning as well as for personal use (Apagu & Wakili, 2015). Posinasetti (2014) observed that ICT plays a very important role towards students learning in schools; he explains that ICT enables effective education by providing educational activities in large geographical areas. It also encourages individual study and brings about fast feedback and virtual collaboration. ICT also encourages students to share their learning experiences and have access to new-ways of interaction.

Edafiogho *et al.* (2006) listed the components of ICT to include computer systems, communication systems and reprographic systems. This implies that ICT includes communication satellites, radio, television, telephone, video tape recorder and microphone, among others. ICT tools are digital technologies such as mobile phones, audio tapes, video cassettes, radio, television, computers, laptops, tablets PCs, desktops, data projector, software programs, printers, scanners, and Interactive teaching box among others. These tools, as observed by Blurton

(1999), are used to communicate, create, disseminate, store, and manage information.

The potential of each technology varies according to how it is used. Forcheri and Molfino (2000) have shown that the various categories of educational ICT tools (input, processing and output tools) can lead to improved students' self directed learning and better teaching methods. For instance, students can use mobile phones for communication via photos, videos, as well as text messages (SMS and MMS) in the course of studying. They can also make use of Tablet PCs which are small screen (12") laptop PCs enabled with touch screens for data entry and multimedia tools which can be used for individualized self-learning.

Students can also make use of web browsing to search for materials and Emails for sending and receiving assignments. Videos, television, and multimedia computer software that combine text, sound, and colorful, moving images can be used to provide challenging and authentic content that will engage the student in the learning process. Interactive radio, likewise, makes

use of sound effects, songs, dramatizations, comic skits, and other performance conventions to compel students to listen and become involved in the lessons being delivered. Audio tapes and video tapes can be used to record lectures and replayed at the student's convenience. ICTs have also been used to improve access to and the quality of teacher training. This is done through self-directed, self-paced Web-based courses for teachers. Online tutorials can also be offered, with some courses requiring occasional face-to-face meetings. Hence, ICTs can enhance the quality of education by increasing learner motivation and engagement, facilitating the acquisition of basic skills, and by enhancing students' self directed learning.

### 3.1 Methodology

The survey method was used for this study. The population of the study was 7,600, consisted of all the registered students in public secondary schools in Emohua L.G.A from JSS 1 to SS 3. The breakdown of the population is shown in table 1.

**Table 1: Population of study**

S/N	Public Secondary Schools in Emohua L.G.A.	Population of students from JSS 1 to SS 3
1.	Odegu Community Secondary School Rumuewhor	726
2.	Community Secondary School, ElibradaEmohua	760
3.	Community Girl's Secondary School OkporowoOgbakiri	514
4.	Community Secondary School, OduohaEmohua	516
5.	Ibaa Girls Secondary School, Ibaa	662
6.	Community Secondary School, Omudioga	364
7.	Community Secondary School, Rumuji	450
8.	Community Secondary School, Rumuekpe	458
9.	Rundeled High School, Rundeled	301
10.	Community Secondary School, Ndeled	392
11.	Community Secondary School, OkporowoOgbakir	363
12.	Uvahu Comprehensive High School, Ibaa	304

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13.	Demonstration Secondary School, Ndala	402
14.	Community Secondary School, Ahai	668
15.	Government Secondary School, Rumuakunde	720
	<b>Total</b>	<b>7, 600</b>

Source: Statistical Records, Ministry of Education (2022), Rivers State

The sample size used was 380, derived using the Taro Yamane formula for determining the sample size from a large population. The instrument of data collection from the respondents is a self-constructed and validated questionnaire titled Utilization of Information and Communication Technology and Students' Learning Activities Questionnaire (UICSLAQ). The instrument was tested for reliability using Kudar Richardson Correlation coefficient (r) which yielded a reliability coefficient of 0.79.

Data is presented in tables and analyzed using frequency, percentages and weighted mean scores (WMS). To arrive at the mean, criterion responses were weighed as follows: (SA) - 4points, (A) - 3points, (SD) - 2points, (D) - 1point. The mean score is calculated using the formula:  $x = \frac{\sum fx}{\sum f}$ . The criterion mean is calculated thus, criterion mean =  $4+3+2+1+0=10/4=2.5$

The decision rule of 2.5 in a 4 point Likert scale applied here implies that mean scores below 2.5 were rejected while those at 2.5 and above were accepted. After which, explanation on each of the tables were given for clarification.

