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Summer 8-15-2017

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Bamidele,, Olawale Mr and Olusegun, Samuel Olufemi, "Influence of Computer Literacy Skill on On-line Cataloguing by Librarians in Ekiti State University, Nigeria" (2017). *Library Philosophy and Practice (e-journal)*. 1593.
<http://digitalcommons.unl.edu/libphilprac/1593>

Influence of Computer Literacy Skills on On-line Cataloguing by Librarians in Ekiti State University Nigeria

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Abstract

The introduction of computers into cataloguing marked a turning point in the way it is being done; this has changed and expanded the work of cataloguers tremendously. The application of the internet is essentially to fast-track that process and ensures that books and other resources spend the least period of time in the cataloguing section. Cataloguers that have internet access have now recognised the potentials of online catalogue for improving subject access to information. It is in the light of this that this research work focuses on the influence of subject background and computer literacy skills on on-line cataloguing by librarians of Ekiti State University. This work adopted a survey research method and utilised questionnaire to generate data. Out of the twelve (12) copies of questionnaire distributed, eleven (11) copies (91.6%) were returned with valid responses. Findings revealed that librarians need constant training to keep up with international standards; this will enhance professional exposure and capacity building and ensure that best practices in cataloguing are adopted

Keywords: *ICT, Cataloguing, On line, Skill*

Introduction

Organisations of knowledge in libraries cover cataloguing, classification; indexing, abstracting services, compilation of bibliographies and shelving. However, cataloguing and classification is the hub of librarianship. Information materials in libraries are catalogued for purposes of identification and easy retrieval. Cataloguing and classification are part of the technical aspects of librarianship. Aina (2012) perceived cataloguing as a complex process used in providing access tools to materials in a collection so that users of such collections can access the materials in that collection. Cataloguing is a two phase activity that involves description of bibliographic details and identification of the subject in a book using a thesaurus. A search tool is, therefore, necessary for every collection to be meaningful. This explains why high premium is placed on cataloguing and classification in the librarianship curriculum.

According to Edoka (2000), cataloguing is concerned with the correct and accurate description of the physical properties of a library document (print, non-print, audio, visual or both). It is a skilful art, subject to specific rules and guidelines, which the practitioner acquires through a period of professional training. A skill whose finesse and speed of application takes time and experience to develop is used to describe cataloguing activities. Cataloguing is the description of book and other information materials, showing the bibliographic details such as author, editor, publisher, series, tracing and other access points. It is the process through which a library catalogue is created in order to achieve easy retrieval of information. Cataloguing consists of two major aspects: descriptive and subject cataloguing. Classification is a system of coding for organisation of library materials such as books, serials, audio visuals, computer files, maps, manuscripts, realia, according to the subject and allocating a call number to them. Classification places common information materials or collection together and it separates them from unrelated items. Classification implies grouping of related subjects together with common characteristics and distinguish them according to their likeness. Cataloguing and classification are placed together because of the inter-dependent nature of the two courses and that the activities of one lead to the other.

Cataloguing is the process of listing the bibliographic details about a particular information material or an item in the library. Cataloguing, according to Wynar (1992), is the process of preparing a catalogue or entries for a catalogue. A catalogue is a list arranged by alphabet, by number, or by subject of books, maps, coins, stamps, recordings or any other medium which comprises a collection. Wynar (1992) opined that a collection may be privately owned, or it may represent the resources of a museum, a library or even the resources of a temple. An example is the clay-tablet library found in Nineveh Library and catalogue of Callimachus Library discovered in the Ancient Times. Simply put, cataloguing is the process of preparing the catalogue entries of a library. The essence is to enable library users to discover, among other things, the different types of information materials that are available in a given library collection and where they can be retrieved.

The descriptive cataloguing is a part of the library cataloguing process that is concerned with identifying and describing the physical and bibliographic characteristics of the item, and by determining the name(s) and title(s) to be used as access points in the catalogue, but not with assigning subject and form headings. In other words, descriptive cataloguing is the process that is concerned with transcription of elements of bibliographic description such as title-page details, collation, and the choice and form of entries. The process includes making a physical description of a book including names of author or authors, the exact title of the materials, the date and place of publication, the names of publishers or printers as may be applicable, the pagination, illustration, price, format, and for rare books, details such as kind of paper, and binding. The tool for descriptive cataloguing is either Anglo America cataloguing Rules (the new RDA) Resource Description and Access or International Standard Bibliographic Description (ISBD).

