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Information Communication Technology Training Needs of Academic Staff in Universities in Ekiti State, Nigeria

Oluwatobi Omotunde Dr
Babcock University, Ilishan-Remo, Ogun State, omotundetobi@yahoo.com

Information Communication Technology Training Needs of Academic Staff in Universities in Ekiti State, Nigeria

[1]Omotunde Oluwatobi. I, [2]Ajie ifeoma Abigail

[1]Department of Information Resources Management Babcock University, Ilishan-Remo, Ogun State [2]Library department, National Open University of Nigeria, Lagos

Corresponding author

omotundetobi@yahoo.com, +2347067327037

ABSTRACT

The use of electronic resources has in recent time been adopted by most higher learning institutions in Nigeria. However the appropriate training for academic staff on how well to integrate it into their research output, learning and teaching process is at a worrisome state. Hence, the aim of this study was to investigate academic staff training needs on the use of information communication technology.

The descriptive research design of the survey type was adopted for this study. The population consists of 45 lecturers in the faculty of social sciences in Ekiti state university and Afe Babalola University. A Radom sampling technique was employed in selecting two departments from each faculty. A total of 37 lecturers formed the sample group of the study. Further, a questionnaire was used for data collection. The descriptive statistical tool was used as the basis of analyzing the data.

The findings of the study revealed that majority of respondents have limited computer skills, can't use technical computer programs to complement their work and were not formally trained on the use of ICT rather they acquire their skills independently.

This study proposed that more frequent training on the use of electronic information devices and resources be made available to lecturers in Nigerian higher learning institutions. Also, librarians are to come to the aids of lecturers by helping them make informed decisions through various platforms of exhibition of the various technologies service available in the library.

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Introduction

The reliance on technology by professionals in various fields has dramatically changed the way in which jobs are performed and the world is viewed. The use of electronic resources has in recent times been adopted by most teaching disciplines in Nigerian universities. Petit (1996) points out that electronic revolution means that the role of academia is changing, hence, early preparation will help to curb the challenges brought about by technology.

Electronic information resources are documents are documents in libraries that are available in electronic formats and which require special equipment and skills to be assessed such as CD ROM, electronic data base and the Internet. According to Aina (2014), the purpose of setting up libraries is to acquire, process, store, preserve and make available current and relevant print and electronic materials that will meet the need of its users at the appropriate time.

Academic researchers are critical to the advancement of teaching education development of any country. Based on their various empirical discoveries in the frontier of knowledge to support this, they can assess electronic information through a variety of technology which includes e-journal, CD ROM, Open Public Access Catalog System (OPACS) and through the internet which provides a broad range via information search engines subject directories and other Web based resources. To project innovations in researching and discovering of new fundamental facts, universities must subscribe to number of e-resources which should be easy to access and utilize by respective academic researchers.

Aina (2011) stated that accessibility determines the speed at which an information output in any format is obtained. Furthermore, in a study conducted by Egberongbe (2011) he revealed that electronic information cuts across all members of the university community and to a greater extent easy to use and users are satisfied with their search output. This reflects the usefulness and importance of the electronic resources to the advancement of researching and academic discovery.

Electronic resources provide a number of benefits over print resources. This involves the fast and timely delivery of information needed compared to print resources, electronic resources are also capable of quick information delivery searching with the combination of keywords. To support this Dadzie (2005) stated that electronic resources are inevitable research tools that compliment the print based resources. The advantage includes access to information that might be restricted to the users due to geographical location or finance, access to more current information, and provision of extensive links to additional resources related contents. However, despite the fact that electronic resources are more beneficially compared to the other form of information resources, it is not without its own challenges and developing countries are more prone to these challenges. One major common problem faced by the users of electronic resources is that a great number of users complain of slow internet access and the usual problem of lack of constant electricity supply. Lewis & Smith (2002) summarized barriers for maximum use of electronic information resources as limited equipment, inadequate skills, minimal support, time constraints, and the educators' own lack of interest or knowledge about computers. All these limiting factors have contributed to the slow pace of the integration of electronic use in Nigerian university.

Another important constraint which is the focus of this study is the training needs for the use of electronic resources by academic lecturers in Nigerian universities. Ojo (2005) argued, from the perspective that having technologies is one thing, but whether or not people can use them effectively is another thing entirely. The availability of technology did not automatically make the higher education institutions on the continent use the technology. Hence, training of academic staff on the use of ICT devices can't be underestimated in this global age. End users in higher education institution need to be trained in order to make the most effective and productive use of networked and electronic information services.

