2-20-2019

ICT Training and Development of 21st Century

Ifeoma Ajie
ifeomapeters9@gmail.com

Follow this and additional works at: https://digitalcommons.unl.edu/libphilprac
Part of the Library and Information Science Commons

https://digitalcommons.unl.edu/libphilprac/2519
Abstract

The 21st century library and information services are characterized by advancement in the use of electronic means in the accessibility, retrieval and dissemination of information. The information age is a key feature of the 21st century and there are implications as it affects the delivery of library services. Hence, the purpose of this paper is to address the issues and concerns in training and development of library personnel to prepare its citizens for the new information and communication technology of the 21st century. The approach used here is a survey of literatures that have been reviewed by scholars. The findings of this study revealed the key features and requirements of automation and computerization of library services and how library personnel in developing countries can join their counterparts in advanced countries. Also concerns in training and development of library personnel were discussed and in conclusion some recommendations were highlighted among which were; educating and orienting library staff on training and development policies, the librarians changing role, providing staff with adequate training on the new technologies in Information Communication Technology (ICT) especially library management software to enable them meet the changing trends in the profession, and providing adequate budgetary allocation for training and development of libraries in the 21st century.

Key words: 21st Century, Information Communication Technology, Library Personnel, Training, Development

Introduction
The use of technology for library and information service delivery has undergone various levels of development. An automated cataloguing, circulation and acquisition systems has led to better management of library operations and improved services and for this to be possible there are some challenges that needs to be surmounted. As stated by (Davis 2011), libraries face a host of new challenges, among them finding ways to stay relevant in the Information Age. Libraries are required to do more with less, and the skills library professionals need continue to evolve. Coping with the challenges of the information age or 21st century means integrating and using information communication technology (ICT) facilities in library services delivery. Library users now clamour for electronic services in accessing, retrieving and disseminating of information and so it’s the duty of the library management to train and develop their personnel in such areas so that they can be better equipped to carry out their duties. This paper discussed the differences between training and development as well as their types and processes. Library staff training and development is a crucial element in ensuring positive user experiences within libraries. A staff component consistently exposed to relevant training and development interventions should not be underestimated. As stated by (Connor 2009), an academic library’s single most valuable resource is its workforce. Without educated, well-trained, and motivated librarians and library staff, an academic library program is ill prepared to meet the needs of its clientele or the challenges that face institutions of higher education. Training here addresses current issues where library personnel in developing countries are lagging behind in 21st century trends while development is more of long term issue addressing the career of the library personnel i.e improving oneself in library trends not just for immediate use but for future purposes as well. Taking a critical look at what is happening in libraries in advanced countries, it is evident that library personnel in Nigeria and other developing countries are lagging behind. For instance, the virtual public library in Denmark makes it possible to gain access to the catalogues of all public libraries plus the biggest research and special libraries. People are able
to order an item from anywhere in the country and collect it at their local library (IFLA, 2001). The story is also changing for a good number of academic libraries in developing countries, for instance, Nigeria. Places like the NnamdiAzikiwe library, Laz Otτ Memorial Library Babcock University, University of Nigeria Nsukka, Kenneth Dike library, University of Ibadan, Hezekiah Oluwasami library, O.A.U. Ile Ife, John Harris library, University of Benin, to mention but a few are stronger in the automation of their libraries and library services. Salisu (2002) is of the opinion that, ICT has engendered a new approach to work and service delivery, and is a technological development that has changed work and job expectations. The concerns in training and developing library personnel borders around the knowledge of ICT and so library personnel are meant to be more knowledgeable with library software and necessary skills so that they can put their users through and also to be counted among the 21stcentury libraries. The library is one of the main areas deeply affected by ICT which is the backbone of information age and so library personnel need to be abreast of any new trend. This is due to the fact that the library being the main stay of information and knowledge has been made virtual such that library and information services extend beyond walls and physical buildings therefore training and development cannot be toyed with.

**Background**

The job of library personnel has been redefined since the birth of the 21st century. Notable changes are being felt in the area of automation and computerization. For libraries in developing countries to live up to the expectation of 21st century libraries, there is need for automation of their libraries and this will encompass online connectivity via the internet amongst other things and library personnel need to be trained efficiently in this skill so that they can render useful service to users. According to Anyakoha (2005), the 21st century age is the new age which we now live in, it is a revolutionary period with impact far surpassing those of the agricultural and industrial revolutions. The birth and explosion of ICT has brought about
changes in different aspects of human life in the 21st century and the library is not an exception. Anyakoha, went further to note that the new opportunities provided by ICT in business, learning, communication etc. have catapulted the world into a new society called the knowledge society or information society. Salisu (2002) is of the opinion that ICT has engendered a new approach to work and service delivery, and is a technological development that has changed work and job expectations. The library is one of the main areas deeply affected by ICT which is the backbone of information age and library personnel are deeply affected as well because it’s obvious that it’s no more business as usual. This is due to the fact that the library being the main stay of information and knowledge has been made virtual such that library and information services extend beyond walls and physical buildings.

