Training Cataloguers in Information and Communication Technologies (ICTs) Era to Promote Research Best Practices in University of Calabar

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Abstract
This study investigated training Cataloguers in ICTs era to promote research best practices in University of Calabar. One hundred copies of questionnaire were purposively distributed to professionals and paraprofessionals in University of Calabar Library with an instruction that only those who had performed cataloguing and classification services should respond. On retrieval only 21 usable copies were found and analyzed for this study. Result from the study reveal that Cataloguers are very few in University of Calabar and among the few (21), 17 have already worked for up to 15years and above while only 4 have worked for 4years. Study reveal that Cataloguers mostly get training through personal efforts and only two cataloguers have received University sponsorship for cataloguing and classification. It is also revealed that Cataloguers have many skills to learn through training in ICTs.The challenges militating against their participation include; high cost of training, lack of organization sponsorship and poor implementation of Institution staff development policy. The paper thus recommends an urgent stepping up for training Cataloguers in ICTs based skills, because of the dearth of Cataloguers needed for the future of Librarianship. Also, since Cataloguers perform both academic and administrative duties, Institutional policy has to be revised to make room for this group to get training as at when due without bottlenecks. As this encouraged participation allows cataloguers to be abreast of current trends in cataloguing services, it will make for effective and efficient participation that would ultimately lead to applications that would promote research best practices.
Keywords: Training, Cataloguers, ICTs, Academic library.

Introduction and Background
In contemporary librarianship where most services are ICTs (Information and Communication Technologies) based, it is essential for professionals especially Cataloguers to be well informed and updated regarding developments in ICTs to guarantee continuous addition to human knowledge. Libraries, as part of information superhighway which connect people to the world of knowledge have been the essential condition for teaching, learning and research in Institutions of higher learning and have performed the roles of selecting, acquiring and organizing varieties of publications in whatever form the publications may appear to meet the diverse needs of their users.

A library that fails to perform this great task according to Lawal (2015) is a moribund and an anemic information system because it has lost its vitality, honor, and its age long standard. It is therefore the duty of the library through its Cataloguers to strive hard to satisfy the intellectual and information thirst and curiosity of its users by properly organizing materials to ease access and utilization. An age long debate trying to determine the precedence of the technical or reader services areas of the library has serious significance on the perception of the role of the Cataloguer in the 21st century, "the knowledge or information age" as it is unimaginable to have a library today without any form of catalogue or its cataloguers especially considering the fact that cataloguing had been in practice since creation as God, separated light from darkness, water from dry land, firmament from earth, creating different living and non-living things, each with special features to distinguish it from others. Hence, different cataloguing codes had been developed from since the 19th century before this bibliographic standard meant to address a broad knowledge organization which is called the Anglo American Cataloguing Rules (AACR2, 1978).

Cataloguing is the process of making classified materials easily accessible to those seeking information concerning them and the cataloguer is the human resource who has acquired the skills and ability to pattern this cataloguing to suit the purpose of an information system as well as the prevalent needs of the time in terms of information accessibility and utilization. Cataloguers training which also refers to capacity building, manpower/human resource/staff or personnel development, are quintessential to library development as it is in every organization. It serves as the driving force for efficiency and speed in access to materials that in turn affect utilization that leads to user satisfaction.

Professional development is the process by which professionals keep current the knowledge, skills, and

abilities needed to function effectively in their profession. It is assumed that to maintain professional competence, the professional must participate in updating activities and continuing education as a fundamental responsibility though librarians' motivation for continued learning involves a mixture of social responsibility, desire for advancement, professional pride, a concern for future libraries, the need to keep abreast of new knowledge and technology, as well as an interest in supplementing professional training. (ALA, 1980). Efficiency of a library depends to a large extent on the competence of its staff as it is important to assess the library professionals'' needs for continuing education and professional development in a changing electronic environment of academic library.

