



E-Learning And Digital Library Inclusion: Through The Use Of ICT Facilities Among Colleges Of Education In Katsina State

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ABSTRACT

The purpose of this paper is to examine the achievements control of e-learning and the digital library inclusion: through the use of ICTs facilities among colleges of education in Katsina State, Nigeria. However, the study support teaching, learning, and research in ways consistent with and supportive of the institution's mission and goals. The study used frequency and percentage tables, mean and standard deviation, Pearson Linear Co-efficiency Correlation analysis. The study found that, e-learning been practiced in colleges of education, and the effective of ICTs facilities towards supporting e-learning the level was Fair-minded (general average mean=3.23, Std=0.945). While, utilization of e-library resources was poor among students (average mean=2.31, Std=0.586). Henceforth, there was a positive/strong relationship between the e-learning and e-library inclusion for use of ICTs facilities in colleges of education ($r=.711^{**}$) and ($\text{sig}=.000$). The study concluded that, the colleges of education, it is hoped that the results of this study is to determination and help its management to emphasis the e-learning of colleges education by incorporating it into their curriculum with emphasis on e-library resource retrieval and use with the availability of ICTs facilities. The study recommended that, the management should consider e-learning is the newer more encompassing tern for those activities previously described by the term "computer based training.

Keywords: E-learning, Digital Library, ICTs Facilities, Online Support Services, College Libraries.

INTRODUCTION

According to Abdul and Shakeel, (2015) most of the college libraries are now automated and many scholars have e-mail accounts. Communication and data transfer or interchange has become easy with the help of Internet and email attachments. The concept of e-learning can be incorporated interested in a digital library system. For instance, in an e-learning environment the contents are truly dynamic. Any piece of information comes with a system that equips a user to test his level of knowledge. Libraries have adapted accordingly to enhance the learning process. Digital library and e-learning would have to complement each other. E-learning be made possible if there are well-equipped classrooms and user-friendly technologies. It is important to develop Internet delivery mode and open archives, and support of technology online access, learning possibly will convert modest digital libraries. However, an e-learning bowl face challenges of relating technologies across geographical boundaries and to poles apart communities. However, with current researches focusing on improving user interfaces and tools to

generate content, analyzing and interacting with complex data, e-learning could become easier. (Renwick, S. 2015).

These dynamic mediums offer shared community spaces, support digital communication and collaboration, and link to information sources, such as streamed video, podcasts, webcasts, digital libraries, web pages, and videoconferencing. The use of Internet to access learning materials; to interact with the content, instructor and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and grow from the learning experience (Gruca, A. N. 2010).

Indeed, e-learning has enable colleges of education in empowering Katsina State with supplementary and developed education to create a better learning environment for all learners. Though, ICTs is a position where learners, teachers, researchers and wider institutional stakeholders use technology to enhance the overall educational practice in Katsina State that improving and encouraging comprehensive and diverse personal, high quality learning, teaching and research. The developing service of e-library is facilitate access to electronic resources in various formats, implant the virtual library in curriculum design and development, provide enriched learning experiences and contribute to internal and external e-repositories (Saleh, 2012).

Katsina State has been known for its heavy investment of computer in the education sector and most profoundly in the institutions of higher learning (Abubakar and Adetimirin, 2015). The Colleges of education have been great beneficiaries of these computer investments and all the two colleges in Katsina have sine long embraced and integrated Computer into their academic area. All the three Colleges of Education in Katsina State have electronic library resources, and it is functioning so well accessible information. The challenge is that most of the students who are enrolled into these Colleges of Education they have no general knowledge of computer application hence they have never explored the benefits that come with the utilization of electronic library resources (Kefas, 2015). The study proposed to examine computer application, towards e-learning and electronic library resources in the colleges of education in Katsina State.

Problem Statement

There is low usage of ICT facilities in the colleges of education. Perhaps, this is due to lower level of computer presentation and electronic library provisions. This situation spur the need for this study, with the view to determine the extent to which e-learning and digital library inclusion: through the use of ICTs facilities among colleges of education in Katsina State, Nigeria.