**Purpose of the Paper**

The purpose of the paper is to assess training and development needs among library personnel with a view to identifying possible issues and concerns and making necessary recommendations for their resolutions. For library personnel to cope with dynamic trends of research, teaching and learning, there is need for appropriate training and development exercise on a consistent basis. It is widely accepted that training and development has come to stay in many libraries all over the world and developing countries are no exception. Libraries have usually been seen as custodians of books and journals for the academia but the challenge that is arising out of globalization and information technology is that the third world academic library has to provide up-to-date information which will benefit the clients both now and in the future (Cotta-Schinberg, 2005). It is therefore appropriate for all libraries to upgrade their personnel to enable them fit into the 21st century global world. This means that there is need for adequate training and development programmes in libraries in Nigeria. This may affect the delivery of quality services, professional career development and productivity, hence the purpose for this study.
The library of the 21st Century

The library of the 21st century according to Igun, 2006 has been appropriately described as a digital library. The library in a 21st century setting combines both digital and traditional library elements. Abandoning all the elements of a traditional library would be unsuitable for developing countries, where illiteracy is still high and ICT literacy is very low so a combination of both will create a good balance for users. Salisu (2002) noted, ICT has engendered a new approach to work and service delivery, and is a technological development that has changed work and job expectations. The library is one of the main areas deeply affected by ICT which is the backbone of information age. This is due to the fact that the library being the main stay of information and knowledge has been made virtual such that library and information services extend beyond walls and physical buildings( Eze 2013)., Another information technology application similar to the document delivery or information dissemination in library science is the "Push and Pull technologies". These technologies have emerged as useful concepts to describe the operation of distributed information resources in different formats that is text, images, sound, and video. Traditional information distribution applications were based on request/reply model, whereas push and pull technologies are based on client/server model. Web browsing, library searches, FTP, GOPHER, WAIS are examples of pull technology and e-mails, telephone newscasts, electronic newsletter are the examples of push technology.

Training

Obisi (2001) defines training as a process through which the skills, talent and knowledge of an employee are enhanced. He argues that training should take place only when the need and objectives for such training have been identified .Obisi (2011) cited Mamoria (1995) in his work where he defined training as a practical and vital necessity because it enables employees to develop and rise within the organization and increase their market value, earning power and job security. Mamoria explains that training helps to mould employees’ attitudes and helps
them to contribute meaningfully to the organization. The organization benefits because of enhanced performance of employees. He further states that a well trained employee would make a better and economic use of materials and equipment which would go a long way to minimize wastages.

**Types of Training**

There are two major types of training, on-the-job training and off-the-job training as identified by Alo (1999):

On-the-job training, is normally handled by colleagues, supervisors, managers, mentors' to help employees adjust to their work and to equip them with appropriate job related skills Armstrong (1995) argues that on-the-job training may consist of teaching or coaching by more experienced people or trainers at the desk or at the bench. It may also consist of individual or group assignment and projects and the use of team leaders and managers. According to Armstrong, on-the-job training is the only way to develop and practice the specific managerial, team leading, technical, selling, manual, and administrative skills needed by the organization and it has the advantages of actuality and immediacy as the individual works, learns and develops expertise at the same time.

Disadvantages of on-the-job training according to Armstrong are that the effectiveness of the learning is strongly influenced by the quality of the guidance and coaching provided on the job. Many managers and team leaders are unskilled at training and disinclined to carry it out or to encourage it. Furthermore, relying on fellow employees in “sit by me” training has obvious disadvantages as instruction may be inadequate and the training may perpetuate bad habits. Again, the learner may be distracted by the same environment and find it difficult to acquire basic skills quickly. To resolve these disadvantages, train the trainers programme should be regularly embarked upon to sharpen the skills of supervisors and in-house trainers.
According to Ejiogu (2000) off-the-job training on the other hand, would include lecture, vestibule training, role playing, case study, discussion and simulation. Armstrong (1995) listed group exercises, team building, distance learning, outdoor and workshops as part of off-the-job training. He further explains that off-the-job training may be provided by members of the training department, external education and training establishments, or training providers—training consultants or guest speakers. He encourages line managers to be closely involved to bring reality into the classroom, to ease the transfer of learning, and to make sure that those involved in off-the-job training are carefully selected, briefed and monitored so as to ensure that they make the right contribution.

