

## **ICTs Use and Library Information Resources in Enhancing a Sustainable Educational Development: A Case Study of University of Ibadan, Ibadan, Nigeria**

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### **Abstract**

*Education is an asset that an individual must possess and acquire because it is an instrument par excellence for national development. The use of Information and Communication Technology has advanced the education sector in Nigeria mostly in tertiary institutions as a result of information provision. This study therefore investigates ICTs use and library information resources in enhancing a sustainable educational development in the University of Ibadan, Nigeria. Survey research method was adopted for the study; undergraduate students of University of Ibadan were selected for this study. Data collected were analyzed using frequency count, analysis of variance (ANOVA), regression and correlation statistical tool to test for the relative contribution and the significant relationship between ICTs use, library information resources to the prediction of sustainable educational development tested at 5% level of significance. The results revealed that Information and Communication Technology (ICT) has contributed to the development of education in the study area with Computer (Laptop) 341(97.7%) which ranked highest. The findings also revealed that the use of library information resources by the undergraduates was very highly utilized with textbook 219*

(62.8%) which ranked highest. The findings reveal that reading for examination 349(100.0%) was the major purpose of using information resources by the undergraduate. It also revealed limited number of computers 314(90.0%) as one of the major constraints of information resources utilisation in the university. The study revealed that there was a significant combined effect of the independent variables on the dependent variable, ( $F(2,346) = 7.724, P < 0.05$ ). It also revealed that information resources use (Beta = .203,  $t = 3.860, p < 0.05$ ) and ICT use (Beta = .149,  $t = 1.515, p > 0.05$ ) are potent predictor factors of educational development. It further revealed that information resources use ( $r = .201^{**}, p < 0.05$ ) and ICT use ( $r = -.147^{**}, p < 0.05$ ) positively correlated to the prediction of educational development of students. The study recommended that government should make computer and internet facilities available at all levels of our educational system as this is expected to improve the academic performance of students in our higher institutions.

**Keywords:** Educational development, ICTs use, library information, resources utilisation, South-west Nigeria

### **Introduction**

Education is an instrument par excellence for national development. It involves the development of the whole person intellectually, psychologically, socially, vocationally, religiously or morally. This is the reason why education is seen as an integral part of national development, Education is a process through which people are formally and informally trained to acquire knowledge and skills. The formal training comes from established schools from the basic level to the tertiary level (Okoye, 2010). Education refers to the process of learning and acquiring information and application of the information to achieving set goals and objectives. According to Ogbobor (2011), education can be divided into two main types: formal learning through an institution such as a school and self-taught learning or what is often termed life experience. Generally, education is important for learning basic life skills, as well as learning advanced skills that can make a person more attractive in the job market. Levels of education in modern societies can go from preschools to colleges and universities. Without tertiary institutions, there is no education and without library to fulfill objectives of the institutions in terms of provision of teaching, research and learning, there will be no knowledge gain. Therefore, library in educational setting plays a quotient role.

Libraries have long time been regarded as information center all over the world as the main purpose of its establishment is to educate and socially enlighten. Therefore, most libraries today have supported education efforts by providing services like media resource, entertainment and leisure such as Center for Educational Media Resource Studies (CEMRS). A more active approach has been taken by libraries offering educational classes or one-to-one tutoring programs. Many libraries have outreach programs designed to meet the needs of specific groups of people with limited educational skills. Library resource materials are distributed to the institutions, including those in prisons, hospitals, rehabilitation centers, and group homes for the elderly and disabled (Ogbebor, 2011).

Education and library are two inseparable indivisible concepts, both being fundamentally and synchronically related to and co-existing with each other. One cannot be separated from the other, and the existence of one is impossible without the other. None of them is an end in itself; rather both of them together are a means to an ultimate end. Education is an 'aggregate of all the processes by means of which a person develops abilities, attitudes, and other forms of behaviour and positive value in the society in which he lives (Fafunwa, 1979). It is a social process by which people are subjected to the influence of a selected and controlled environment (especially that of the school) so that they may attain social competence and optimum individual development. Education is thus, the result of acquired knowledge and the accumulation of observations and experiences while a library is both the fountain and source, and the protector and storehouse of that knowledge and experience (Amusan, Oyetola and Ogunmodede, 2012).