With the current development in ICTs in education and College libraries in Nigeria are now providing resources in electronic formats (Abubakar and Adetimirin, 2015). Katsina state has two State Colleges and one Federal College of Education. Altogether, made significant investment in enhancing library services. To the students and staff, e-library facilities and other computer-based technologies. Consequently, students can gain access to information that will enhance their scholarly research work (Abubakar and Adetimirin, 2015). Nevertheless, available literature has indicated low use of e-library resources by students in all of the three Colleges of Education in Katsina. This has diminished the potentials and payback, considering the enormous investment on e-library resources. This however, may probably be due to lack of the basic computer skills that could enable them to access the needed e-library resources. Other problems encountered include the absence of committee consultants and computer experts in e-library operation. More also, lack of set-up facilities poor (communication facilities and irregular power supply, the poor e-library management) environment and the small amount of information contained in e-libraries.

In the light of the above conditions are the consequences that the prevailing problem. This study intends to investigate the failure to which e-learning programmed effective utilize e-libraries resources. By leading to several undesirable outcomes such as failure in academic performance, and lack of effectiveness among teachers, and learners. To this, can growth the failure contest with other tertiary's institutions. In and outside the country, which as a whole lead to the college's ineffectiveness for the e-learning demonstrated.

General Objective

The main purpose of this study is to observe the correspondent within a context of e-learning and the digital library inclusion: through the use of ICTs facilities among colleges of education in Katsina State. To develop a comprehensive research framework to better understand the e-learning and digital library factors within the Information Technologies (ITs), educational and institutional environment for a favorable teaching and learning process with ICT development in Nigeria as attainable in other developed countries.

Objectives of the Study

- i. To assess the level of e-learning been practiced in colleges of education, and what are the effective ICTs facilities that support e-learning in Katsina State
- ii. To ascertain the level of digital library effectively utilize the ICTs resources in colleges of education in Katsina State e-learning been practiced in colleges of education, and what are the effective ICTs facilities that support e-learning in Katsina State
- iii. To establish relationship between technological, governmental, and environmental factors that promote e-learning and the digital library inclusion for effective utilization in colleges of education in Katsina State.

LITERATURE REVIEW

A literature review is an account of what has been published on a topic by accredited scholars and researchers. This area has been devoted to give a brief account of the quantitative literature published till October, 2023 in the field of e-learning and e-library inclusion of ICTs facilities review. More specifically, it is aimed to identify the influence of e-learning programme on utilizing e-libraries for the students in college Libraries.

An examination of the body of research literature, which is the backbone of any research work, reveals the current trends and the future requirements in the subject of the concerned research project. At this juncture, it is appropriate to undertake a detailed review of the literature with the intention of identifying the research gap, need and importance of the proposed study, appropriate methodology and tools to be employed extra. In this area, the literature has been discussed and reviewed in the following sub-headings. Gakibayo, Ikoja-Odongo and Okello-Obura (2013) in Uganda, emphasized that academic libraries were an integral part of universities and had a critical role to play in supporting the core mission of the university that is teaching, learning and research. For example, e-resources made available by university libraries to university communities; faculty, staff, students and other authorized users are for activities that support the university mission. One may therefore conclude that these studies have shown that e-library resources are widely used in universities, but there is a relationship between computer literacy and use of e-learning. Where ICTs facilities were lacking and computer skills were low, less use was made of e-library resources. Most academics and students surveyed were computer literate to some extent, but they needed to develop their searching skills.

Soyizwapi (2015) conducted a research study among number of postgraduate students in the Faculty of Science and Agriculture at the University of KwaZulu-Natal, Pietermaritzburg. The study focused on the use students made of electronic Library and databases which provided information needed for their studies. The findings of the study indicated that postgraduate students used electronic Library and electronic databases, but that a few of the databases were not used. She also found that a number of problems were experienced by postgraduates when using the databases. Postgraduates became aware of the availability of electronic databases from a variety of sources such as friends, library orientation programmes and academic staff. It was also found that search engines were identified as facilities that were very popular with almost all the students. There was a need for training in the use of e-library and electronic databases for a need to improving accessible information in place of all campus and off-campus users.