Islam and Islam (2006) outlined problems faced by traditional library systems necessitating the dare need for Information and Communication Technologies (ICTs) in Libraries. Also, they presented the advantages of using computers and other telecommunication media or devices in managing libraries as manifold with some advantages in the cataloguing and classification section to include copy cataloguing, online and outsourcing cataloguing, OPAC(online public access catalogue), resource description and access (RDA), compilation of bibliographies, effective preparation of current arrivals and metadata schemas.

Generally, library cataloguers have discontinued with total dependence on the traditional cataloguing or organization of resources in recognition of the fact that the five major principles of Librarianship propounded by Ranganathan (1959) have become even more relevant in the ICTs era. The necessity to rationalize the need for change in order to do it with conviction was justified in a report by Calhoun (2006) for the Library of Congress LC) on the changing nature of the catalogue and its integration with other discovery tools reveal that *Librarians are losing out to newer discovery tools such as Google, Amazon…Also, libraries can no longer afford cost of highly detailed and individualized metadata description (in Okojie2009,p 2-3)* .

Okojie (2009)outlined some reasons why she believe that the cataloguer needs to change and very fast however, author reiterates that anybody who has done some cataloguing will understand that it is time consuming and tedious because of the many details of "full stop, coma, colon, semicolon …"(p.3) that must be put in precise positions as prescribed by AACR2. Also, the use of controlled vocabularies in Library of Congress Subject Heading (LCSH), Sears List of Subject Heading and various thesauri as well as the mastery of these rules and principles and a strict adherence to them which made the cataloguer of yesteryears king and was looked upon with awe even by professional colleagues. Again, Librarians' have discovered that the cataloguer dies wretched on this tedious job without any incentives and so even from the library school, the perception has discouraged the emergence of new cataloguers especially as librarians serving in technical section are perceived as "sufferers".

While some Heads of Libraries and their Institutions Management had sort ways to motivate cataloguers, others have remained aloof, to watch the extinction of cataloguers in libraries. Another major issue is that there is a serious dearth of skilled cataloguers by retirement and with the explosion of information creation and the increasing number of new formats which are non-textual materials (videos, CDs etc) the concern is to train more adequately skilled cataloguers as the scenario above is not very different observing among libraries. However, the reality of the situation today with the advent of ICTs leads to questioning if cataloguers can still render services with satisfactory results. Can the time spent be used more productively by doing things in a different way especially now that more librarians have become interested in other aspects of the profession rather than on the tedium of cataloguing and classification?

Therefore, the researcher believes that to promote research best practices, an effective integration of ICTs into the cataloguing processes as an enabling environment is necessary to support University Library Computerizations and internet connectivity and whether training of cataloguers could remedy the lack of proper access and utilization of library information materials is the concern of this study.

Objectives of the Study
- To find out whether cataloguers have ICT training
- To find out the mode of cataloguers' ICT training
- To determine staff development programs that cataloguers have participated in
- To explore ICT skills that Cataloguers still need to develop
- To find out the problems militating against cataloguers participation in development programs.

Literature Review
Nwalo (2005) noted that "there is no doubt that cataloguing and classification constitute the core of Librarianship and it is a fundamental discipline. Cataloguing and classification as control channels provide orderliness in the library. Therefore, the role of cataloguers is very crucial in the development of library services through training and retraining of experts for cataloguing and bibliographic description which is very necessary in order to keep up with the latest developments in ICTs.

From the aforementioned threats to traditional cataloguing, it is obvious that for the work of

cataloguers to continue to be the critical point where other aspects of the profession revolves, its pattern must change with time; Cataloguing must move from the craft position to that of an industry. Indeed, while the challenge is not just limited to cataloguing but to the library and information in general, the cry for meaningful change has grown louder with time as researchers have noted the information age requires new skills in seeking, processing (cataloguing) and using information. Even in more developed countries, research shows that users are turning away from the traditional catalogue.