Therefore training on the use of information communication technology devices is very essential in supporting academic staff contribution to their research output and also in their teaching and learning process. Electronic resources constituent significant investment in many libraries and therefore it should be considered important to ensure that end users get a good return on this investment. It should not only be about acquiring only new or the latest technology but training end users to the gain and process of utilizing support resources. Ongari – Okemua (2000) implore that an organization without relevant and appropriate training of its employees will lead to under performance and collapse of such organization.

Nigerian university academic staff should be able to compete globally with their colleagues. This can only be achieved through the level of competencies exhibited by academic staff on the use of electronic information resources as a competitive advantage for their teaching, learning and research process.

The universities in Nigeria need to align its teaching and learning methods with best practices found both nationally and globally. Adopting the use of ICT within higher education seems inevitable as digital communication and information models become the preferred means of storing, accessing and disseminating information. Hence, this study bothers on investigating lecturer's perception of their training needs and preferred training method in using information communication technology in the faculty of social sciences in universities in Ekiti State.

Purpose of the study

The main aim of the study to is to investigate academic staff actual level of ICT competencies and further probe into their perception towards the need for training on ICT skills.

Research question

1. What are the previous knowledge and skills in using ICT facilities or applications by lecturers in faculty of social sciences in Ekiti State?
2. What type of training do lecturers in social science faculty in Ekiti universities receive in terms of training?
3. What are the training methods preferred by lecturers in learning about electronic information resources?
4. Do lecturers in faculty of social sciences need training based on their educational level?
5. How are the training needs of lecturers in the faculty of social science in universities in Ekiti State identified?

Literature Review

Training is an essential ingredient for helping trainees to acquire needed skills and to view technology as an agent of change. In other words, training helps boosts end users searching skills, morals and overall performance in dealing with the library electronic resources. This implies that end users' training is a way of ensuring that users are capable of using technology such as Internets CD ROM and other electronic enabling devices. According to Witiak (1998), there are four factors to be considered in conducting training program. These are the direction of the training program, administration of the passwords, budget for training and lastly skilled training facilitator to provide additional support for training.

 Training programs should be designed to provide end users with the necessary skills to search electronically. The training programs are to include workshops, self instruction manuals, video cassettes and tutorial discs. Thomasson and Fyallbrat (1996), revealed that a large number of end

users were unaware of the new ICT tools and methods for information retrieval and for those that are aware of and familiar with electronic resources, only a small number really knew how to use the full capabilities of the software. Carlson and Gadio (2002) state that teacher training in the use of ICT is the best starting point in the ICT policy of a country because they are the key to making learning happen. In a study by Archibong and Effiom (2009), lack of interest, limited access to ICT facilities and lack of training opportunities were among the obstacles to ICT usage among academic staff found.

Moyo (1996) studied the training needs of academic staff in using the internet. The study revealed that there were low levels of awareness and under utilization of the existing electronic services among the academic staff. Furthermore, majority of the academic staff lacked basic ICT skills. Only a moderate level of them were able to use advanced computer skills and able to use email. Majority of them did not have basic keyboard or word processing skills. He further noted factors that contributed to the observed outcomes to be the lack of awareness of the usefulness of the internet facilities. Inadequate help provided to the academic staff and insufficient number of work station.

Mayid and Abazova (1999) conducted study on computer literacy and use of electronic resources by academic staff. The study found out that majority of academic staff in the study was knowledgeable about OPAC search options and have been using them while majority also use email facilities. However, the use of CD Rom was very low; this could be attributed to lack of awareness about the services. The findings further revealed that usage of electronic information resources was influenced by factors such as gender, computing skills and age. Further, Oyelaran and Adeya, (2004) investigated the level and depth of use of computers by university staff in Nigeria. Findings revealed 58.5% use computers for word processing, 32.2% use it for spreadsheet and data processing and 20.5% use it for programming. 66.9% use it for e-mail/Internet while 9.4% use the computer for other purposes apart from the aforementioned. Ademodi and Adepoju (2009), conducted a study in Ondo and Ekiti states in Nigeria and found that, the rate of computer skills and competence among ICT trainers working with libraries was low. Jegede (2009) also in a study revealed that majority of the academic staff who had undergone formal ICT training did so at personal expense and that even where trainings were

organised by schools' authorities and computer centers, payments in many of the cases have been from personal purses.