#### 4.1 Data Presentation and Analysis

A total of 380 copies of questionnaire were administered out of which 376 were retrieved. However, after an intense examination, only 370 copies of the questionnaire were filled correctly by the respondents. Thus, 370 copies of the questionnaire were used for data analysis giving us a return rate of 93%.

The first part of the distribution was the demographic distribution of respondents while the second part consisted of responses from respondents to the question asked. In this chapter, data collected for the study are analyzed and discussed. The following tables are used to present the data.

**Table 2: Distribution of respondents by Institution**

S/N	Institutions	No. of respondents	Percentage
1	Odegu Community Secondary School Rumuewhor	16	4
2	Community Secondary School, ElibradaEmohua	18	5
3	Community Girl's Secondary School OkporowoOgbakiri	26	7
4	Community Secondary School, OduohaEmohua	22	6
5	Ibaa Girls Secondary School, Ibaa	16	4
6	Community Secondary School, Omudioga	24	6
7	Community Secondary School, Rumuji	42	11
8	Community Secondary School, Rumuekpe	38	10
9	Runde High School, Runde	20	5
10	Community Secondary School, Ndele	28	8
11	Community Secondary School, OkporowoOgbakir	32	9
12	Uvahu Comprehensive High School, Ibaa	28	8
13	Demonstration Secondary School, Ndala	22	6
14	Community Secondary School, Ahai	18	4
15	Government Secondary School, Rumuakunde	20	5
	<b>Total</b>	<b>370</b>	<b>100%</b>

**Table 3: Distribution of Respondents by Gender**

Gender	Number of Respondents	Percentage
Male	178	48%
Female	192	52%
<b>Total</b>	<b>370</b>	<b>100%</b>

Table 3 above shows that, there were more female respondents than male.

**Table 4: Distribution of Respondents by Class**

Variables	Options	Number of Respondents	Percentage
JSS Class	JSS1-JSS3	164	44%
SS Class	SS1-SS3	206	56%
<b>Total</b>		<b>370</b>	<b>100%</b>

From table 4, respondents in the senior secondary level responded more to the items listed in the research instrument.

#### 4.2 Data Analysis Based on Research Questions

**Research Question 1:** What is the relationship between students' utilization of Information Communication Technology tools and resources in secondary schools libraries in Emohua Local Government Area, and their information searching activities?

**Table 5: Relationship between students' utilization of Information Communication Technology tools and resources and their information searching activities**

Statement	SA	A	D	SD	Total	Mean	Rem
I make use of ICT tools and resources found in my school library to get information on different topics faster than with non -digital sources	240	105	15	10	370	3.5	Sig.
I make use of ICT resources found in my school library to carry out research on my school project and assignments more effectively than without them	205	131	24	10	370	3.9	Sig.
I make use of ICT tools and resources found in my school library to locate, store and retrieve important information as it concerns my studies, and this makes my learning more effective	172	189	7	2	370	3.4	Sig.
My use of ICT tools and resources found in my school library enhances the speed and effectiveness of my information search	201	162	5	2	370	3.5	Sig.
I make use of ICT resources found in my school library to download useful materials when preparing for my examinations	209	146	10	5	370	3.5	Sig.



As shown in Table 5 above, all items in this section had an accepted mean of 3.5, 3.9, 3.4, 3.5 and 3.5 respectively. This shows that there is a significant relationship between students' utilization of Information Communication Technology tools and resources in secondary schools libraries in Emohua Local Government Area, and their information searching activities. More details on the table above.

**Research Question 2:** What is the relationship between the students' utilization of Information Communication Technology tools and resources, and their assignment activities?

**Table 6: Relationship between the students' utilization of Information Communication Technology tools and resources, and their assignment activities**

Statement	SA	A	D	SD	Total	Mean	Rem.
I complete assignments better and faster when I use ICT tools and resources in my school library.	244	131	3	2	370	3.6	Sig.
My assignment scores have always been better when I utilize ICT tools and resources to do them	156	195	11	8	380	3.3	Sig.
I locate more helpful resources in completing my assignments when I utilize ICT tools and resources.	222	141	7	0	370	3.5	Sig.
I find it easier and more appealing to do my assignments when I use ICT tools and resources.	168	152	35	15	370	3.2	Sig.
My assignments are done more effectively when I use ICT tools and resources to do them	192	163	9	6	370	3.4	Sig.

As shown in Table 6 above, all items have an accepted mean of 3.6, 3.3, 3.5, 3.2 and 3.4. This shows that, with the use of Information Communication Technology tools and resources, students find it easier and more appealing to complete their assignments better and faster.