Aaron (2006) quoting a survey reported in ARL LibQual study 2004 to assess users 'opinion about library catalogue stated the opinion of users as: *"The library catalogue is widely viewed as being too difficult to use. Users want and expect Google-like feature that is, "Browsing not searching,-Don't care about consistency,-Prefer to see everything in one place,-Don't want to do heavy thinking before they can access information -More than 67% of University students and faculty members get information daily from popular search engines,-Less than 40% use library web pages daily (less than 10%) for undergraduates and the catalogue use is even smaller.* People still search for and use even poor information if it is easier to get than search the library catalogue.

Several authors have harped on the need to study and understand the theory and practice of cataloguing. Omekwu&Anyaogu (2006) established that cataloguing and classification is the intellectual basis of providing materials for the clientele and explained that these activities impose order on diverse library routines with the goal of making resources easier to discover, manage and access. Cataloguing and classification permanently announces the availability of information materials in any organized library with full bibliography and location symbols thus, Ezomo (1990) upheld that materials acquired by the library but whose presence in the library is not known by the clientele is of no use.

Cataloguing is evolving as the trend towards re-engineering the basic structure of the library organization including technical services gaining momentum andwhile recognizing these changes, cataloguers will be needed in the electronic era for original cataloguing of unique, esoteric materials as well as for providing organization for emerging electronic formats (ALA 2010).In accordance with their specific background and Education, cataloguers perform task that require familiarity with academic matter, bibliographic skills analysis and organizing the library collection for services (Krietz& Ogden 1990).According to Khalil, Donger&Qiang(2009), Knowledge based activities have become increasingly important and pervasive. Cataloguers diligently search for bibliographic details, index and classify library materials into meaningful accessible forms thus, so many hours are spent at work with eyes glued to materials, which may be stressful (Bello&Thompson 2003) and thereforethe need to bridge the gap using ICTs. Ojedokun (2007) pointed out that there seem to be a growing pressure on tertiary education to increase efficiency and relevance in the quality of its products, recognized ICTs training as the major activity to be addressed and advised that tertiary education must provide effective leadership in ICT integration through research and modeling as well as provide opportunities for professional development to boost quality service delivery in both academic and non-academic aspects of its operations. This would be encouraged by the quality of the library and the services provided through proper cataloguing of materials to help students acquire these skills.

While the roles of cataloguers remain, there has been an expansion of their duties as a result of the introduction of ICTs.Okojie (2009) revealed that cataloguers all over the world have continued to take advantage of the possibilities presented by ICTs to improve their work and university of Calabar library cataloguers must not be left out since one of such changes is in the provision of bibliographic control to manage the exponential growth in information creation in such a way that it needs to add value to the needs of users.

Adeleke and Azubogu (2013) posit that Cataloguing training is presently influenced by the evolution of bibliographic information driven by new technologies and applications. Authors reveal that for three decades, the cataloguing, classification and indexing section of the Nigerian Library Association (NLA) has been organizing annual workshops and seminars in order to provide the appropriate platform for the training and retraining of library personnel working in the cataloguing units of libraries of all types.The workshops and seminars provide the training opportunities that enables cataloguers and classifiers at all levels to develop skills and competencies needed to organize their information.The workshops bring bibliographic personnel together to share the experiences of experts, scholars, and accomplished practitioners and always feature paper presentation, poster sessions, discussions groups, symposia, toursand hands –on practices.

As workshops and seminars are geared towards enlightening its members on the various aspects and problems associated with bibliographic works and finding ways to solve them, Gelfand (2004) revealed that, "conferences being organized in African Regions at present are titled towards ICT context" and the cataloguing and classification workshops are no exceptions. Topics such as knowledge access management: tools and concepts for next generation cataloguers, Innovation services and the future: challenges for cataloguing and metadata management were themes around which the discussions at Lokoja 2009, Akure 2010, and Badagry 2011 workshops revolved. Unfortunately, many University Managements do not realize the administrative role attached to academic librarians' job performance in cataloguing and classification thus, denies them access in

participating at such conferences since they are considered only as academics.