However, the study of online searching in scientific information in science and technology libraries of Delhi reveals a sizeable number of users (almost 60%) are facing numerous problems while browsing

electronic information, such as lack of knowledge about the resources, lack of trained staff and inadequate terminals (Naushad, 2015).

The Studies were carried out on the use of electronic resources by teachers, students and research scholars of universities and research organizations. Seventy-eight percent(78%) of the respondents feel that the use of the UGC – Infonet e-journals has created high dependency value on their research work and they needed current article alert services and electronic document supply services (Madhusudhan, 2010).

In the context of developing countries, Okello-Obura and Magara (2008) investigated electronic information access and utilization at the East African School of Library and Information Science, Makerere University, Uganda. Out of the 250 targeted students, 190 responded, giving is sponge rate of 76%. The study revealed that, users derived a lot of benefits from electronic library resources and develop of e-learning activities. In the direction of gaining access to a wider range of information and improved academic performance as a result of access to quality information.

E-learning engages the use of a computer or electronic device in some way to offer educational or learning materials, and e-manage data, information, and knowledge to improve student' performance (Agarwal *et al.*, 2004). The characteristic of e-learning process was mainly based on the Internet; information dissemination and knowledge flows in form of network courses among others (Liu and Wang, 2009).

E-Learning and Digital Libraries Most of our College Libraries are now automated and many scholars have e-mail accounts. Communication and data transfer or interchange has become easy with the help of Internet and email attachments. The Inlibnet (web.inlibnet.ac.in/index.jsp) program for college libraries is expanding in every dimension. The concept of e-learning can be combined into a digital library system. For instance, e-learning environment the contents are truly dynamic. Any piece of information comes with a system that equips a user to test his level of knowledge. Libraries have adapted accordingly to enhance the learning process. It is important to develop Internet delivery mode and open archives, in addition with the aid of technology online access learning could become simpler digital libraries and e-learning faced challenges of relating technologies across geographical boundaries and to different communities (Rosenberg, M. 2016).

Theoretical Framework

This study was guided by the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003). Venkatesh and his colleges developed the unified model through reviewing eight models which explain ICT usage, namely TRA, TAM, the motivational model, Theory of Planned Behavior (TPB), a model combining TAM and TPB, the model of PC utilization, Diffusion of Innovation (DOI), and the social cognitive theory. The purpose of UTAUT is to explain a user's intentions to use ICT and the subsequent user behavior. The model considers four constructs as direct determinants of user acceptance and usage behavior, namely performance expectancy, effort expectancy, social influence, and facilitating conditions. There are four key moderating variables: gender, age, experience, and voluntariness of use. Venkatesh et al. (2003) stated that UTAUT provides a tool for managers to assess the likelihood of success of technology introductions and to understand the drivers of acceptance in order to design interventions, which include, e.g., training or marketing. UTAUT focuses on users who may be less willing to adopt and use new systems.

The UTAUT Model is relevant to this study because it provides knowledge on how information can be sought. The context of e-library resources in this study emphasizes the aspect of information search process but on a digital platform. However, this information can only be sought if the learners has use the ICT facilities for their services. This is where Venkatesh model emphasizes the guidance of the lecturers or the librarians for learners who may not be having adequate knowledge in regard to e-library recourses and e-learning for the use of ICTs facilities.

E-learning in Colleges of Education to supporting Learning process

A) Knowledge Databases:

Whereas not necessarily seen as actual training, these databases are the most basic form of E-Learning have probably seen knowledge on software sites offering indexed explanations and guidance for software questions, along with step-by-step instructions for performing specific tasks.

B) Online Support:

Online support is also a form of E-Learning and functions in a similar manner to knowledge databases. Online support comes in the form of forums, chat rooms, online bulletin boards e-mail or live instant messaging support slightly more interactive than knowledge databases, online support offers the opportunity for more specific questions and answers, as well as more immediate answers.

C) Asynchronous Training:

This is E-Learning in the more traditional sense of the word. It involves self-paced learning either CD-ROM-based, Network based, Intranet-based as Internet-based. It may include access to instructors through online bulletin board, online discussion groups and e-mail or, it may be totally self-contained with links to reference materials in place of a live instructor.

