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Attitudes of Academic Librarians toward Training in the Digital Library Environment

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Abstract

The study investigated the training needs of academic librarians in the digital environment using a descriptive survey research design. The population of the study was 81 librarians in three academic libraries in Enugu State. Questionnaire was used in data collection. Eighty One (81) copies of the questionnaire were distributed to the librarians and sixty one (61) copies were completed showing 75.3% return rate. The data collected were analyzed using mean scores. The findings of the study revealed that librarians need training in e-resources collection development, scholarly communication and publication, online journal databases, Internet search skills, use of social media , research data services, digital library software, digitization, management skills, online classification and cataloguing, use of multimedia, and computer basics. The major factor affecting librarians training in the digital environment is limited electronic recourses for training. The study recommended that emphasis in the training of librarians should focus more on digital skills, to enable them fit into this age of digitization. ICT skills should be integrated into the library and information science curriculum to enable them acquire digital skills.

Keywords: Training needs, Academic librarians, Digital environment

Introduction

Information has become a distinctive attribute of this modern world. The development and application of information and communication technologies (ICTs) have moved the library environment from the traditional to: the hybrid library; automated library; digital library, and virtual library (Rubina and Muhammad, 2004). The introduction of modern technologies in the library has not only aided the generation, distribution, processing and storage of information, it has as well brought significant changes in library's functions. This is evident in the nature, volume, and format of accessing information. Bawden (2004) is of the view that library and information science is primarily concerned with the collection, organization, storage and retrieval of materials and information, in a bid to satisfy users' queries. Technology has greatly modified the traditional academic library and these dramatic changes have, to a large extent, impacted on the knowledge and skill requirements for academic librarians practicing in the digital environment (Raju, 2014). The implications of these developments are significantly demanding with regards to the skills and training of academic librarians with a view to keeping them abreast

with recent developments. This is the views of Halder (2009) and Rubina and Mohammad (2004) which would make them more proficient in the performance of their duty, This is because training and development are important tools for successful application of information and communication technology in the libraries.

However, Rosenberg (2006) and (Chiware, 2007) are of the opinion that skills in e-resources management, e-services development, full text digitization and teaching skills are absent in African university libraries. There are also other constraints with regard to funding. These include: Information technology (IT) infrastructure, internet connectivity, lack of commitment from staff, management and the availability of African generated contents in the digital collections and institutional repositories (IRs).

The recent trends in development of the library similarly have its own ripple effect on academic librarians with regards to the effective and efficient performance of their job. The transformation in structure is not without its attendant challenges as electronic and digital libraries come along with their peculiar characteristics regardless of sharing the same purpose of preserving, organizing

and distributing information resources as in the case of traditional libraries (Youngok, 2006; Fadehan and Ali, 2010). According to Bawden (2004), a question which arises is how these developments influence the demands that are made of information professionals and, accordingly, the implications of these on their training. To be effective and efficient in their job, there is need to train and re-train the academic librarians as posited by Youngok (2006) and Fadehan & Ali, (2010). These authors are of the opinion that the transformation in the nature and roles of libraries in relation to the digital environment has brought about the need for the development and acquisitions of new skills and competencies.

Prerequisites for the training needs of academic librarians in the digital environment should be focused on, first, an understanding of the present situation and prospects of digital libraries in our universities and higher institutions; second the training centered on skills to handle resources and the technological framework for digital libraries; and finally, good knowledge of the improved features offered by the digitized contents and digital resource discovery tools. In view of the above, the study seeks to investigate the academic librarians' perception of their training needs in the present day digital environment using three selected academic libraries in Enugu state, Nigeria. This study has been carried out in order to identify the gaps and as well, make appropriate recommendations towards designing and modeling of training programmes for academic librarians in Nigeria.

Objectives of study

The study was guided by the following objectives:

- To identify the training needs of academic librarians in the digital environment;
- To determine the librarians' general attitude toward training in digital library environment
- To explore the factors militating against training of academic librarians in digital environment;
  To suggest strategies for enhancing training needs of academic librarians in a digital environment.

Literature Review

Training and development are important tools for successful application of ICTs in academic and research libraries (Halder, 2009). Training is a means of impacting knowledge, and developing skills and also changing attitudes and behavior (United Nations, 2003). Training involves the improvement of three basic characteristics: knowledge, skills and attitudes. A need is not a want or a desire. It is a gap between "what is" and "what have to be". Need assessment is used for identifying gaps and to provide information for a decision on whether the gaps could be addressed through training. In other words, training fills the gap of needs.