Subject cataloguing, on the other hand, is used in determining the subject content of information materials and other information items for the purpose of consistency within one catalogue and other catalogues or between other catalogues using the same subject headings list and determining the common usage for easy access of terms and uniformity. The tool used for subject cataloguing is either Library of Congress Subject Headings. (LCSH) or Sears list of subject headings (SLSH). They are list of items in English Language arranged in alphabetical order that are acceptable as subject headings. They are standard terms that are acceptable and used globally.

A library catalogue is the comprehensive list of all information resources in a library. The library catalogue is the record of the entire holdings of a library as well as index to the library collection. It guides the users to specific information in the collection of a library or group of libraries. It is meant to facilitate the location and retrieval of documents or materials through access points like author, title, subject, series and so on. It is also a database of the records of the library collections which is systematically arranged usually in alphabetical order.

Charles Ammi Cutter made the first explicit statement regarding the objective of a library catalogue thus:

1. To enable a person to find information resource of which either the author, the title, the subject or the category is known. This is identifying objective.
2. To show what the library or information centre has by a given author, on a given subject in a given form of information material. This is collocating objective.
3. To assist in the choice of information resources as to its addition (bibliographically) and as to its character (literary or topical). This is evaluative objective. These objectives are still relevant to the goals of a library catalogue as specified in the functional requirements for Bibliographic Records (FRBR) which defines four user tasks: find, identify, select and obtain.

Wynar (1992) observed that classification generally is the arrangement of things in logical order, according to their degrees of likeness. In librarianship, it is the technique for the arrangement of books and other reading materials in a logical sequence according to the

subject on the shelf and in the subject catalogue. All members of a group or class produced by classification share, at least, one characteristic which members of other classes do not possess. Buchanan (1979) stated that:

Classification displays the relationship between things and between classes of things. The result of classification is the display of a network or pattern of relationships. This pattern is used for many purposes, in some cases, Unconsciously by intuition in others, consciously. Through classification the multitude of unorganised impressions are reorganised for easy access.

Cataloguing and Classification and the Changing Technology

Cataloguing and classification of a book simply put, has to do with sieving out and organizing the bibliographic information of a reading material, arranging them in a particular order and grouping the reading materials mainly books into classes. Cataloguing and classification as well as other library activities/services have witnessed reasonable changes in the era of ICT. In the words of Arkoful (2007), these technologies have accelerated the rate at which library services and routines are carried out.

The introduction of computers into cataloguing marked a turning point in the way it is being done and by whom the cataloguing is done. The introduction of non-professionals to cataloguing is one of such changes. Para-professionals in the library can now perform conveniently tasks solely meant for cataloguers. Nwalo (2007) states that, paraprofessionals in libraries can now effectively perform much of the duties that hitherto were the exclusive preserve of professionals. The California Occupational Guide (1996) describes how automation has in many cases changed cataloguing of routine materials from being primarily a responsibility of the librarian to a paraprofessional responsibility assigned to the cataloguing department.

According to Ejedifiru (2010) ICT technology is capable of transmitting, storing, creating, displaying and sharing or exchanging information by electronic means. As a result of these enormous impacts of ICT on information, handling cataloguing and classification aspect of information processing has also been affected by this great migration of ICT to the new information order. Cataloguing and classification, as well as other library activities, have therefore, witnessed tremendous change in this era of ICT. Mohammed (1997) is of the view that information technology is rapidly transforming the content and services of libraries. Mason (2014) observes that libraries are a classic example of how automation has impacted on the traditional ways that work is done, particularly in cataloguing departments—changing how, and by whom, the cataloguing is done. Resource-sharing of cataloguing activities is another very notable change being currently experienced in cataloguing. It helps to save cost and reduce to the barest minimum, duplication of efforts in cataloguing. Nwalo (2007) notes that resource-sharing is of immense benefits to libraries and their users as it makes information more readily available, saves costs and prevents duplication of effort especially in cataloguing and classification.

The work of cataloguers have changed and expanded as noted by Crosby (2011). According to her, cataloguers classify books, videos, CD-ROMS, and other materials so as to enable users find what they are looking for. Cataloguing has grown more important as searchers log on to on-line catalogues from home. Technology has made cataloguing more efficient. In the words of Youngman (2009), cataloguers are moving into new roles as they attempt to provide enhanced access to the new resources. They now process not only books, but also CD-ROMs, computer discs, and multi-format items. Cataloguers add the records they create to a shared international database. It is known that librarians have been sharing catalogues for a long time, but the internet have made it easier. Because of on-line access, making catalogues easy to use is more critical and more possible. Using computers, Crosby (2011) said, librarians are starting to create different catalogues for different kinds of readers. A catalogue designed for casual browsers for instance, she said, might display summaries of each book while the one designed for preschoolers might use more graphics or might not rely as heavily on putting things in alphabetical order.