**Research Question 3:** What relationship exists between the students' use of Information Communication Technology tools and resources for learning and effectiveness in their examinations?

**Technology tools and resources for learning and effectiveness in their examinations**

Statement	SA	A	D	SD	Total	Mean	Rem.
Use of ICT tools and resources helps me in personal and group learning in preparation for examinations.	140	192	28	10	370	3.2	Sig.
When I utilize ICT tools and resources to prepare for examinations, I always perform better.	202	108	45	15	370	3.3	Sig.

I find it easier and more effective to prepare for my examinations when I use ICT tools and resources than when I prepare manually	56	72	198	44	370	2.3	Not Sig.
I enjoy using ICT tools and resources to prepare for my examinations than preparing otherwise.	130	165	179	91	370	2.1	Not Sig.
I am more confident in facing my examinations and experience less tension when I prepare for them using ICT tools and resources.	182	103	65	20	370	3.2	Sig.

As shown in Table 6 above, item 1, 2 and 5 have a significant mean of 3.2, 3.3 and 3.2 respectively while the remaining items on the table were not significant. This implies that there the respondents agree that they prefer preparing for examination manually that is through the use of text books and note books.

**Research Question 4:** What is the relationship between the students' use of Information Communication Technology tools and resource and their effectiveness in their test activities?

**Table 8: Relationship between the students' use of Information Communication Technology tools and resource and their effectiveness in their test activities**

Statement	SA	A	D	SD	Total	Mean	Rem.
My test scores are always better when I use ICT tools and resources to prepare for them.	275	80	10	5	370	3.7	Sig.
I always feel more confident and ready for my tests when I prepare for them using ICT tools and resources.	202	108	45	15	370	3.3	Sig.
I find it easier and more effective to prepare for my tests when I use ICT tools and resources than when I prepare manually.	99	56	115	100	370	2.4	Not Sig.
I enjoy using ICT tools and resources to prepare for my tests than preparing otherwise.	45	55	179	91	370	2.1	Not Sig.
I am more adequately prepared before facing my test and experience less tension when I prepare for them using ICT tools and resources.	101	153	92	24	370	2.8	Sig.

From Table 8 above, respondents agree that ICT tools and resources helps them prepare for their test activities but prefer studying manually through the use of text books and note books. More details on the table above.

**Research Question 5:** What relationship exists between the students use of Information Communication Technology tools and resources and their technical skills in online learning activities?

**Table 9: Relationship between the students use of Information Communication Technology tools and resources and their technical skills in online learning activities**

Statement	SA	A	D	SD	Total	Mean	Rem.
The use ICT tools and resources found in my school library has broadened my knowledge and skills in information search	275	80	10	5	370	3.7	Sig.
The use of ICT resources in my school library has improved my competence in reading, writing and subject learning online.	202	108	45	15	370	3.3	Sig.
I can now make use of the computer more effectively and access the Internet for easy learning due to my utilizing ICT tools and resources found in my school library to locate, store and retrieve important information related to my studies	189	99	51	31	370	3.2	Sig.
I make use of ICT resources found in my school library for e-learning or online learning.	221	123	21	5	370	3.5	Sig.
My use of ICT tools and resources found in my school library has enhanced my ability to collaborate and share knowledge with others	187	138	33	12	370	3.5	Sig.
My technical skill in the download of useful information materials has improved owing to my use of ICT resources found in my school library.	257	101	7	5	370	3.6	Sig.

As shown in Table 9 above, respondents agree that their technical skill in online learning as well as their competence in reading, writing and subject learning online has improved as a result of the availability and the use of ICT resources in their school library.

**Research Question 6:** What is the relationship between the challenges encountered by the students in the use of Information Communication Technology tools and resources and the effectiveness of their learning activities?

**Table 10: Relationship between the challenges encountered by the students in the use of Information Communication Technology tools and resources and the effectiveness of their learning activities**

Statement	SA	A	D	SD	Total	Mean	Rem.
My lack of adequate skill on the use of ICT tools and resources inhibits effectiveness in my learning activity	275	80	10	5	370	3.7	Sig.
Inadequate availability of ICT tools and resources in my school library inhibits effectiveness in my learning activity	202	108	45	15	370	3.3	Sig.
Non-preservation of ICT tools and resources in my school library impedes effectiveness in my learning activity	189	99	51	31	370	3.2	Sig.

General lack of awareness among the students about the usefulness of ICT tools and resources for learning inhibits effectiveness in their learning activities	227	109	29	5	370	3.5	Sig.
Lack of funds for the maintenance of my personally-owned ICT tools and resources inhibits effectiveness in my learning activity.	290	76	4	0	370	3.7	Sig.