Training Needs Assessment in the views of Clarke cited in Ferreira and Abbad (2012), refers to the organizational process of collecting and analyzing data that supports decision making about when training is the best option (or not) to improve individuals' performances, define who should be trained, and exactly what content should be taught. It provides clear guidelines as to which professional skill deficiencies must be remedied and what the profile of future trainees should be. Furthermore, Miller and Osinachi (2002) opined that the training needs assessment is a critical activity for the training and development function. They believe that the needs assessment is the first step in the establishment of a training and development program. It is used as the foundation for determining instructional objectives, the selection and design of instructional programs and the evaluation of the program provided. According to Chiware (2007), academic librarians should be trained in open source software such as Dspace utilization, downloading, installation, management and updating the software. Again, he noted that networking, storage technologies, information retrieval, web access, web publishing, databases management among others are very important needs of librarians so as to navigate in the voyage of digital environment. In addition, librarians should be trained in the protection of digital intellectual property, design of technical architecture of digital library, all the practices of collection development in the digital environment which include selection, acquisition, preservation, conservation, organization and management of

digital collection. Furthermore, in terms of librarians educational needs requirements for the digital environment Chiware (2007) noted that continuing education programmes or formalized training in library and information science with combination of computer science are vital in the 21st century librarianship.

However, it appears that librarians exhibit certain attitudes towards training needs in library services in the digital environment. These attitudes have been used to represent librarians' perceptions on the issue of digital training needs. Attitudes are inclinations and feeling, prejudices or bias preconceived notions, ideas, fears and convictions about any specific topic. According to Johnson cited in Adekunle, Omoba and Tella (2007), the major reason for failure of library automation projects in many developing countries like Nigeria is that librarians along with the funding agencies plan the automation in a very small manner without sufficient knowledge of the purchase of hardware, software and power supply requirements. They further sought to establish a connection between current knowledge and personality types in measuring librarians' attitude towards the use of the Internet. Along with the two individual characteristics, the research also measured other factors, including the levels of support and the amount of training individuals received to enhance their knowledge and a more innovative personality were likely to have a more positive attitude towards the innovation. The hypotheses related to knowledge were supported but the hypothesis that predicted innovativeness to relate positively to actual internet use was not supported. Similarly, Janes (2002) observed that reference librarians who had experience with digital reference tend to have more positive attitude than those who had no experience. Librarians' prior skills and experience with ICT could be related to acceptance or rejection of technological innovations.

Many factors militate against training of academic librarians in digital environment. According to Chiware (2007), these challenges are connected to funding, internet connectivity, issues of human resources, retention of skills, telecommunication infrastructure, and copyright issues. Academic libraries encounter these challenges which affect the training of

librarians and implementation of digital library projects. He further noted that lack of qualified and competent trainers for digital environment is a challenge. Jestin and Parameswari (2002) explored the challenges for library professional in the new millennium. The introduction of computers and new technologies was a challenge to many librarians. Dasgupta (2009) discovered that academic librarians face lack of proper library facilities and inadequate physical facilities.

In spite of the challenges librarians face, there are strategies for enhancing the training needs of librarians in the digital environment. Traditionally, librarians instructed the end users of print publications, but a balance between print and digital documents will be a basic norm in the near future. Training and retraining of librarians in the use of ICT based resources and services such as email, world wide web, browsers, search engines, OPAC, online databases, system software, application software, electronic journals, computer conferences, CDs and DVDs etc should become integrated in the library's user education programme (Vasanthi, 2005). He further noted that there should be creation of digital libraries called Academic Digital Library (ADL) which should provide new services and extend existing ones to guide libraries in the digital formats. The programs of ADL should support information access and delivery via electronic communications, information management, consultation and training, new forms of scholarly and scientific communication and development of the knowledge network of the university. According to Ezema and Ugwu (2014), librarians should be trained in the basic requirements of generic skills and information technology which are important for librarians to navigate in the voyage of digital environment. Again formal and informal means of education and continuing education also help in updating the necessary skills academic librarians need in training in the digital environment.

Furthermore, Chiware (2007) suggested that ICT should be integrated into the library and information science curriculum. That way librarians embarking on continuing education will have the basic knowledge of ICT. Academic libraries should develop policies

that will support them to engage in innovation and the development of organizational, technical, policy and financial structures needed to maintain both print and digital collections. Planning structures should also encourage and support strategies to enhance the transmission of scholarly and scientific communication in a digital environment.