Education is accomplished with adequate utilization of information resources in the library as its use will equivalently give birth to knowledge. Libraries are established to serve its mother institution in terms of teaching, learning and research. Library is also defined as organized collection of published and unpublished books and audiovisual materials with the aid of services of staff that are able to provide and interpret such material as required, to meet the informative research, educational and recreational needs of its users. Libraries provide resources for

knowledge acquisition, recreation, personal interests and interpersonal relationships of users.

The adoption of ICT in the library brought about digitization, e-resources sharing, online cataloguing, virtual library and online book ordering. Devchoudhary (2007) observed that ICT has influenced the traditional library services in the process of acquiring, processing, storing, retrieving and information delivery. It is a known fact that the development of any nation is usually influenced by the degree and extent of the socio-economic improvement that are brought to bear through the introduction of science, technology and mathematics. According to Bayah and Farmation (2002), Cited in Uwabueze and Ozionko (2011) sustainable development leads to fulfillment of societal ideas considered relevant to the needs and aspirations of the society.

Education can be measured through the amount of information consumed resulting to knowledge used in solving practical life situations. Access to this information most oftentimes involves the use of the institutional libraries and information communication technologies. This has vastly contributed to educational development in the global world. It is significant to know that part of the secret to lecturers in higher institutions, superlative teaching performance in the classroom and quality teaching effectiveness was as a result of the well-stocked library the university had and access to ICTs in their various faculty and department. The paper therefore examines ICTs usage and library information resources in enhancing a sustainable educational development with specific emphasis on its role in the education sector and extent of ICTs facilities used by undergraduate.

Many studies have documented either the use of information and communication technology on sustainable education development or impact of information and communication technology on sustainable development in Nigeria. One of the earliest studies by, Anyasi, Onianwa, Akpadia, Idiakheua and Ebegba (2012) examines the significance of information and communication technology for sustainable development. The authors used both primary and secondary data to obtain relevant information from the respondents. Specially, structured questionnaire was employed to elicit information from the respondents. The findings

reveal that information and communication technology is a necessary tool to achieve sustainable development in Nigeria. Shah (2012) in Tyonum and Ezeogu (2015) in agreement to the above definition emphasised that sustainable development means the overall change and improvement in the society as related to the individual in the society, progress in the social, political, religious and economic structure of the nation. A major outcome of education is sustainable development.

Shah (2012) noted that sustainable development encompasses a number of areas and stands as the idea of environmental, economic, social progress and equity, all within the limits of the world's natural resources. Sustainable development not only meets the needs of present generation but also those of the future generation. In other words, it is the development that guarantees a better quality of life for everyone, now and for generations to come. One among the sectorial impact of ICT in the Nigerian development according to Nwabueze and Ozioko (2011) was ICT application in education, they emphasized that most of the discussions and initiatives on ICT in education tend to focus on the use of ICT for teaching and learning only (The Commonwealth of Learning, 2006; Becta, 2004; Akale, 2003). This emphasis on instructional applications of ICT in education has an antecedent.

Long before the emergency of ICT, educational interest in the computer centered on its instructional applications as exemplified by computer-assisted instruction (CAI), computer-aided testing (CAT), et cetera. Accomplishing the antecedent using ICT-driven education, this is electronic mode of knowledge sharing and transmission, which may not necessarily involve physical contact between teacher and student. The concepts "computer-aided teaching" and "computer- aided learning" have given birth to computer-aided instruction, which represents a combination of both teaching and learning. The introduction of ICT has helped to promote fundamental changes in teaching and learning methods thereby helping to overcome the barriers of time and place as technology introduces new choices and opportunities for students and teachers through endless research and learning on the internet (Osakwe, 2012).