As shown in Table 10 above, respondents agree with all the listed challenges as what they encounter in the use of Information Communication Technology tools and resources and these challenges hinder the effectiveness of their learning activities.

### Test of Hypothesis

**Table 11: Test of Hypothesis by Pearson Product Moment Correlation**

Correlations

	Utilization of ICT	Students' learning activities
Utilization of ICT	Pearson Correlation	1
	Sig. (2-tailed)	.474**
	N	.000
		1241
Students' Learning Activities	Pearson Correlation	.474**
	Sig. (2-tailed)	.000
	N	1
		1241

**Correlation is significant at the 0.01 level (2-tailed).**

The table revealed the result of the null hypothesis for the test of significant relationship between utilization of information and communication technology and students' learning activities in secondary school libraries in Emohua LGA, River state, Nigeria. The result indicated that  $n(370) = 0.474$  in correlation, resulting in p-value of  $0.00 < 0.05$ . The p-value being less than the 0.05 alpha value implies that the stated null hypothesis was rejected, and an alternate stated thus: there is a significant relationship between utilization of information and communication technology and students' learning activities in secondary school libraries in Emohua LGA, River state, Nigeria.

### 5.1 Discussion of Findings

Table 4 was used to answer research question 1 which intended to find out the relationship between students' utilization of Information Communication Technology tools and resources in secondary schools libraries in Emohua Local Government Area, and their information searching activities. The responses shown in the table depicts that respondents agree that ICT tools and resources found in their school library have made it easier for them to carry out research on their school project and assignments as well as get more information on different topics faster than with non-digital sources. This finding agrees with Usman, Mika'ilu and Garba (2019), who found out that use of ICT had tremendous impact on students' learning in secondary schools, as it enhanced

comprehensibility through learner control and multimedia innovations and made lessons more interesting.

Respondents also affirmed that they make use of ICT tools and resources found in their school library to locate, store and retrieve important information as it concerns their studies, enhancing in the process, the speed and effectiveness of their information search and making their activities learning more effective. This is in agreement with Yushiana and Shahar (2013) found that in a typical school environment, the library plays the role of a gateway to the information world for the students, as the advances in ICT, coupled with the merging of computers, telecommunications, and broadcasting technologies, have brought a new dimension in the roles of school libraries making them a “knowledge hub” for the school which links the school community to knowledge networks within the country and globally.

Based on this, we can conclude that there is a significant relationship between students' utilization of Information Communication Technology tools and resources in secondary schools libraries and their information searching activities. That is, with the help of ICT tools and resources present in the school library, students are able to gain more knowledge, get more information as well as download useful materials at ease which makes learning easier and more effective.

**Research Question 2: What is the relationship between the students' utilization of Information Communication Technology tools and resources, and their assignment activities?**

Answers to this research question are presented in Table 5. Result shows that more respondents ascertain that with the help and usage of ICT tools and resources found in their

school library, they complete their assignments better and faster and locate more helpful resources in completing their assignment which makes their assignment scores even better compared to making use of only note books.

This analysis shows that students prefer using ICT tools and resources to aid them in doing their assignments faster, better and more effective. Selvakumar and Thandavamoorthy (2013) carried out a study on the diverse utilization of information and communication technology by the users of school libraries and found out that ICT is having a profound effect on education by opening the whole world of knowledge and allowing teaching and learning to take place beyond the traditional boundaries.

Table 6 shows the results of data obtained in response to research question 3. Respondents affirm that in preparing for examinations, ICT tools and resources helps them in personal and group learning and they have better performances. Meanwhile, respondents disagree that using ICT tools and resources makes it easier and more effective to prepare for their examinations than manually.

From the above report, the respondents confirm that they prefer using ICT tools and resources found in their school library for group reading and learning as it improves their technical skills, broadens their knowledge and makes learning more effective. This correlates with Samenov (2005) when he posits that ICT use encourages collaboration by naturally bringing students together where they can talk and discuss what they are doing for their work and this in turn, opens up avenues for communication thus leading to language development. This agrees with Sime and Priestley (2005) in whose study students associated the use of ICT with changes in the nature of classroom relations, as well as a reshaping of learning and teaching.

On the other hand, respondents also agree that rather than use ICT tools and resources to prepare for their examination, they prefer preparing manually that is, making use of their texts books and note books.