Research Methods

The study adopted descriptive survey design. . A structured questionnaire developed by the researchers was used as instrument for data collection. The questionnaire covered all the aspects of research questions and was personally administered to the respondents. The questions were made up of likert questions. The

area of the study was Enugu state. The population of the study was 81 the librarians working in three academic libraries in Enugu state.. The libraries are Institute of Management and Technology (IMT) Enugu, Enugu State University of Science and Technology (ESUT) and University of Nigeria, Nsukka (UNN). Eighty one (81) copies of questionnaire were distributed and sixty one (61) copies retrieved making 75.3% of the entire population. Data collected were analyzed using mean and presented using tables.

Results

The results of the study and analysis are presented based on the research questions.

Table 1: Administration of questionnaire

S/no	Names of institution	Questionnaire Administration	Questionnaire Retrieval	Percentages
1	University of Nigeria, Nsukka	65	45	69.2%
2	Enugu State University of Science and Technology	11	11	100%
3	Institute of Management Technology, Enugu.	5	5	100%
	Total	81	61	75.3%

Table 2: Work Experience

S/no	Work Range	Frequency	Percentage
1	1-5years	11	13.6%
2	6-10 years	32	39.5%
3	11-16years	18	22.2%
4	16 and above	20	24.7%
	Total	81	100%

The work experience of all the librarians was considered necessary for this study. The reason is because the experience that comes with the number of years they have put into their job description would help in determining their attitude to training. . Findings show that 11.5% percent have worked for between 1-5years, 40.9% worked for 6-10yrears, 22.9% worked for 11-16years while those who have worked for 16 and above years represented 24.6% of the population.

1. The training needs of academic librarians in the digital environment.

Table 3: Training needs of Academic Librarians in the Digital Environment.

S/no	Description of items	SA	A	SD	D	Mean	Decision
1	Training in use online journal databases,	55	6	0	0	3.90	Accept
2	Training in online classification and cataloguing	45	16	0	0	3.74	Accept
3	Training in electronic scholarly communication and publication	56	5	0	0	3.92	Accept
4	Training in research data services(including collection, metadata creation and preservation	50	11	0	0	3.82	Accept
5	Training in e-resources collection development	59	2	0	0	3.97	Accept
6	Digitization	46	15	0	0	3.75	Accept
7	Computer basics	42	16	3	0	3.64	Accept
8	Training in the use of multimedia	47	10	4	0	3.70	Accept
9	Digital library software	48	13	0	0	3.79	Accept
10	Management skills	45	16	0	0	3.74	Accept

Table 3 shows the training needs of academic librarians in the digital environment. The result shows that the librarians need training in e-resources collection development (3.97), scholarly communication and publication(3.92), online journal databases, internet, social media etc(3.90), research data services(3.82), digital library software(3.79), Digitization(3.75), management skills(3.74), online classification and cataloguing(3.74), use of multimedia(3.70), and computer basics(3.64).

2. Librarians' general attitudes towards digital training.

Table 4: Responses on librarians' general attitude towards digital training.

S/no	Description of Item	SA	A	SD	D	Mean	Decision
1	Readiness/willingness to embrace change	44	17	-	-	3.72	Accept
2	I can do what digital technologies can do as well	4	3	41	13	1.97	Reject
3	Information technology can't address the needs of librarians	5	-	55	1	2.15	Reject
4	Changes occurring due to ICT applications are out of control of Librarians	15	16	20	10	2.59	Accept
5	Each year ICT offers more efficient ways to carry out library operation	-	-	55	6	1.90	Reject
6	Card catalogue can be modified more easily than OPAC through ICT	45	15	-	1	3.70	Accept
7	ICT helps in making specific information available	55	6			3.90	Accept
8	Indifference on the part of the librarian	-	-	44	17	1.72	Reject

Table 4 show the general attitude of Librarians to digital training. Findings show that librarians believe embarking on digital training is determined by the readiness and willingness of the Librarian to embrace change (3.72), believe that changes occurring due to ICT applications are out of control of Librarians (2.59), believe that card catalogue can be modified more easily than OPAC through ICT and also a believe that ICT helps in making specific information available (3.90).

3. The factors militating against training of academic librarians in digital environment.

Table 5: Responses on the factors militating against training of academic librarians in the digital environment.