Development

According to Obisi (1996), the concepts of training and development are used interchangeably. However, it can be differentiated from the other. Training is for specific job purpose while development goes beyond specifics, development covers not only those activities which improve job performance, but also those which bring about growth of personality. In training, you use one stone to kill one bird while in development you use one stone to kill two birds (Mamoria, 1995).

Steinmetz, (1996) notes that training is a short-term process, utilizing a systematic and organized procedure by which non-managerial personnel learn technical knowledge and skill for a definite purpose. Development on the other hand is a long term educational process utilizing a systematic and organized procedure by which managerial personnel learn conceptual and theoretical knowledge for general purpose. Agbo (2015) cited Laurie (1999) who also stated that career development is no longer just a haphazard system of promotions, moves and occasional training programmes, rather it is a long term organizational strategy for assisting employees in optimizing their skills and advancing their education.

Training of the 21st century librarian
Ajidahun (2007) noted that training is needed for managerial and non-managerial staff of any profession though they are very essential for non-managerial staff who constitute large portion of the total employee in an academic library. Yesufu (2000) says training of staff enhances productivity, because education and training is regarded as the most important direct means of upgrading the human intellect for productive employment, this applies in all organizations and the library is inclusive. Goldsmith (2007) observed that training for both staff and users is an important part of the library mission, thus librarians must conduct training sessions for all category of library staff to promote preservation awareness through lectures and documentary videos.

Training in the area of digitization remains core for the 21st century librarian. Zhou (2005) describes the responsibilities of a digital librarian: Select, acquire, preserve, organize and manage digital collection; Design the technical architecture of digital library; implement, and support digital services such as information navigation, consultation and transmit services; Establish friendly user interface over network; Set up relative standards and policies for the digital library; Design, maintain and transmit add-valued information products; Protect digital intellectual property in network environment and insure information security. According to Obaseki (2011), computerization used to be accompanied by utilizing other varying computer facilities like networking cables, software packages scanners etc.in accomplishing library functions which were originally performed manually. Obaseki (2007) specified earlier on that computerizing the library functions and services encompasses the initial: :- Planning processes; Selection of hardware and software; Acquisition of selected software and hardware; training of library personnel on the use; maintenance of these novel system; networking computer terminals (inter linking of computers); retrospective conversion of the library collections; printed materials and artifacts records by means of computer software into machine readable options or formats.

**Training and development of librarians and library staff**
According to Castelyn (2007) all libraries aim to have efficient staff in order to provide good library services to the public they hope to serve, whether that readership is using a public, university, school or private library. Training and development therefore, is of the utmost importance in the library field, although each library organization must decide for itself what it means by a desired state of efficiency, as requirements will alter from library to library and country to country. However, the training and development should be designed to ensure efficient performance to the dual benefit of the library system and the users. Training and development of staff is crucial both in developed and developing countries. It is appropriate in an extremely sophisticated library system using the most up-to-date computer methods and equally appropriate in a library system that may only recently have been established. Castelyn (2007) was also of the view that a trained staff is able to exploit the book stock which means a more satisfied readership at all levels. The readers must be able to feel confident in the member of staff who may be dealing with them. This confidence means that readers will return again to borrow books and to ask for information from the library staff. Here, the knowledge of the individual staff member plays an important part, for the staff, even if they have only a basic education, must be knowledgeable about the tasks they perform on a daily basis and must have a sound understanding of the organization in which they are working. Training and development will enable them to participate more intelligently in the work of the library. They must know why they are asked to operate certain procedures and what will happen if they make mistakes.

According to Mathis and Jackson (2000) training is the process by which employees acquire capabilities to aid in the achievement of organizational goals, hence the need for training and development activity to help in the achieving of the goals of academic libraries which is the total satisfaction of the clients. In a limited sense, training provides employees with specific, identifiable knowledge, and skills for use in their present jobs. Sometimes a distinction is drawn
between training and development, with development being broader in scope and focusing on individual gaining new capabilities, useful for both present and future jobs. However, for the purpose of this work training and development are adopted as one activity.

According to McClelland (2002), the significance and value of training and development has long been recognized. The exponential growth in technology with its effect on the economy and society at large, the need for training and development is more pronounced than ever especially in social institutions like the academic library. Training and development in the most simplistic definition, is an activity that changes people’s behaviour. Increased productivity is often said to be the most important reason for training and development. Training and development is essential not only to increase productivity but also to motivate and inspire workers by letting them know how important their jobs are and giving them all the information they need to perform those jobs of which librarian and library staff are not exempted (McClelland, 2002).

**Concerns of Training and Development in ICT**

New tools of information and communication technology have absolutely changed the role and responsibilities of librarians. A number of studies have been conducted to explore the problems faced by librarians. Some studies have been conducted in developing countries to investigate the problems confronted by the librarians.