D) Synchronous:

Training Synchronous training is done in real time with a line teacher facilitating the training. Every one journals in at a set time and can communicate directly with the teacher and with each other. A student can raise their cyber hand and view the cyber whiteboard. It lasts for a set amount of time-from a single session to several weeks, months or ever years. This type of training usually takes place via internet web sites, audio or video conferencing Internet telephony or even two-way live broadcasts to students in a classroom.

E-libraries resources in colleges of education to supporting learning process

According to Hirsh (2014), the task of e-library is to provide both information services and resources that are capable of meeting the research, teaching and learning needs of the talent and students. Of course, academic researchers see e-library as research Centre and intellectual energy house where knowledge, ideas and directions are generated to achieve research goals of the colleges of education.

1) No physical boundary. The user of a digital library need not to go to the library physically; people from all over the world can gain access to the same information, as long as an Internet connection is available.

2) Round the clock availability a major benefit of digital libraries is that people can gain access 8am/10pm to the information.

3) Multiple access. The same resources can be used simultaneously by a number of institutions and patrons. This may not be the case for copyrighted material: a library may have a license for "lending out" only one copy at a time; this is achieved with a system of digital rights management where a resource can become inaccessible after expiration of the lending period or after the lender chooses to make it inaccessible (equivalent to returning the resource).

4) Information retrieval. The user is able to use any search term (word, phrase, title, name, and subject) to search the entire collection. Digital libraries can provide very user-friendly interfaces, giving click able access to its resources.

5) Preservation and conservation. Digitization is not a long-term preservation solution for physical collections, but does succeed in providing access copies for materials that would otherwise fall to degradation from repeated use.

6) Space. Whereas traditional libraries are limited by storage space, digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain them and media storage technologies are more affordable than ever before.

7) Added value. Certain characteristics of objects, primarily the quality of images, may be improved. Digitization can enhance legibility and remove visible flaws such as stains and discoloration.

METHODOLOGY

The study used descriptive, correlational and cross sectional. (Creswell, 2003; Amin, 2005). Cross-sectional design was used because the data were collected at once, descriptive because mean and standard deviation were used in assessing e-learning and the digital library inclusion: through the use of ICTs facilities and correlation to find out the relationship between e-learning and the digital library for effective utilization of e-library resources (Amin, 2005). Quantitative approach was used to describe the statistics of the scores using indices that describe the current situation and investigate the relationships between the study variables using information gained from the questionnaire. In this study a total population of 500 participants from three different colleges of education were been reflected as a study to include the following colleges:

- Federal College of Education Katsina, Katsna FCE
- Isa Kaita College of education, Dutsin-ma, Katsina IKCOE
- Bala Usman College of Legal Studies, Daura BUCLS

During the analysis of the data, frequencies and percentage distribution was been used to analyze data on the profile of the respondents. Means and Standard Deviations go on used to determine the students’ e-library and the e-learning through use of ICTs facilities, while Pearson’s linear correlation coefficient was used to determine significant relationship between e-learning and the e-library inclusion: through the use of ICTs facilities among colleges of education in Katsina State.

DISCUSSION/RESULT

The results obtained from the 222 copies of the research questionnaire were analyzed using simple percentages and frequency tables numbered. Note the key to tables: (**BUCLS** = Bala Usman College of Legal Studies, Daura; (**FCE** = Federal College of Education, Katsina State); (**IKCOE** = Isa Kaita College of Education, Dutsin-ma). This section covers the demographic features of the respondents in terms of age and categories of respondents. Table 1 and 2 give the summary of the respondent’s to answer.

Table 1 Age distribution of Respondents

AGE	BUCLS	FCE	IKCOE	Total	%
Below 30	10	18	17	45	11%
31 – 39	11	26	14	51	23%
40 – 49	15	30	24	69	31%
50 – up	20	25	12	57	25%
Total	56	99	67	222	100%

Table I presents the age distribution of the respondents. It shows that 69 percent of the respondents were in the 40 – 49 ages bracket while 31 percent were between the ages of 50 years and above. On the other hand, 25 percent were 31-39. Only 11 percent of the respondents were below 23 years. This shows that more than half of the respondents are young adults (40-49 years) followed by old adults of 50 years and above implies that the students guidance to undergoing a form of education in order to increase knowledge among the colleges of education and general population.