In a related study conducted by Wildt and Schneckenberg (2006) and Mostert and Quinn (2009) on E-competence and use of ICT for teaching and learning among academic staff both studies concluded that, students and academic staff need to be aware of, and understand, the innovative potential of the technology that is available for their teaching, learning, research and consultancy; and that they need to develop specific, appropriate and new competences to cope with the technological challenges.

According to a research done in schools of the United States by Means, Penuel, and Padilla (2001), the lack of access to ICT and technical support generates discomfort in the respondents when they have a need to incorporate the use of ICT in their teaching, the minimum high quality of contents in their specialties, and the lack of support from their superiors in the integration of ICT in their educational planning. Lewis & Smith (2002) summarized barriers that affect the integration of ICT to be limited equipment, inadequate skills, minimal support, time constraints, and the educators' own lack of interest or knowledge about computers.

In addition, Hashim (2000) carried out a study on end users perception of academic library services. The findings of the study revealed that end users lack knowledge and skills, as well as lack of awareness about the library resources and services. The study further revealed that lack of computer facilities impedes use of ICT resources and services. Hence the study proposed that academic libraries should provide intensive information skills training for users in assessing and using electronic resources. Readiness for ICT development must start by considering how well prepared the staff in higher education is for these changes before considering any ICT program that might be implemented. Quinn (2003) argued that university teachers in Africa have undergone little or no training for their role as lecturers, let alone training for ICT usage. He concluded that it is as if higher education institutions in Africa are using imported ICT staff development approaches in the training of it employees which means, Africa is not only importing ICT facilities, but also ways of training their own people.

Studies in the related literature revealed that for an effective integration of ICT into the teaching learning process, it is necessary to give in-service training to faculty members who play key roles in the school and that the in-service training activities should meet the individual needs of the faculty members (Galanouli, Murphy & Gardner, 2004). American Library Association ALA (2005) suggested some training methods for instructing users in using electronic information resources which are classroom presentations, online tutorials or computer assisted instructions (CAI), information instructions and printed guide. Training program should be designed to enhance and provide end users with skills to search electronically. Workshops are one form of training that may be adopted if they suit the need of end users, other training formats include self instruction manuals, video cassettes and tutorial discs. Witiak (1998) proposed important factors that need serious attention in a training program, this includes the duration of the training program, administration of the password, budget for training and skilled training facilitator to provide additional support during training. In order to support the research output of academic staff in faculties in Nigerian universities, training in using electronic resources is considered necessary and should be carried out by information experts.

Training in the use of EIR will no doubt influence positively the level of efficiency and effectiveness and general competence of academic staff in Nigerian universities. It is clear that the roles of professionals in various fields are changing and these include the role of academic staff. Knowledge gained through self training or learning can be transferred to daily academic activities instead of reacting to the dilemma presented by technology.

Finally, most literature reviewed in this study was able to establish the level of awareness of academic staff on the use of ICT, academic staff ICT competence skill, computer literacy and use of electronic resources by academic staff. However, literature was silent on the training methods preferred by academic staff, the effect of educational level on training needs of academic staff and ways at which the training needs of academic staff are identified. This gap in literature and knowledge conceived this present study so as to empirical investigate academic staff actual level of ICT competencies and further probe into their perception towards the need for training on ICT skills.

Methodology

The descriptive research design of the survey type was adopted for this study. Survey is a non-experimental research method that can be useful to collect data on a phenomenon that can't be directly observed such as academic staff training needs on information communication technology. The population for this study consists of lecturers in the faculty of social sciences in universities in Ekiti State. There are three universities in Ekiti State but for the purpose of this study only two will be considered, namely; Ekiti State University, Ado-Ekiti and Afe Babalola University, Ado-Ekiti. The faculty of social sciences in Ekiti State University consists of five departments while that of Afe Babalola University is also made up of five departments.

There are a total of 74 lecturers in faculty of social sciences in Ekiti State University and Afe Babalola University. For the purpose of this study a random sampling technique was employed to select two departments from each faculty in the two respective universities namely ; department of political science and psychology in Ekiti state university and department of Economics and International relations in Afe Babalola University. A total enumeration technique was used to cover the lecturers in the 4 departments in the selected universities which are made up of 37 lecturers forming the respondents of this study. A questionnaire was designed and used for data collection because of the high literacy level of the study population. Data were analysed using descriptive statistical tools such as; frequency percentage and mean.