Trushina (2004) discussed the issues related to the internet as well as the correlation of professional codes and their implementation in library practice. He stated that libraries depend on ethical principles more than any other institution because library services are essentially human – oriented. He stressed that librarians must follow the intellectual freedom principle and their moral responsibility to the patrons requires the digital librarians (DL) to be essentially a type of specialist librarian who has to manage and organize the digital library, handle the specialized tasks of massive digitization, storage, access, digital knowledge mining, digital
reference services, electronic information services, search co-ordination, and manage the archive and its access. He should be well versed in mark–up languages, cataloguing, metadata, multimedia indexing and database technology, user interface design, programming and Web technology.

Johnson (2007) viewed library and information science education in developing countries. He concluded that LIS programs in developing countries continue to suffer from lack of financial support by governments Wallis (2005) found that information literacy is a vital skill set for citizens of information societies. They suggested that the librarian must support learning at all levels. They are needed to pass skill set of technology and media literacies to citizens at all levels of society for economic, social and personal empowerment.

In Iran, Gavagani, Shokraneh & Shiramin (2011) concluded that librarians do not have traditional skills and sufficient background knowledge to meet the changing needs of their customers. They need to be empowered by new skills and information before going to empower their patrons. So there must not be a gap between librarian’s professional / technological knowledge and their societies informational need to be answered by librarians. Need for changing the syllabus of medical library and information science education in Iran was also felt.

In India, Jestin & Parameswari (2002) explored the challenges for library professionals in the new millennium. They found that library professionals in India were subjected to various challenges. The introduction of computers and new technology was a challenge to all librarians. It was concluded that librarians should be ready to participate in the process of generating and distributing information and knowledge for quality of life and education for all. Librarians must also unite to withstand the revolutions that will occur in the information and communication fields. Haider (2003) found that the present library scenario in Pakistan is not so impressive and is suffering from inadequate funds and lack of bibliographic resources in the country. It
was suggested that in order to meet new challenges, library schools are needed to improve the quality of their teaching staff and revise curricular as well. The amount of research by library professionals into their own discipline is simply inadequate.

Narrowing it down to Nigeria, Ademodi&Adepoju (2009) investigated the computer skill among librarians in academic libraries in Ondo and Ekiti States in Nigeria. It was found that there was shortage of computers and computer skills among professionals. The study recommended that more attention and funds should be provided for training and procurement of ICT infrastructure in Nigerian university libraries. For computerization purpose, library administration should solicit funds and assistance from foreign agencies and foundations who are interested in the cause.

Ajidahun (2007) indicated in a research study that, the level of professional training in information technology received by the professional and para-professional library staff in Nigerian University libraries is generally adequate as shown by the results of the research. Alemna (2001) argues that, a sound library education is paramount to the image prestige of the library profession. This is because a profession like librarianship is not fixed but vibrant due to the fast changing nature of the world as well as the information needs of our clients. Alemna (2001) proposed that there should be improvement in the various types of training and development programmes with a considerable support from the government. Adomi&Anie (2006) in their research on computer literacy skills of professionals in Nigerian university libraries concluded that most of the professionals do not possess high level of computer skill and their use of computer and technology is still maturing. They recommended that library management and leaders should organize and offer in-house computer training programmes for librarians and enough computers should be provided in this regard.

**Conclusion and Recommendations**
The knowledge society of the 21st century is here, and developing countries including Nigeria must operate in this environment. There are tools and skills that are needed to operate in this environment. Most libraries today face the threat of technological obsolescence, unless they step up their game and modernize both human and material resources. Library personnel need to commit themselves to continuous learning and improvement in order to provide quality service to users. They need to fix and position themselves in the tenets of a performance technology model which is a systematic and set of methods of increasing productivity in order to meet the needs of the 21st century. Laissez-Faire approach to employee training is retrogressive. A situation where organizations believe that training and development is an act of favour, that employees should find their way is fraught with dangerous consequences. In conclusion, training and development is the tonic library personnel need to enhance their performance and potentials that will in turn enhance organizational effectiveness. Training and development programmes are vital issues of career progression and recognition in the global world and based on the findings of this study, the following recommendations were made to cope with the challenges and needs of the 21st century:

- educating and orienting library staff on training and development policies,
- orienting library staff and users on the librarians changing role,
- providing staff with adequate training on the new technologies in Information Communication Technology (ICT) especially library management software to enable them meet the changing trends in the profession,
- providing adequate budgetary allocation for training and development of libraries in the 21st century.
- the library staff should increase their willingness in training to obtain skills within and outside the university library which will help in the development of their personal skills and initiatives.
References


Ajidahun, C.O. (2007), Training, Development and Education of Library Manpower in


Anyakoha, M.W. (2015), Information and communication technology (ICT) In Library and Information services.