Table 2: Categories of respondents

Respondents	BUCLS	FCE	IKCOE	Total	%
Students	18	70	27	115	52%
Academic Staff	38	29	40	107	48%
Total	56	99	67	222	100%

Table 2 summarizes categories of the respondents. A Students and academic staff constituted the bulk of academic researchers in college e-libraries in Katsina state with 48 percent of students and 52 percent of academic staff respectively.

Table 3: Determination of E-learning through use of ICTs facilities in colleges of education performance expectancy

Knowledge Databases	Mean	Std. Deviation	Interpretation
I can fosters, interaction and stimulates understanding and the recall of information.	3.44	1.078	Good
I Accommodates different learning styles and fosters learning through a variety of activities	3.16	1.463	Fair
I do Fosters self-paced learning.	2.07	1.201	Poor
Average mean	2.89	1.247	Fair
Online Support Assistances			
I know how to encourage browsing information through hyperlinks to sites on the World Wide Web.	4.25	.552	Very good
I know how to display online support comes in the form of forums, chat rooms.	4.22	.505	Very good
I know how to use online bulletin boards.	4.22	.815	Very good
I know how e-mail or live instant messaging support slightly more interactive than knowledge databases.	4.15	.642	Good
I know how to organize, copy and paste files in directories format.	4.14	.747	Good
I know how to create itemized lists (ex. bulleted format).	3.98	.969	Good
I know how to edit, copy, cut and paste a block of text or selected objects.	3.92	.872	Good
I can analyses and draw conclusions from a data set by searching, sorting and editing records.	3.04	1.089	Fair
I can use online support offers the opportunity for more specific questions and answers, as well as more immediate answers.	2.88	.843	Fair
I can work with self-pacing for slow or quick learners reduces stress and increases satisfaction.	2.72	1.027	Fair
I know how to provide context sensitive help and interactivity engages users, pushing them rather than pulling them through training and retrieve information appropriate.	2.63	1.519	Fair
I am able to work with very large documents that require to develop knowledge of the Internet; and encourages learners to take responsibility.	2.24	1.286	Poor
I know how to use file on-demand availability enables learners to complete training conveniently at off-hour or from home.	2.14	1.100	Poor
Average mean	3.43	0.920	Good

Determination of E-learning through use of ICTs facilities in colleges of education performance expectancy

Table 3 shown that, item one to three represent knowledge databases for learners'. The total average mean for 1, 2, and 3 is 2.89, and the standard deviation is 1.247. This means the performance of knowledge databases for learners' usage is fair. The results presented in table 3 shows that item 1 to 13 represent Online Support Assistances for the learners'. The mean for item 1 is 4.25, standard deviation is 0.552 the interpretation is Very Good. The presentation of online support assistances level 1 shown the total average of the mean is 3.43, while standard deviation is 0.920 the interpretation was determined the online support assistances level 1 is good. That means the presentation of online support assistances is adequate.

Table 4: E-learning through use of ICTs facilities in colleges of education effort expectancy

Asynchronous Training	Mean	Std. Deviation	Interpretation
I can go in repossess, and filter, data from the Microsoft access and involves self-paced learning any CD-ROM-based.	2.97	1.251	Fair
I can make a simple database in Microsoft access.	2.79	1.500	Fair
I understand the applicability of network based, Intranet-based as Internet-based.	2.72	.948	Fair
I understand how to create different access to instructors through online bulletin board, online discussion groups and e-mail or, it may be totally self-contained with links to reference materials in place of a live instructor.	2.70	1.054	Fair
Average mean	3.20	0.934	Fair

Asynchronous Training

Table 4. Shows that an e-learning through use of ICTs facilities in colleges of education effort expectancy on asynchronous training has four items. As indicated on the table above shown that, the interpretation is Fair of asynchronous training by the (average mean=3.20, Std=0.934).