Data Analysis, Findings and Discussions

Tables

Table 1: Demographic Characteristics of Respondents

	Category	Frequency	Percentage %
Department	Political science	12	32.4
	Psychology	10	27.1
	Economics	7	18.9
	International Relation	8	21.6
	TOTAL	**37**	**100**
University	Ekiti State University	22	59.5
	Afe Babalola University	15	40.5
	Total	**37**	**100**

Academic Qualification	Professor	7	18.9
	P.h.D	12	32.4
	Masters	14	37.9
	Bachelor Degree	4	10.8
	TOTAL	**37**	**100**

From Table 1, majority of the respondents were from political science (32.4%) department while the department of economics has the least number of academic staff (18.9%). Further, Ekiti state university had majority of academic staff 22 (59.5%). Finally, the academic qualification of respondents in this study ranges from professors, PhD, Masters to Bachelor Degree holders. Majority of the respondents, 14 (37.9%) had a masters degree while the least academic qualification of respondents, 4 (10.8%) were bachelor degree holders.

Table 2: Previous knowledge in using ICT facilities

	Pervious knowledge in using ICT facilities	Frequency	Percentage%
1	Word processing	28	75.7
2	E-mail	19	51.4
3	Using a www search engine	17	46
4	Downloading/uploading a file from the internet	14	37.8
5	Online discussion	11	29.8
6	PowerPoint design and presentation	8	21.6
7	Spread sheet programme	7	18.9
8	Graphic design	4	10.8

The respondents were asked to identify their previous knowledge in the use of ICT facilities as shown in Table 2 by enabling them choose more than one option in the item within these section. Majority of the respondents stated that they know how to use the word processing 28(75.7%) while more than half of the respondents affirmed that they know how to use the e-mail to send and receive messages/documents 19(51.4%). However, less than half of the respondents had

knowledge on how to use the search engine 17(46%). Downloading and uploading file from the internet 14(37.8%), on-line discussion 11(29.8%), power point design and presentation 8(21.6%), spreadsheet program 7(18.9%) and graphic design 4(10.8%). The result above indicates that the majority of respondents have limited computer skills and at the same time they can't use technical computer programs to aid their work such as the use of spread sheets, graphic design and power point presentation and design. The result reflects that respondents may not effectively use the computer to solve complex problems, communicate and access vital information.

Table 3: Type of training received by respondents

	Type of training	Frequency	Percentage%
1	Attending workshops	24	64.9
2	Got help from friends/associates	21	56.8
3	Computer assisted instruction	17	46
4	Classroom instruction	11	29.7
5	One to one instruction	09	24.3

Respondents were required to indicate the type of training programs they received in the use of information communication technology facilities and programs especially in interacting with the computer by enabling them choose more than one option in the items within these section. Table 3 shows that majority of the respondents got their training from attending workshops 24(64.9%) followed by their friends and associates at work 21(56.8%). This implies that workshop and friends/ associates were the major channel by which lecturers got the skills they acquired in the use of ICT enabling devices while less than half of the respondents got their training from computer assisted instructions 17(46%), classroom instruction 11(29.7%) and one to one instruction 9(24.3%). This result implies that majority of the respondents in this study were not formally trained on the use of ICT rather they acquire their skills independently and through the help of their friends and associates in their workplace.

Table 4: Training method preferred by respondents

	Preferred training method	frequency	Percentage%
1	One to one instruction	25	67.6
2	Classroom demonstration	21	56.8
3	Computer assisted instruction	19	51.4

4	Workshop	17	46
5	Printed sheets/manual	11	30

On the aspect of the preferred training method by lecturers. Respondents were by asked to choose more than one option in the items within this section; most of the respondents have the desire for training and further admits its value to the appropriate use of ICT facilities. Based on these facts they were asked to indicated which of the variety of methods they will prefer. 25(67.6%) of respondents indicate that they preferred one to one instruction. Majority of the respondents also preferred being trained using the classroom demonstration method. 21 (56.8%) and also 19(51.4%) of the respondents preferred the computer assisted instruction. While less than half of the respondents indicated that workshop 17(46%) and printed sheets/ manual 11(30%) to be the least preferred training method. This result implies that respondents of this study will learn and gain more in training which are one to one with their respective instructors, training that are basically on classroom demonstration and also through computer assisted instructions while workshop training on the use of ICT devices and the use of printed sheets / manual might not add value or knowledge to their needed ICT skills.