Hence since the training of cataloguers forms an important part of the education and training of librarians and cataloguing is still considered one of the most important skills for organizing information, Adeleke &Olorunsola (2007) assert that "the education, training and re-training of cataloguers and indeed librarians are very important and must be of serious concern to employers". They counseled that "employers should not assume that once library and information practitioners have acquired the basic training, they are equipped for life".

Some authors (Jeevan&Saji2004; Singh, Sharma &Negi 2009;Sampath, Kumar &Biradar,2010) reveal lack of manpower, lack of skilled staff as well as insufficient and lack of training are the main constraints for not automating library activities and a denial of best practices as products are not reaching users to the point expected. Professionals therefore expressed the need for appropriate training to make use of ICT tools.

It has been noted by Ondari-Okemwa (2000) that employees in any organization may fail to perform at the expected level when they are bereft of relevant and appropriate training thus suggesting that any organization that would like its employees to perform as expected needs to boost their morale and efficiency through training.

Obajemu (2006) reports a survey of 84 participants at the Cataloguing, Classification and Indexing Group of the Nigeria Library Association Workshop in 2004 to determine the impact of the annual workshop on the application of information and communications technologies (ICT) to cataloguing and classification in Nigerian libraries. The work covers 43–libraries, universities, and polytechnics, colleges of education, research institutes and ministries in Nigeria. The data analysis shows that the workshops had encouraged the participants to further pursue ICT .The findings also reveal that the workshops had positive impact on the participants with respect to the application of ICT to cataloguing and classification.

Wilson and Halpin (2006) discuss a case study of Learning and Information Services (LIS) departments at four British universities to study the development of a new, generic key skills base and the relevant CPD(continuous professional development). Semi structured interviews were used to interview library managers asICT skills featured strongly in the responses and the importance of being multi-skilled and being able to adapt quickly and effectively are also stressed.

Adeyinka (2009) examines the attitudinal correlates of some selected Nigerian librarians towards the use and application of ICT in various libraries. The study emphasizes the need for libraries to embark on training their librarians who does not have knowledge of ICT. Professional development is the process by which professionals keep current the knowledge, skills, and abilities needed to function effectively in their profession. It is assumed that to maintain professional competence, the professional must participate in updating activities like continuing education since efficiency of a library depends to a large extent on the competence of its staff. Hence it is important to assess the library professionals" needs for continuing education and professional development in a changing electronic environment of academic library.

According to Bello and Thompson (2003) "Cataloguers have a special requirement to constantly retool and update themselves with current technology and issues affecting their work. This specialist activity of librarians requires continuous training beyond cataloguing education in library school, on the job training or occasional courses in bibliographic control.

Authors have argued about the suitability of library science programs in preparing cataloguers for the practical realm of work which include teaching them cataloguing in the context of bibliographic control and alleged that "library and information science (LIS) programs tend to draw a distinction between "educations" and "training" and many posit that it is not appropriate for graduate programs to engage in training". (Hills2004; Kgosiemang 2005&Bowen-chang and Housein 2009).The emergence of new technologies that needs to be learnt by those in the library schools and practiced by those in the work room is another justification for continued education of cataloguers in that experienced cataloguers are in acute shortage (Bowen-Chang &Housein2009). For instance, Bello & Thompson (2003) as well as Hill (2004) had also recognized a shortage of qualified cataloguing practitioners through the number of advertisements for cataloguers placed in journals as an indication of scarcity of this group of librarians. In addition to the theoretical knowledge acquired at the library schools, involvement in practical training is an essential stepping stone for prospective library graduates.

In a similar vein, Obajemu&Ibegwam (2006) observed that librarians who attended cataloguing, classification and indexing workshops regularly in Nigeria demonstrate positive attitudes towards the use of information and communication technologies. Thus, ICT infrastructure and an enabling environment are required in this context.