Table 5: E-learning through use of ICTs facilities in Colleges of Education Social Influence

Synchronous Training	Mean	Std. Deviation	Interpretation
I am able to use the real time with a line teacher facilitating the training.	3.97	.173	Good
I am able to download journals in at a set time and can communicate directly with the teacher and with each other.	3.93	.264	Good
I am able to raise the cyber hand and view the cyber whiteboard search engines to locate desired information.	3.81	.540	Good
I am able to set amount of time-from a single session to several weeks, months or ever years	3.64	.952	Good
I am able to use basic steps to ensure online privacy and computer security.	2.09	.476	Poor
I am able to recognize that copyright restrictions apply to computer software and Internet documents.	2.08	.655	Poor
I am able to comprehend the training usually takes place via internet web sites, Internet telephony or even two-way live broadcasts audio or video conferencing in a classroom.	2.07	.637	Poor
Average mean	3.08	0.528	Fair
Email Usage			
I am able to compose, send, receive, reply to and forward email messages.	4.04	1.373	Very good
I am able to send electronic messages with attachments.	3.42	.908	Good
I can use mailing list to exchange information.	3.41	1.188	Good
I am able to access my college email account	3.35	.937	Good
Average mean	3.56	1.102	Good

Synchronous Training

The results presented in table 5 e-learning through use of ICTs facilities in colleges of education social influence shows that learner’s knowledge on synchronous training this has seven items. The table results imply that learners on synchronous training practice. The interpretation is Fair by indication of (average mean=3.08, Std=0.528).

Email Use Services

Table 5: revealed that the email use services among learners in the colleges of education was good (average mean=3.56, Std=1.102). The above results imply that learners’ assistances in using emails is good and therefore can help them in sending assignments, and course works to their lecturers online. They can also be able to receive lecturer notes, assignments, course works from their lecturers.

E-libraries resources in colleges of education to supporting learning process

Objective Two: the second objective of this study was to determine the E-libraries resources in colleges of education to supporting learning process. To achieve this objective, the questionnaires were distributed to the students and academic staff only.

Utilization of Electronic Resources	Mean	Std. Deviation	Interpretation
I use the electronic journals provided by the library for my project writing.	3.99	1.278	Good
I use the e-library resources to retrieve current literature for studies	2.37	.636	Poor
I use the Electronic catalogue (OPAC) for sourcing information in the library.	2.36	.917	Poor
I participate in professional discussion group/list serve via the library's Internet access.	2.29	.823	Poor
I use the electronic books provided by the library to complement my class notes.	2.22	.712	Poor
I use the e-library resources to update my knowledge in subject areas of interest.	2.16	.608	Poor
I use e-library resources to do class assignments.	2.13	.380	Poor
I use the online database in the library for my assignments.	2.12	.420	Poor
I use the library's and e-library resources to source materials for research/writing project.	2.10	.428	Poor
I follow blog discussions on subject area of interest via the library's internet access	2.09	.377	Poor
I use e-library resources to search for scholarship opportunities.	2.08	.425	Poor
I use the e-library resources to amplify my course works.	2.07	.367	Poor
I use the Internet access in the e-library resources to send e-mail.	2.05	.241	Poor
General average mean	2.31	0.586	Poor

The study found that, the utilization of e-library resources among students of the colleges of education was poor (average mean=2.31, Std=0.586). The poor utilization of e-library resources could be attributed to lack of awareness, lack of ICT facilities, lack of comprehensiveness of the e-library resources, lack of trained library staff in ICT services and lack of management support to provide man power for the e-library facilities.

This study is in agreement with that of Ojo and Akande (2015) who found that the level of usage of the electronic information resources at the University College Hospital (UCH) Ibadan, was not high. This was attributed to lack of information retrieval skills for exploiting electronic resources, thus making the level of usage of resources by medical students very low.

The fact that students are not making use of e-library resources to supplement their class work, or enrich themselves with new knowledge from updated materials could only mean that students lack the necessary ICT skills which would help them take advantage of such services which are readily at their disposal, or it could be because the e-library services which the colleges have do not serve their purpose; they are just there for the sake but not having what the students need to enhance their academic knowledge.