Access to instruction through the internet is flexible, ensures broad viability and availability of educational opportunities. It is a cost effective system of instruction and learning, materials can be accessed irrespective

of time and space (Jegade, 2002) cited in (Idowu and Esere, 2013). Usha (2009) attested to the fact above by identifying three major areas in which ICT is considered significantly in improving the educational system in general. These are; ICT Education, ICT Supported Education and ICT Enabled Education. It is a general belief that ICT helps in the creation of human resources, hence regarded as the primary backbone of the teaching-learning process such as online courses through the web.

Library plays an important role in making educational objectives achievable (Bello, 2004) cited in (Amusan, Oyetola and Ogunmodede, 2012). Ochai (1995) observed that libraries have dissipated a lot of energy in the attempt to prove the central role the library should play in information provision for national development. Popoola and Haliso (2009) conducted a study on use of library information resource and service as predictor of the Teaching Effectiveness of Social Scientists in Nigerian Universities and found that the library information resources mostly used by the respondents were journals, abstract and indexes, textbooks, theses and dissertations, conference proceedings, technical reports, newspapers and magazines, government documents and statistical publications. The study further revealed that social scientists in the Nigerian Universities heavily used library electronic information resources (Internet/E-mail, and CD-ROM databases) perhaps due to improved access to the more current information that the resource provide.

According to Tyonum and Ezeogu (2015), the library fosters self-education and stimulates education growth. Any effective and qualitative education depends on the library for its teaching, learning, research, consultation and expansion of knowledge. Similarly, Edom (2007) cited in Tyonum and Ezeogu (2015) stated that effective use of library is the bedrock of academic excellence. Thus, the library is the most important resource in the pursuit of the broad goals and objectives of any educational institution.

Tyonum and Ezeogu (2015) defined education as a long-term investment which guarantees a nation its bright future. The technological advancement in the world today is attributed to education. Thus, any country yearning for sustainable development must accord education a

priority, any nation that is intellectually bankrupt will certainly be socially, politically and economically bankrupt.

Qualitative and functional education enhances individuals' ability to survive in the contemporary society and fosters sustainable socio-economic development (Tyonum & Ezeogu, 2015). Ifidon and Ifidon (2007) demonstrated that the principal actors in the education industry are teachers, librarians, parents, youths, the government and society at large. They further stated that education is a tool for growth and development. Meanwhile, ICT plays a significant role to make the principal actors in the education industry to be effective and it improves the growth and development of education.

Despite the relevance of libraries to education and the nation at large, libraries in Nigeria are facing a lot of challenges that limit their effective services. These challenges according to Tyonum and Ezeogu (2015) include: poor funding, inadequate qualified staff, inadequate ICT facilities, epileptic power supply, inadequate research materials, outdated collections and generally low perception of the relevance of libraries.

The state of development of library resources and services in most libraries in Nigeria today is below expectation. This is as a result of lack of patronage by the library users in their various categories, showing their grievances about the generally poor state of provision of library facilities and information resources in their institutions in Nigeria. Though, competent and qualified librarians were employed to carry out quality services to users in the libraries, yet equipment needed to provide the services are inadequate. Also, libraries are not well equipped with ICT facilities and users' complaints about poor Internet connectivity, limited number of computers and unreliable power supply.

### **Research Questions**

The study seeks to find answers to the following research questions:

1. What are the types of ICT facilities used for sustainable educational development in the university library by the undergraduate students of the university of Ibadan?
2. What is the information resources used to gather information by the undergraduate students of the university of Ibadan?

3. What is the purpose of using information resources by the undergraduate students of the university of Ibadan?
4. What are the constraints to information resources utilisation by the academic staff in the Selected Universities in South-west Nigeria?

### **Research Hypotheses**

- Ho<sub>1</sub>: There will be no significant combined influence of the independent variables (ICT use and library information resources) on educational development of students in University of Ibadan, Ibadan.
- Ho<sub>2</sub>: There will be no significant relative influence of the independent variables (ICT use and library information resources) on educational development of students in University of Ibadan, Ibadan.
- Ho<sub>3</sub>: There will be no significant relationship between the independent variables (ICT use and library information resources) to the prediction of educational development of students in University of Ibadan, Ibadan.