Jain (1999) presents the findings of the study for, On-the-job training (OJT): a tool for professionalism and productivity a case study of Botswana National Library needs for library. The main OJT training needs were identified as: information technology, job orientation, customer service/public relations, marketing/publicity, refresher courses and managerial skills. It shows that usually there is a lack of technological training for the staff. Participants also felt that IT will improve a library's productivity, because staff will be exposed to a new spectrum of information which can motivate them to help the users with recently available information. The

survey stresses the need for effective ICT training to make the most effective usage of computers and appropriate software applications pertinent to a specific job like cataloguing and classification.

Methodology

This is a descriptive survey which employed questionnaire as an instrument for data collection. The population of this study consists of 105 professionals and paraprofessional librarians who by the rotational posting within the library have an opportunity with number of years in service to perform cataloguing duties. A total of 100 respondents were selected out of the population. Questionnaires were distributed with a condition that only those who had performed cataloguing duties for at least 6months were liable to fill. Thus, a sample of 21 duly filled questionnaires was analyzed using tables, bar chart and frequency counts for easy interpretation.

Data Analysis and Discussion: Out of 100 copies of the questionnaire that were administered to only those who had performed cataloguing duties for at least (6months) 21(21%) were retrieved. The data collected in the study is presented according to the objectives of the study

TABLE 1: Bio-data of Respondents

Professional rank	F/%	5-15 yrs	16-25 yrs	26-35 yrs	M	F	Total
Senior library Officer	7(33%)	3	1	3	5	2	21
Asst. Librarian/its equipment	3(14%)	1	1	1	1	2	1
Librarian II & its equipment	3(14%)		1	1	1	2	
Librarian I & it equipment	3(14%)		3		3		
Senior Librarian .& it equipment	2(10%)		2		1	1	
Principal librarian	2(10%)			2	2		
Deputy librarian	1(5%)		1	1	1		
Total	21(100%)	4	9	8	14	7	

Table 1 reveal that Study reveal that 17 cataloguers have worked above 15years while only 4 worked below 4years.This ratio reflects a dire need for Cataloguers who might not be readily available for employment thus, a boost up in the training of paraprofessionals staff in this capacity. Study tally with those of Bowen-Chiang &Housein (2008) as well as Bello & Thompson (2003) who revealed that the number of advertisements for Cataloguers is an indication of scarcity of their group of Librarians

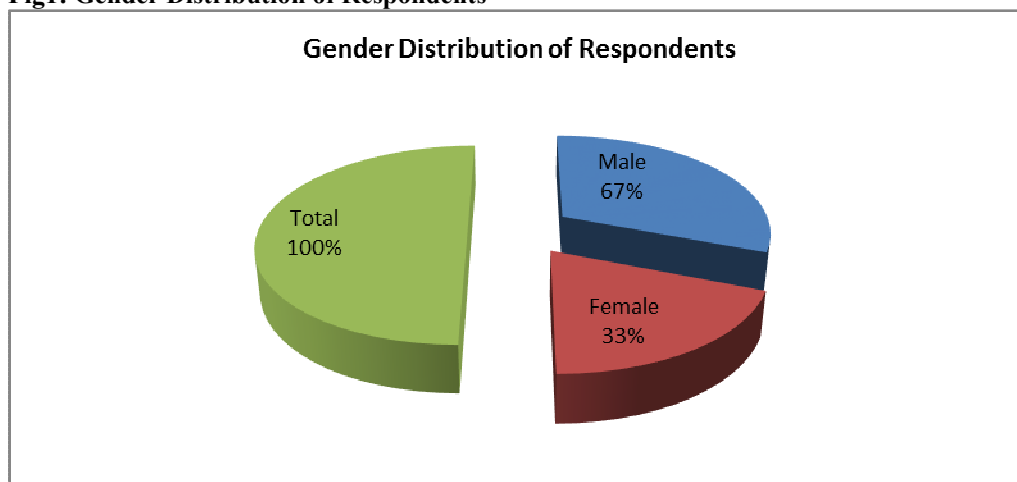**Fig1: Gender Distribution of Respondents**

Fig. 1 shows that (67%) of the respondents are male while (33%) are female. This represents the gender distribution of participants involved in the survey.