This study agrees with that of Egberongbe (2013) at the University of Lagos who found that e-library resources such as bibliographic databases, e-newspapers and e-magazines were not used very much. Furthermore, the study showed that lecturers and research scholars were aware of e-library resources. Awareness of e-library resources indicated user knowledge of the availability of the e-library resources, and that they made use of them.

The Relationship between the Utilization of E-learning and E-Library inclusion for use of ICTs facilities in Colleges of Education

		E-learning for use of ICT Facilities	E-Library Resources
E-learning for use of ICT Facilities	Pearson Correlation Sig. (2-tailed)	1	.711** .003
E-Library Resources	Pearson Correlation Sig. (2-tailed)	.711** .003	1

****.** Correlation is significant at the 0.05 level (2-tailed).

The results presented in table shows a positive/strong relationship between E-learning for use of ICT facilities and E-library resources ($r=.711^{**}$). This implies that an improvement in the utilization of e-library resources will cause an increase in the abilities of learners in information and communication technologies (ICTs). In other words, if learners improve on their grade book times, presentation skills, word processing skills, database skills, graphing skills, email utilize and web design skills, there will be a high likelihood that they will have the confidence to exploit the available e-library resources that are readily at their disposal hence increase e-library utilization.

This study agrees with that of Majid and Abazova (2010) who found that a majority of International Islamic University of Malaysia academics had been using computers, although about half of their respondents considered their computing skills as “fair” or “poor”. The study also found that use of e-resources was influenced by the computing skills of students, their age and gender. The majority of the students with “very good” and “excellent” ICT skills had been frequently using e-library resources.

RECOMMENDATIONS

- To provide e-learning is becoming an increasingly important approach to user education, information literacy and also staff development.
- Networked technologies such as the internet and World Wide Web are dramatically changing education and training as it enable people to access information and communicate with others across global borders, cultures and on a global scale.
- They offer the potential for sharing high quality learning resources, exchanging information and working in learning groups e-learning involves learning that is delivered, enabled or mediated by electronic technology, for the explicit purposes of training and or education.
- The internet has been good for education; over the last decade, the tickle of content has become a flood, and educators have been quick to integrate the largesse into courses and classroom practices; distance education has mushroomed, and Sophisticated System for the delivery of e-learning are in place.
- The management should consider an E-learning is the newer more encompassing tern for those activities previously described by the term “computer based training.

CONCLUSION

This study examined the result of e-learning equal on digital-library resources and utilization of ICT facilities among the colleges of education in Katsina State. E-learning is among the most important explosion propelled by the internet transformation. This allows users to fruitfully gather knowledge and education both by synchronous and asynchronous methodology to effectively face the need to rapidly acquire up to date know-how within productive environments. E-learning delivers content through electronic information and communications technologies (ICTs) According to Ajayi, (2008). The use of ICT facilities, involves various methods which includes systematized feedback system, computer-based operation network, video conferencing and audio conferencing, internet worldwide websites and computer assisted instruction. This environment would be primarily asynchronous with background

discussion, assignments and assessment taking place and managed through synchronous tools that integrate into the asynchronous environment. It is also finding that e-learning seems unsuitable for those individuals without self-discipline. Digital Library Services are an essential component of a quality e-learning system. E-learners are largely dependent on the quality and academic usefulness of services that the digital library can offer electronically. The strength of digital libraries and digital collections depends on the relationships libraries develop and maintain with the creators and users who learn from, and evaluate these resources. Providing technical, reference and instructional support to e-learners requires that libraries redefine their values and services, collaborate with their users, and approach their tasks creatively. The library has no doubt, played vital roles in the planning and implementation of e-learning programmes in the colleges, although it has been confronted with many challenges. Many expected roles of digital libraries for e-learning have not been accomplished as a result of the challenges of digital libraries for e-learning. Based on the challenges that face e-learning as discussed in this paper, solutions were proffered with a view to improving e-learning pedagogy in using digital libraries in these colleges.

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DECLARATIONS

All authors listed have significantly contributed to the development and writing of this article. The authors are also conducting a complementary study, involving structured interviews with bioinformatics researchers and observations of these researchers in order to better comprehend e-learning and digital library inclusion through use of ICT facilities and their digital material or else information workflows.

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