### **Methodology**

The research design adopted for this study was descriptive research design of the survey type using a self-developed questionnaire as the instrument. The instrument is titled "Library information resources and Educational Development" Scale (LIREED) contained questions developed into six sections. Section A contains background information; Section B contains type of ICT facilities used for sustainable educational development; Section C contains items on type of library information resources used to gather information; Section D contains items on purpose of using information resources; Section E contains items on the extent of ICT facilities used in enhancing a sustainable educational development and Section F contains items on constraints to information resources utilization. The total population of this study is four thousand and seven 4,007 undergraduates of 2015/2016 session of the University of Ibadan (UI), Ibadan, Nigeria. Out of this population, a sample size of 401 students was randomly selected for participation in the study. A total



of 401 questionnaires were distributed, out of which 349 were returned. The reliability coefficient for the instruments was tested to be 0.87 using Cronbach-Alpha method. The questionnaire was pre-tested on undergraduates of the University of Ilorin that was not included in the study. The data collected for this study were analyzed using simple percentage, frequencies, correlation and regression analysis and run on the computer, using the Statistical Package for the Social Science (SPSS).

## Results

**Research Question 1:** What are the types of ICT facilities used for sustainable educational development in the university library by the undergraduate students of the university of Ibadan?

**Table 1: Types of ICT facilities used for sustainable educational development**

S/N	ICT facilities	A	D	Mean	S.D	Ranking
a.	Computers (Desktop)	305(87.4%)	44(12.6%)	3.32	.791	5 <sup>th</sup>
b.	Computer (Laptop)	341(97.7%)	8(2.2%)	3.54	.584	1 <sup>st</sup>
c.	Mobile phones	328(94.0%)	21(6.1%)	3.46	.696	2 <sup>nd</sup>
d.	Scanner	264(75.6%)	85(24.3%)	2.99	.887	7 <sup>th</sup>
e.	CD-Writer	234(67.0%)	115(42.9%)	2.80	.991	8 <sup>th</sup>
f.	Internet	322(92.3%)	27(7.7%)	3.60	.682	3 <sup>rd</sup>
g.	Printer	319(91.4%)	30(8.6%)	3.47	.786	4 <sup>th</sup>
H	Electronic Journals	305(87.4%)	44(12.6%)	3.26	.828	5 <sup>th</sup>
i.	Online Database	288(82.5%)	61(17.5%)	3.10	.880	6 <sup>th</sup>
j.	Fax machines	203(58.2%)	146(41.9%)	2.64	1.039	9 <sup>th</sup>

*Survey, 2016*

Table 1 reveals that Computer (Laptop) 341(97.7%) with mean of 3.54, Mobile phones 328(94.0%) with mean of 3.46, Internet 322(92.3%) with mean of 3.60, Printer 319(91.4%) with mean of 3.47, Electronic Journals and Computer (Desktop) 305(87.4%) were the major types of facilities used by students for sustainable educational development. This finding commensurates with the submission of Attama and Owolabi (2008) the primary ICT resources for development are; Computers, the Internet, electronic mail (E-mail), World Wide Web (WWW). From the above, Nwabueze and Ozioko (2011) inferred that being on the web would put any nation or organization on the right course of speedy

and sustainable development in line with the emerging changes in technology, economic and political paradigms. Consequently, many organizations, ministries and parastatals in Nigeria have their own websites through which they make relevant information available to members of the public.

**Research Question 2:** What is the information resources used to gather information by the undergraduate students of the university of Ibadan?