S/no	Factors	SA	A	SD	D	Mean	Decision
1	Insufficient qualified resource persons	44	17			3.72	Accept
2	Limited electronic resources for training	55	18	-	-	3.90	Accept
3	Insufficient support from management	41	20	-	-	3.67	Accept
4	Insufficient funds	43	6	-	-	3.70	Accept
5	Attitude of Librarians to training	18	22	18	3	2.90	Accept
6	Technophobia	20	21	20	-	3.0	Accept
7	Limited training programme	40	21	-	-	3.66	Accept
8	Limited time for training	30	15	16	-	3.22	Accept

The table above shows the factors militating against training of academic librarians in the digital environment. It revealed that limited electronic resource for training is a major problem with mean score of 3.90. This is preceded by insufficient qualified resources (3.72), insufficient funds (3.70), insufficient support from management(3.67), and limited training programmes(3.66)

4. The strategies for enhancing the training needs of academic librarians in a digital environment.

Table 6: Responses of strategies for enhancing training needs of academic librarians in the digital environment.

S/no	Strategies	SA	A	SD	D	Mean	Decision
1	There is need for web based training and computer tutorials	59	2	-	-	3.97	Accept
2	Adequate funding by the parent institution	57	4	-	-	3.93	Accept
3	Integration of ICT into the Library and Information Science Curriculum	45	16	-	-	3.74	Accept
4	Sponsorship of the Librarians to ICT based conferences and workshops	55	6	-	-	4.09	Accept
5	Motivation by Library Management	56	5	-	-	3.92	Accept
6	Continuous training and retraining of Librarians	45	16	-	-	3.74	Accept
7	Adequate provision of Information Technology facilities to Libraries and Librarians	36	25	-	-	3.59	Accept
8	Adequate training Programmes	44	17	-	-	3.72	Accept
9	Time constraint	27	34	-	-	3.46	Accept

Results from table 4 indicated the strategies for enhancing training needs of academic librarians in the digital environment. They include sponsorship of Librarians to ICT based conferences and workshops (4.09), need for web based training and computer tutorials (3.97), adequate funding by the parent institution (3.93), motivation by library management (3.92), integration of ICT into the Library and Information science curriculum (3.74), continuous training and retraining of Librarians (3.74), adequate provision of information technology facilities to libraries and Librarians (3.59), and time constraint (3.46).

Discussion

 The findings from the study are quite revealing. Table 2 reveals that all the Librarians need training in the major skills required in a digital environment. This is not surprising owing to the fact that majority of these librarians is digital immigrants who are trying to get acquainted with the knowledge of ICT. This finding supports the views of Chiware (2007) who opined that academic librarians should be trained in open source software such as D space skills, downloading, installation, management and updating the software. He further noted that these librarians should be trained in the protection of digital intellectual property, design of technical architecture of

digital library, all the practices of collection development in the digital environment which include selection, acquisition, preservation, conservation, organization and management of digital collection.

The findings also reveal the attitude of Librarians towards digital training. This finding implies that all the Librarians have a positive attitude towards digital training. Furthermore, one could draw conclusions that majority of the Librarians are excited about being trained. From observation, a good number of these librarians have prior knowledge of ICT, thereby giving them a positive attitude to know more. This supports the views of Janes(2002) who indicated that Librarians' prior skills and experience with ICT could be related to acceptance or rejection of technological innovations.

The results also showed that though the librarians have a positive attitude towards training, there are challenges. The most recorded problem is limited electronic resource for training. This finding supports the view of Chiware(2007). The dwindling library budget does not enable libraries provide these electronic resources. This is an area that requires serious government involvement through good policy formulation and political will for implementation of such policy. Other challenges found in the study are insufficient qualified resources, insufficient funds, insufficient support from management, and limited training programmes. It is unfortunate that these remain serious challenges in digital training of Librarians. This calls for quick response from the University management if Librarians will remain relevant in this global age.

The results also revealed strategies for enhancing training needs of academic librarians in the digital environment. The strategies pointed out by the librarians agree with the views of Ezema and Ugwu (2014).They noted that librarians should be trained in the basic requirements of generic skills and Information Technology which are important for librarians to navigate in the voyage of digital environment. Furthermore, the finding is also in line with the views of Chiware (2007) who suggested that ICT should be integrated into the library and information science curriculum.

That way Librarians embarking on continuing education will get a braced with the basic knowledge of ICT.