Table 2: Mode and Component of Cataloguers ICTs training

Mode of training	Yes	No	Total
Personal effort	18(85%)	3(14%)	100%
University sponsorship	3(14%)	18(85%)	100%
Components of ICT Training			
Word processing	14(67%)	7(33%)	100%
ICT consulting			
Internet Browsing	19(90%)	2(10%)	100%
System maintenance	-	-	-

Result in table 2 shows that only 3(14%) Cataloguers have been granted University sponsorship for ICT training while other 18(85%) Cataloguers have taken a personal effort to train themselves. Also, only 2(10%) out of the 4components of ICT training have cataloguers benefited from (word processing and Internet browsing, 14(67%) and 19 (90%) respectively. Result tally with the standard of ALA (2010) which specifies that cataloguing is evolving as the trend towards re-engineering the basic structure of the library organization or processing and Cataloguers need to provide this organization for the emerging electronic formats. Study also tally with Okojie, (2009) who reveal that Cataloguers all over the world have continued to take advantage of ICT possibilities to improve their work. Having caught up with these challenges, Cataloguers have applied personal efforts to train themselves and keep the ICT train moving.

Table 3: Developmental Programmes that Cataloguers have Participated.

OPTION	YES	NO	TOTAL
NLA Annual National Conference	21(100%)	-	100%
NLA cat and class section conference	3(14%)	18(85%)	100%
In house training	21(100%)	-	100%
Online courses	2(10%)	19(90%)	100%
Reading professional literature	21(100%)	-	100%
Formal courses/studies on information searching relevant to new cataloging modes	1(5%)	20(95%)	100%
Open Access cataloguing	2(10%)	19(90%)	100%
MARC 21 cataloguing	2(10%)	19(90%)	100%

Table 3 reveals that there is a (100%) attendance at NLA annual Conferences but the Cataloguing and Classification conferences 3(14%) whereas online courses, open access cataloguing and MARC 21 Cataloguing were only attended by 2(10%) cataloguers. This is grossly inadequate and keeps the Cataloguers bereft of current issues and practices in Cataloguing perhaps because of lack of sponsorship. This study tally with Ondari-Okemwa(2000)who noted that Cataloguers in the library may fail to perform at the level expected when they are bereft of relevant and appropriate training; a situation that can collapse the effective application of Cataloguing skills with the different ICT tools evolving in the information era.

Table 4: Work Skills that Cataloguers still need to develop

SKILLS	AGREE	DISAGREE
Skills to use electronic tools for copy cataloguing	21(100%)	-
Skills to explore ICT subject headings	21(100%)	-
Skills for online use of cutter	21(100%)	-
Skills for social networking and resource sharing	21(100%)	-
Skills for sending and receiving data through blogs	21(100%)	-
Skills for comparative cataloguing	21(100%)	-
Skills for cataloguing analysis using union data protection	21(100%)	-
Skills for use of Resource Description Access standards	21(100%)	-
Skills for use of web 2.0	21(100%)	-
Skills for metadata schemas	21(100%)	-
Skills for electronic data transfer	21(100%)	-
Skills for cataloguing statistics in volume and subjects	21(100%)	-
Skills for marketing cataloguing through webinar toolkits	21(100%)	-

Analysis from table 4 shows difference skills that Cataloguers unanimously agreed they still need to develop if they have to promote research best practices. Study tally with Adeleke and Azubogu (2013) as well as Adeleke &Olurunsola (2007) who posit that Cataloguers training is presently influenced by the evolution of bibliographic information driven by new technologies and application. Also, education training and re-training of Cataloguers must be of serious concern to employers who should not feel that once practitioners have acquired basic training, they are equipped for life.