**Table 2: Type of library information resources used to gather information**

S/N	Library Information Resources	VHU	HU	MU	LU	N	Mean	Ranking
a.	Newspapers	170(48.7%)	84(24.1%)	64(18.3%)	21(6.0%)	10(2.9%)	4.10	2 <sup>nd</sup>
b.	Magazines	86(24.6%)	138(39.5%)	74(21.2%)	36(10.3%)	15(4.3%)	3.70	4 <sup>th</sup>
c.	Journals	132(37.8%)	118(33.8%)	81(23.2%)	14(4.0%)	4(1.1%)	4.03	5 <sup>th</sup>
d.	Textbooks	219(62.8%)	83(23.8%)	27(7.7%)	11(3.2%)	9(2.6%)	4.41	1 <sup>st</sup>
e.	Almanacs	95(27.2%)	77(22.1%)	125(35.8%)	37(10.6%)	15(4.3%)	3.57	8 <sup>th</sup>
f.	Encyclopedias	125(35.8%)	85(24.4%)	92(26.4%)	37(10.6%)	10(2.9%)	3.80	6 <sup>th</sup>
g.	Dictionaries	141(40.4%)	93(26.6%)	86(24.6%)	25(7.2%)	4(1.1%)	3.98	3 <sup>rd</sup>
h.	Abstract/indexes	94(26.9%)	55(15.8%)	126(36.1%)	51(14.6%)	23(6.6%)	3.42	7 <sup>th</sup>

*Survey, 2016*

Table 2 reveals that textbooks 219(62.8%) with mean of 4.41, newspaper 170(48.7%) with mean of 4.10, Dictionaries 141(40.4%) with mean of 3.98, magazines 138(39.5%) with mean of 3.70, Journals 132(37.8%) with mean of 4.03 and encyclopedia 125(35.8%) are very highly utilized and were the major types of library information resources used to gather information by the students. While, almanacs 125(35.8%) with mean 3.57 and abstracts/indexes 126(36.1%) were moderately utilized. This finding corroborates with the study which Popoola and Haliso (2009) conducted use of library information resource and service as predictor of the Teaching Effectiveness of Social Scientists in Nigeria Universities. They found that the library information resources mostly used by the respondents were journals, abstracts and indexes, textbooks, theses and dissertations, conference proceedings, technical reports, newspapers and magazines, government documents and statistical publications. The study further revealed that social scientists in the

Nigerian universities heavily used library electronic information resources (i.e. Internet/E-mail, and CD-ROM databases) perhaps due to improved access to the more current information that the resource provide. According to Tyonum and Ezeogu (2015), the library fosters self-education and stimulates education growth. Any effective and qualitative education depends on the library for its teaching, learning, research, consultation and expansion of knowledge. Similarly, Edom (2007) cited in Tyonum and Ezeogu (2015) stated that effective use of library is the bedrock of academic excellence. Thus, the library is the most important resource in the pursuit of the broad goals and objectives of any educational institution.

**Research Question 3:** What is the purpose of using information resources by the undergraduate students of the university of Ibadan?

**Table 3: Purpose of using information resources**

S/N	Purpose of using information resources	A	D	Mean	S.D	Ranking
A	Reading for examination	349(100.0%)	-	3.73	.444	1 <sup>st</sup>
B	Preparing notes	338(96.9%)	11(3.2%)	3.55	.558	3 <sup>rd</sup>
C	General awareness	319(91.4%)	30(8.6%)	3.36	.635	7 <sup>th</sup>
D	Discussions	297(85.1%)	52(14.9%)	3.25	.739	8 <sup>th</sup>
E	Research work	332(95.1%)	17(4.9%)	3.59	.583	5 <sup>th</sup>
F	Written assignment	343(98.3%)	6(1.7%)	3.50	.534	2 <sup>nd</sup>
G	Information searching	324(94.9%)	25(7.2%)	3.49	.628	6 <sup>th</sup>
H	To improve general knowledge	334(95.7%)	15(4.3%)	3.40	.657	4 <sup>th</sup>