Table 5: Need for training based on lecturer academic qualification

	Category	Yes	No
1	Professors	5 (71.4%)	2 (28.6%)
2	P.h.D holders	8 (66.7%)	4 (33.3%)
3	Masters holders	6(42.9%)	8 (57.1%)
4	Bachelor holders	3(75%)	1 (25%)

Respondents in this study were required to agree to and also disagree to the need of training on the use of ICT by chosen more than one option in the items within this section. The need for training was based on the respondents' professional qualification/ status. The result indicated that majority of the professors 5(71.4%) considered the need to be trained in the use of ICT. Further, majority of the PhD holders among the respondents agreed 8(66.3%) that ICT training is needed. 3(75%) of the bachelor degree holders affirmed that they are also in need of training in the use of ICT while less than half of Masters holders in the study indicated that they are not in need of ICT

training 6(42.7%). This implies that majority of respondents that have a masters degree believe to have an effective level of ICT skills and are not in need of training on the use of ICT while the other respondents; bachelor degree, PhD and professor indicates a high need of training to complement their ICT Skills.

Table 6: How training needs of lecturers were identified

	Statement	Frequency %
1	By various discussion with colleagues	27(73)
2	Identify my own training needs by myself	25(67.6)
3	By the faculty computer instructor	13(35.1)
4	By appraisal of knowledge of EIR by the faculty	07(19)

Respondents were asked how they identified their training need. They were required to choose more than one option in the items within this section. Majority of the respondents 27(73%) admitted that through various discussions with colleagues, they were able to identify the needs to be trained in the use of ICT devices. Further, 25(67.6%) of the respondents affirmed that they personally identified their training needs themselves while less than half of the respondents 13(35.1%) stated that their need for training was identified through the faculty computer instructor and 7(19%) discovered their need for ICT training through appraisal of knowledge of electronic resources by the faculty. This result implies that majority of the respondents identified the perceived training need personally and not through other means.

Conclusion and Recommendation

This study is on the training needs and use of electronic information resources among academic staff in universities in Ekiti State. The explosion in the world of information creation, processing and dissemination has made information to be highly digitalized. Many research outputs and discovery are on daily bases disseminated on electronic information resources media rather than in the print format. This brought about change in the dissemination channel of information and resulted in to complexity and digital divide among academic scholar especially in the developing nations. Further studies have revealed that accessing published electronic research information in the form of journal, articles, e-magazine and e-books has been hampered by many challenges

that include; lack of adequate skills among academic staff on the use of internet/computers, computer self-efficacy and inadequate training on the use of ICT among others. However, as information and communication technology (ICT) advancements and the use of electronic resources especially the internet promises to improve the flow of information to research and academic environment at large (Manda, 2005) the use of ICT in higher education must help to transform the methodological work and the training of academic staff that might intervene in the educational process of the curricula and educational programs.

It is evident from literature and most especially from the findings in this study, that access to electronic information resources can improve academic research productivity. However challenges such as limited access, lack of knowledge, lack of proper training on the use of ICT and lagging behind in technological advancement in Nigeria higher institution of learning can result into setback, thus, the need for electronic information resources skill training for lecturers is very vital in enhancing their research output and productivity. Findings reveals that most academic staff considered in this study have limited internet and computer skills and can rarely use the computer searching programs, online discussion and even downloading and uploading items on the internet. This result depicts, that they lack knowledge to search and download academic electronic information resources such as, journals, articles and books which can bring currency and validity to their research outputs. Electronic information services come with a lot of benefits because it is well up to date and it is easier to use while searching for specific information. Hence, the use of electronic resources could be seen to positively affect lecturer's pedagogical practices and their work in general

This study recommend that more frequent training on the use of information technology communication be made available to lecturers, in view of the fact that it will affect positively the research productivity of the lecturers and contribute towards image building of Nigeria universities as well as influence its respective ranking. Further, in this study it was found that majority of respondents did not receive formal training in using information communication technology. The major means of training received was from their friend/ colleagues at work. Hence, it becomes important that universities in Nigeria should start developing a means at which academic staff should be exposed to formal training on the use of ICT for its respective academic task.

Finally, this study recommends training programs that takes into account different levels of knowledge and skills that must be developed which could be in form of seminars, lectures and workshops. Professional librarians can serve or offer more individualized support services to academic staff that needs their services. Also, besides providing training alone, libraries can come to the aid of lecturers in making well informed decisions. This can be done by having regular exhibitions in the library about the various electronic information services available in the library.

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