Recommendation/Conclusion

Based on the findings, the following recommendations were made:

- Emphasis in the training of librarians should focus more on digital skills to enable them fit into this age of globalization.
- ICT should be integrated into the Library and information science curriculum to enable them acquire digital skills in the course of continuing education.
- The Nigerian University Libraries staff training committee should computerize training activities.
- Sufficient funds should be provided by the institutions Management for training of Librarians.
- Librarians should create avenues for training themselves especially on ICT.
- No training scheme is complete without an evaluation of the training. Training programmes should be evaluated from time to time.

In conclusion, the training need of Librarians in this age of digitization is very crucial. The Librarians needs training and retraining especially in the area of Information communication Technology in other to make themselves relevant in this digital age. Therefore, the crucial issue of the Librarians improved training cannot be over emphasized.

References

Adekunle, P, Omoba, R and Tella, A (2007). Attitudes of Librarians in Selected Nigerian Universities toward the Use of ICT, Library Philosophy and Practice (e-journal). Available at http://digitalcommons.unl.edu/libphilprac/159

Asgar, M (1992). Problems of Library and information science research in Pakistan. Library education in Pakistan: past, present and future. Lahore: PULSAA.

Bawden, D, Vilar, P, and Zabukovec, V. (2005). Education and training for digital librarians: a Slovenia/UK comparison.

Aslib Proceedings: New Information Perspectives. 57(1), 85-98.

Chiware, E (2007). Training Librarians for the Digital Age in African University Libraries, IT and Research in African University Libraries: Present and Future Trends. Retrieved on 17/08/15 from http://archive.ifla.org/IV/ifla73/papers/Sat1-Chiware-en.pdf

Dasgupta, A (2009) Preparing future librarians in India: a vision for LIS schools of Indian Universities in the 21st century.World Library and information Congress: 75th IFLA general conference and council.23-27 August, Italy.. Retrieved from http://www.ifla.org/annual-conference/ifla75/index.htm Accessed 7/10/15.

Ezema, J, Ugwuanyi, C and Ugwu, C (2014).Skills requirements of academic libraries the digital library environment in Nigeria: a case of University of Nigeria, Nsukka. *International journal of Library and Information science.* 3 (1), 17-31.

Fadehan, O. A. & Ali, H. (2010). Educational Needs of Librarians in the Digital Environment: Case Studies of Selected Academic Libraries in Lagos State, Nigeria. *Library Philosophy and Practice* (e-journal). Retrieved from unlib.unl.edu/LPP/fadeham-ali.htm. Accessed 8/10/15.

Ferreira, R and Abbad, G (2012). Training needs assessment: where are we and where we We should go, Brazillian administration review,10(1), pp 77-99.

Halder, S. N. (2009). Multimodal roles of library and information science professionals in present era. *International Journal of Library and Information Science, 1*(6), 92- 99.

Janes,J (2002). Digital reference librarians: experiences and attitudes. *Journals of the American society for information science and Technology*. 53(7), 549-566.

Jestin, J and Parameswari B (2002). Challenges for Library professionals in India in the new millennium. *Library philosophy and practice*. Retrieved from http://unlib.unl.edu/lpp/jestin/html. Accessed 26/9/15.

Miller, J.A and Osinski, D.M (2002) Training needs assessment. Retrieved from http://www.ispi.org/pdf/suggestedreading/mille rosinski.pdf Accessed 27/9/15.

Okiy, R. (2005). Strengthening information provision in Nigeria University Libraries through Information Communication Technologies.The electronic Library,23(3), 311-318.

Raju, J. (2014). Knowledge and skills for the digital era academic library. *The Journal of Academic Librarianship*, 40(2), 163–170.

Rosenberg, D. (2006). Towards the digital library in Africa. *The Electronic Library,* 24 (3):289-293.

Rubina, B. & Muhammad, N. (2004). Assessing Training Needs of LIS Professionals: Prerequisite for developing training programs in University Libraries of Pakistan *Chinese Librarianship: an International Electronic Journal*, 37.Retrieved from URL: www.iclc.us/cliej/cl37BN.pdf. Accessed 18/9/15

Tenant, R (1999). Skills for the new millennium. *Library journal.* Retrieved from http://www.ibe.unesco.org/fileadmin/userupload/HIVand AIDS/publication/unodeHIVall.pdf. Accessed 19/19/15.

Vasanthi, M (2005). The changing environment of academic libraries. Library philosophy and practice. Retrieved from unllib.unl.edu/LPP/vasa-enduser.PDF. Assessed 20/10/15

Youngok, C. (2006). What is needed to educate future digital librarians. D-Lib Magazine 12 (9), Retrieved from http://n.ereserve.fiu.edu/010014821-1.pdf. Accessed 21/08/15.