*Survey, 2016*

Table 3 reveals that reading for examination 349(100.0%) with mean of 3.73, written assignment 343(98.3%) with mean of 3.50, preparing notes 338(96.9%) with mean of 3.55, to improve general knowledge 334(95.7%) with mean of 3.40 and research work 332(95.1%) were the major purpose of using information resources by the students. This finding is in line with the submission of Jegede (2002) cited in Idowu and Esere (2013), that access to instruction and resources through the internet is flexible, ensures broad viability and availability of educational opportunities. It is a cost effective system of instruction and learning,

materials can be accessed irrespective of time and space. Usha (2009) attested to the fact above by identifying three major areas in which ICT is considered significant in improving the educational system in general. These are; ICT Education, ICT supported Education and ICT Enabled Education. It is a general belief that ICT helps in the creation of human resources, hence it is regarded as the primary backbone of the teaching-learning process such as online courses through the web.

**Research Question 4:** What are the constraints to information resources utilization by the academic staff in selected universities in South-west Nigeria?

**Table 4: Constraints to Information Resources Utilisation**

S/N	Items	A	D	Mean	S.D	Ranking
a.	Poor Internet connectivity	298(85.4%)	51(14.6%)	3.28	.883	3 <sup>rd</sup>
b.	Limited number of computers	314(90.0%)	35(10.0%)	3.36	.708	1 <sup>st</sup>
c.	Passwords	310(88.9%)	39(11.1%)	3.33	.717	2 <sup>nd</sup>
d.	Limited access of PC labs	297(85.1%)	52(14.9%)	3.24	.780	4 <sup>th</sup>
e.	Limited time	264(75.6%)	85(24.8%)	3.03	.767	7 <sup>th</sup>
f.	Lack of awareness	218(62.5%)	131(37.5%)	2.89	.895	9 <sup>th</sup>
h.	Inaccessibility to e-resource	283(81.2%)	76(18.9%)	3.19	.817	5 <sup>th</sup>
j.	Resources not easily available	277(79.4%)	72(20.7%)	3.09	.941	6 <sup>th</sup>
k.	Unreliable electricity	258(72.2%)	91(26.1%)	3.07	1.058	8 <sup>th</sup>

*Survey, 2016*

Table 4 reveals that limited number of computers 314(90.0%) with mean of 3.36, passwords 310(88.9%) with mean of 3.33, poor Internet connectivity 298(85.4%) with mean of 3.28, limited access of Pc labs 297(85.1%) with mean of 3.24, inaccessibility to e-resources 283(81.2%) with mean of 3.19 and resources not easily available 277(79.4%) with mean of 3.09 were the major constraints to information resources use by the students. This is in line with the study of Tyonum and Ezeogu (2015), they reported that despite the relevance of libraries to education and the nation at large, regrettably libraries in Nigeria are facing a lot of challenges that limit their effective services. These challenges are; Poor funding, inadequate qualified staff, inadequate ICT facilities, epileptic power supply, inadequate research materials, outdated collections and general low perception of the relevance of libraries.

**Ho<sub>1</sub>:** There will be no significant combined influence of the independent variables (ICT use and library information resources) on educational development of students in University of Ibadan, Ibadan.

**Table 5: Summary of regression for the joint contributions of independent variables to the prediction of educational development**

R=.207

R Square =.043 Adjusted

R square =.037

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1082.776	2	541.388	7.724	.001(a)
	Residual	24251.344	346	70.091		
	Total	25334.120	348			

*Survey, 2016*

Table above reveals significant combined effect of the independent variables (ICT use and information resources use) to the prediction of educational development of students in University of Ibadan. The result yielded a coefficient of multiple regressions R of .207, multiple R-square = .043 and Adjusted R square =.037. This suggests that the two factors when combined accounted for 3.7% ( $Adj.R^2=.037$ ) variation in the prediction of educational development of students in University of Ibadan. The other factors accounting for 96.3% variation in the prediction of educational development of students in University of Ibadan are beyond the scope of this study.