Table 5: Challenges against Cataloguers participation in Developmental Programmes

S/N	OPTION	AGREE	DISAGREE	UNDECIDED
1	High cost of programmes	21(100%)		
2	Lack of organizational sponsorship	19(90%)		2(10%)
3	Sponsorship has many bottlenecks	9(43%)	2(10%)	10(48%)
4	Lack of practical component in the programmes		21(100%)	
5	Family problems and responsibility	15(17%)	2(10%)	4(19%)
6	Poor implementation of staff development policy	19(90%)		2(10%)
7	Hoarding of information by colleagues	5(24%)	13(62%)	3(14%)
8	Sometimes there is general lack of information about the programmes	3(14%)	17(81%)	1(5%)

Table 5 shows that (100%) agree that high cost of programmes whereas (90%) agree that lack of organizational sponsorship and poor implementation of staff development policy as a major challenges associated with cataloguer's participation in developmental programmes. The study tally with Jeevan &Saji2004; Singh, Sharma &Negi 2009;Sampath, Kumar &Biradar,2010 who   reveal lack of manpower, lack of skilled staff as well as insufficient and lack of training as the main constraints for not automating library activities and a denial of best practices as products are not reaching users to the point expected.

Conclusion and Recommendation

Study concludes that Cataloguers require a step-up in their training especially because their work setting incorporates resources and tools that are continuously evolving and they are engaged in technical aspects for which they need to possess adequate knowledge and skills to perform efficiently. In ICT era, Cataloguers process materials in both print and electronic formats, deploying tools for both methods. Cataloguers therefore as a necessity, need to constantly update their professional knowledge and skills through relevant staff training and development programmes.

Trend (as revealed in this study and shown in the review of related literature) is a general reduction in the number of experienced cataloguers thus, even if a decision is made to continue with the traditional cataloguing, there would be a likelihood of reaching a crises situation where there would not be enough cataloguers to work on new materials which are already growing at an exponential rate.

Failure to take ICTs training of Cataloguers seriously would imply firstly, not joining ICT train in an ICTs' era and this will be a strong setback to promoting Best practices for research in the University. It would be likened to the story of a poor woman who unable to provide food for her children also restrained them from eating from her neighbors' house. Study therefore recommends that training Cataloguers on ICTs skills are essential and should be given the seriousness it deserves because the Cataloguers perform both academic and administrative duties that are needed for posterity. Thus,there should be a revision of the Institution's training policy to cater for Cataloguers undisrupted training as the needs arise especially as the future can only be prepared through this medium for lifelong learning challenges in the profession.

References

Aaron, R.D. (2006) Trends in Online Cataloguing .Paper presented at the Mississippi SOLNET User meeting December 4, 2006.

Adeleke,A.A.&Azubogu,N.(2013) Librarians' perception of the annual cataloguing classification and indexing seminar/workshop of Nigerian Library Association:2009-2011.*The Nigerian Cataloguer* 1(1)38-56.

Adeleke,A. A. &Olorunsola, R.(2007).Cataloguing and Classification online; the experience of Redeemer's Universiy Library. *The Electronic Library*, 25(6), 725-732.

Adeyinka,T. (2009, January /June). Attitudinal correlates of some selected Nigerian Librarians towards the use of ICT. Retrieved June 14, 2010 from International Journal of Information Science and Management vol 7 (1) http://www.Srlst.com/ijist/ijism71-15-30.pdf

ALA (2010) Training cataloguers in the electronic era. Retrieved from http://www.ala.org/mgrps/divs/alcts/resources/org/cat/traincataloguers.cfm

Bello, M.A. & Thompson, E.S. (2003) recruiting the cataloguers for tomorrow: the need for succession planning in Ghanaian academic libraries.*Library Management*, 24(6/7), 310-315.