Answers to research question 4 are outlined in Table 7. Results shows that respondents agree that they always feel more confident and ready for their tests when they prepare for them using ICT tools and resources and it has helped a lot to boast their test scores. This finding corresponds with Chen, Lambert, and Guidry (2005) whose results in a similar study showed a general positive relationship between the use of learning technology and student engagement and learning outcomes. However, and surprisingly, the respondents still affirmed that they find it easier to prepare for their test manually than making use of the ICT tools and resources found in their school library.

From the above analysis, the researcher deduced that the respondents prefer preparing for their test manually, that is, with the use of textbooks and note books than with ICT tools and resources but still feel more confident and ready when they use both. That is to say that the ICT tools and resources found in their school library guides them through by providing more information from what is in their textbooks and note books. However, combining these three methods in preparing for their test, boost their confidence and increase the test scores.

Answers to research question 5 are stated in Table 8. Results show that respondents agree that the use ICT tools and resources found in their school library has improved their competence in reading, writing and subject learning online as well as broadened their knowledge and skills in information search and they can now make use of the computer more effectively and access the Internet for easy online or e-

learning.

The above report shows that the availability and usage of ICT tools and resources in the school library helps students to know how to make use of a computer and other ICT tools and resources and most especially improves their technical skills in online learning activities.

Answers to research question 5 are stated in Table 9. Results shows that respondents confirm there are challenges encountered by the students in the use of Information Communication Technology tools and resources as it affect their learning activities. Some of the stated challenges are lack of adequate skill on the use of ICT tools and resources, this shows that ICT tools and resources cannot function in a school where the teachers or/ students do not know how to make use of them or lack the proper skill in using them for effective learning. This agrees with Omoniyi & Akinboro (2009) when he opined that there is need for acquisition of skills and competence in the use of ICT by both library staff and users for quality and efficient information service delivery.

Other challenges are the non-preservation of ICT tools and resources, inadequate availability of ICT tools and resources in the school library as well as lack of funds for the maintenance of the ICT tools and resources found in the school library. All these challenges can inhibits the effectiveness in students' learning activities. The above findings relates with those of Ogbomo, 2010; Aliyu, 2011 and Eguavon&Adeyemi, (2012) who reported that the lack of funds to acquisition, maintenance and training/ retraining of ICT staff of school libraries as the most fundamental challenges confronting the African schools and thus pose serious challenges to effective ICT use.

## **Conclusion**

Based on the findings, the researcher

concludes that the availability and usage of ICT tools and resources found in the school library is of great importance to both the students, teachers and even the government. ICT tools and resources have been a great help to students by helping them in their assignments, aiding them to prepare for their tests and examination and has even increased their scores and boost their confidence towards E-learning.

In as much as students prefer preparing for their test and examination manually, they also make use of ICT tools and resources as part of their guide during preparation. The researcher further concludes that student usage of ICT tools and resources found in the school library has improve their technical skills towards online learning thereby making learning easier and more effective. Thus we can conclude that there is a significant relationship between the utilization of Information and Communication Technology and students' learning activities in Secondary School libraries in Emohua Local Government Area of Rivers State.

### **Recommendations**

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

- i. Based on the established significance of ICT in the learning activities of the students, the acquisition and maintenance of ICT resources in the school libraries should be prioritized by the funders of these libraries.
- ii. In the same vein, periodic training and seminars should be organized for teachers, library staff and even for the students in line with new technological innovations as regards to ICT tools and resources utilization in learning activities.
- iii. There is a need for the relevant authorities to provide sufficient policy, technical guidance and support

in the provision and use of ICT tools and resources in school libraries, as this will help the school libraries to render required quality and timely services to the students and enhance their learning activities.

- iv. Finally, the employment of experienced digital librarians is necessary and recommended for enhancing the students skills in the use of ICT tools and resources, given their relevance in learning activities.

### **Implications of the Study**

The findings of this study has implications for policy and practice. On policy, the Secondary Education management Board in Rivers State should overhaul the educational policy for secondary schools to prioritize the equipping of school libraries with state of the art ICT tools and resources, together with the services of digitally compliant School Library Media Specialists, in order to properly harness this relevance of ICT in the learning activities of the students. By extrapolation also, the entire services of school libraries should be paid prime attention, given the students tendency to combine manual and digital techniques in their preparations for tests, assignments, exams and indeed other learning activities.

On practice, increased attention and integration should be paid by School Library Media Specialists to the use of ICT tools and resources by the secondary school students, given that it has been established to be significant in their learning activities, including improving their skills in online searching and learning. All planning for school library service delivery should factor in the provision of adequate ICT tools and resources relevant for the students' learning activities.

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