The ANOVA result from the regression analysis shows that there was a significant combined effect of the independent variables on the dependent variable,  $F(2,346) = 7.724$ ,  $P < 0.05$ . This finding is in line with the study of Tyonum and Ezeogu (2015), they reiterated that a very important role of the library is to provide information sources which will help augment ideas collected from other sources. Information is an essential element in the communication process. With the advent of

ICT, this role is facilitated, hence users can access information via the internet to update the knowledge and keep abreast of current trends. **H<sub>02</sub>**: There will be no significant relative influence of the independent variables (ICT use and library information resources) on educational development of students in University of Ibadan, Ibadan.

**Table 6: showing the relative effect of study variables to the prediction of educational development of students in University of Ibadan, Ibadan**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error			
1 (Constant)	44.117	5.318		7.894	.000
ICT use	.213	.072	.149	1.515	.001
Information resources use	.311	.081	.203	3.860	.000

*a. Dependent Variable: library information resources use*

Table 6 above shows that the two predictor factors (ICT use and information resources use) are potent predictors of educational development of students in the study zone. The study further reveals these predictors in hierarchy as follows. The most potent factor was information resources uses (Beta = .203, t=3.860, p<0.05) followed by ICT use (Beta = .149, t=1.515, p>0.05) are potent predictors factors of educational development of students in University of Ibadan. This finding correlate with the study of Anyasi, Onianwa, Akpadia, Idiakheua and Ebegba (2012), they examine the significance of information and communication technology for sustainable development. The authors used both primary and secondary data to obtain relevant information from the respondents. Specially, structured questionnaire was employed to elicit information from the respondents. The findings reveal that information and communication technology is a necessary tool to achieve sustainable development in Nigeria. Similarly, Edom (2007) cited in Tyonum and Ezeogu (2015) stated that effective use of library is the bedrock of academic excellence.

**Ho<sub>3</sub>:** There will be no significant relationship between the independent variables (ICT use and library information resources) to the prediction of educational development of students in University of Ibadan, Ibadan.

**Table 7: Correlation matrix showing the relationship among study variables.**

Variables	Mean	Std.Dev	1	2	3
Sustainable educational development	55.8596	8.53224	1.000		
ICT use	45.2665	11.25338	.147**	1.000	
Information resources use	43.2149	5.58191	.201**	.000	1.000

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

The result displayed in the above table reveals the relationship of each independent variables (ICT use and library information resources) to the prediction of the dependent variable (educational development of students); information resources use positively correlates with educational development of students( $r = .201^{**}$ ,  $p < 0.05$ ) and ICT use positively correlated ( $r = -.147^{**}$ ,  $p < 0.05$ ) to the prediction of educational development of students. This finding agreed with the study of Jegede(2002) cited in Idowu and Esere(2013), he submitted that access to instruction through the internet is flexible, ensures broad viability and availability of educational opportunities. It is cost effective system of instruction and learning, materials can be accessed irrespective of time and space. Usha (2009) attested to the fact above by identifying three major areas in which ICT is considered significantly in improving the educationalsystem in general. These are; ICT Education, ICT supported Education and ICT Enabled Education.

### **Conclusion**

Library and information resources and services are relevant to attainment of sustainable educational development in Nigeria. Information repacking, current information resources awareness, library marketing, selective dissemination of information, public relation services, and advertising are some of the strategies that libraries can adopt to ensure sustainable educational development. Without a doubt, ICTs use in the library will continue to make the librarians and the libraries more inclined,

information resources will be easily accessible by users to meet their various needs. This will also involve the development of the whole person intellectually, psychologically, socially, vocationally, religiously or morally. Apparently, years to come, it appears every realm of human endeavour is at the mercy of ICT tools and its efficient use will depend on user compliance. ICTs deployment in higher education together with the provision of the requisite infrastructure such as stable power supply will hasten the needed turnaround of higher education than hinder it.

### **Recommendations**

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

- Government should provide adequate funds for libraries and education sector
- Employment of more qualified staff into the library
- Provision of adequate ICT and other educational facilities
- There should be stable power supply in the library
- Greater government support
- Library management should provide current materials for research and development
- Government should construct more classrooms for students among others.

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