Bowen-Chang, P. &Housein,Y. (2009).Cataloguing training at the University of West Indies, St Augustine. Library Review, 58(2) 97-108. Retrieved March21, 2012, fromhttp://www.emeraldinsight.com.

Calhoun, K.(2006). The Changing Nature of the Catalog and its Integration with other Discovery Tools. Final Report prepared for the library of Congress, March 17, 2006.

Ezomo, E. O. (1990). A Survey of Nigerian University Arrearages.*Nigerian Libraries* 24 (1&2) 53-63.

Gelfand, J. (2004). Interview with Esharenana E. Adomi.*Library Hi Tech News*, 21(8)37-39. Retrieved March 21

2012, from http://www.emeraldinsight.com

Hill,J(2004) Education and training of cataloguers : Obsolete? Disappeared? Transformed/Part 1.Technicalities 24(1-2) 9-13

Islam, Md. Shariful& Islam, Md. Nazmul (2006). Information and Communication Technology (ICT) in Libraries: A New Dimension in Librarianship. *Asian Journal of Information Technology (Medwell online) 5(8) 809-817.*

Jain, P. (1999). On-the-job training: a key to human resource development: *Libri* 41(3) 183-193.

Kgosiemang, R. (2005) Education and training for cataloguers at the University of Botswana Library; an overview. *Cataloguing and classification Quarterly* ,41(2)5-25.

Khahil,M.; Donger,P.&Qiang, C. (2009). Overview in: Information and Communications for Development . The World Bank :Washington DC, 1-5.

Kreitz,P.A.&Ogden,A.(1990). Job responsibilities and job satisfaction at University of California Libraries.*College &Research libraries*, 51(4), 297-312.

Lawal, O.O. (2015)Lecture Notes on Information Management, University of Calabar

Nwalo, K.I.N.(2005) The Cataloguer in the Knowledge Age: A search for relevance in Computerization of Library operations in the Information Age. Selected papers of the Cataloguing , Classification and Indexing Section of the Nigerian Library Association 2001-2002, pp40-48.

Obajemu, A.S. (2006) A Survey of Librarians attitudes to training programmes on ICT application to Cataloguing and Classification Workshops in Nigeria. African Journal of library,Achives and Information Science 16(1)19-27.

Obajemu, A. &Ibegwam, A. (2006). A Survey of librarians' attitudes to training programmes on ICT application to cataloguing and classification workshop in Nigeria. *African Journal of Library, Archives and Information Science*, 16 (1), 19-7.

Ojedokun, A.(2007).Information literacy for tertiary education students in Africa. Ibadan: Third World Information Services Ltd.

Okojie, V.,(2009).The Future of Cataloguing in the era of Information and Communication Technologies;Trends and Issues. In Information packaging in the era of ICT: Challenges facing Cataloguers, Classifiers and Indexers: *NLA: Proceedings of Selected papers of theCataloguing, Classification and Indexing Section* 2007-2008, p1-4.

Omekwu, C.O. &Anyaogu, U. (2006). Consortia Efforts in Cataloguing, Bibliography and Indexing Services in Nigeria. *Information Trends* 3;1-10.

Ondari-Okemwa,F.(2000) Training Needs of Practicing professional Librarians in the Kenyan Public University Libraries: a critical analysis. Library Management,21(5)257-268.

Sampath-Kumar,B.T. &Biradar, B.S.(2010) Use of ICT in college libraries in Karnataka, India: a survey program. Electronic Library and Information system 44(3)271-181.

Singh, K.P.;Sharma,N. &Negi, N.(2009) Availability, Use and barrierstoICTin the r & d institutions : a case study of the libraries and Information centres in Noida.DESIDOC Journal of library and Information Technology 29(6)21-31.

Wilson, K.M. &Halpin, E.(2006).Convergence and Professional identity in the academic Library. *Journal of Librarianship and Information Science*,38 (2) 79-91.