ICT has impacted on the work of cataloguers in a number of ways. Nnadozie (2013) admitted this fact while Yusuf (2009) enumerated some of these areas of change. Firstly, the use of computers has affected the way cataloguing is being done and by whom. Although cataloguing has over the years been the sole work of professional librarians, in most libraries now, especially the public libraries, para-professionals usually called library officers are involved very well in cataloguing. Ejedafiru (2010) saw ICT as technology that transmits, stores, creates, displays, shares, or exchanges information by electronic means. He asserted that for resource sharing amongst libraries to materialise, libraries must adopt and use ICT. One of the key areas where resource sharing reflects and helps a library is in the area of library cataloguing (sharing catalogue data). Yusuf maintained that such resource sharing reduces cost and duplication of efforts in cataloguing. Ejedafiru citing Song (2000) made it clear that no library can adequately provide for the needs of all its users using the resources within its walls. Users will need to have access to universal information before they can be satisfied.

On-line cataloguing is another major change that ICT has brought to cataloguing. According to Yusuf, it involves locating and subsequently copying cataloguing data on-line through international computer networks. Remote library catalogues are available on desktops (Rao & Babu, 2011). In addition to traditional card catalogues and micro-fiche readers, most libraries now offer On-line Public Access Catalogue (OPAC). They further stressed that catalogues of leading libraries these days are available in web-based and telnet based platforms for easy browsing.

The application of the internet is essentially to fast-track that process and ensures that books and other resources spend the least period of time in the cataloguing section. Cataloguers that have internet access have now recognized the potential of online catalogue for improving subject access to information. Many library online catalogues are now accessible for searching class numbers and other cataloguing information. Lon (1997). The ability to have more than one open window on the desktop now enable cataloguers to copy and paste

cataloguing information from multiple sources which has created more accurate access points. From your desktop, it is now possible to link easily and cost effectively into bibliographic information which were previously time consuming.

Concepts such as online catalogues, cataloguing of internet resources, web browsing, global trend in Information Communication Technology; Machine Readable Records etc. are the languages of the information age. The need for information professionals in developing countries to move with the times have been discussed at various fora. The magnitude of materials being passed on the web each day presents an unprecedented challenge to the profession in terms of traditional responsibility to organize, provide access to, and preserve information. As information professionals it is very dangerous to stay local. We must continue to keep pace with the changes in our profession, to meet the needs of our users, and fulfil our role as the principal providers of information services. The current issue is no longer whether information technology applications are relevant to library operations; the critical decision is on how best to apply information technology systems to library and information services.

Gorman (2004) says that by the end of the twentieth century, with the explosion of digital formats and the internet, the treatment of non-book formats using the model of book cataloguing has become less useful. According to him, even conventionally published materials began to appear on the market in multiple formats. In addition, he noted that the much looser distribution channel of the internet eliminated the packaging and any vestige of description that those packages contributed. He further posited that the switch from physical media formats distributed through traditional channels to web-distributed digital information pulled the last remaining rug from under cataloguers who were used to relatively stable materials.

Cataloguers in the Information Age are to make informed decisions on matters such as linking to electronic journals and managing holdings “book” to various data. Cataloguers today create records that accommodate multiple means of accessing particular resources. Library patrons are expecting records to include print holdings, microforms, and direct link to electronic version of the item. Youngman (2009) also affirmed that cataloguing through the internet itself is a task that has fallen on librarians. The application of the Dublin core metadata tag system is a skill that did not exist just a few years ago but is now rapidly growing in importance as an additional role for librarians. Byrd et.al (2001) observed that metadata element is not set out as a replacement for machine readable catalogue MARC rather it is going to evolve along with it. Crosby corroborated this by saying that some librarians are helping to organise the internet as they are setting their sights on digital information. Francis (2010) concluded in the same opinion expressed by others that a future of today’s library is the on-line public access catalogue OPAC which is a database containing the library collection that can be accessed on-line. This would afford all academic librarians to offer full text electronic subscription based journals to their users that can be accessed through the library’s web page in addition to supplying a user name and password.

He maintains that descriptive rules based on predictable stable and named “sources of information” (title pages, table of contents etc) about a resource, with a prescribed order of preference, were not adaptable to resources without title pages or pages and not suitable for resources that exist in a state of constant change. Schneider (2007) challenged the cataloguing practices as exemplified by the Library of Congress Working Group on the future of bibliographic control. She believes that the future of cataloguing is one of a new type of order and data control based on web developments. It is her contention that how we do things in traditional cataloguing may be very different but that much of what we value like shared standards, controlled vocabularies, and unique identifiers are exactly what leaders in the web community are working on also. While it is necessary that library cataloguing should meet up with what obtains in the web world, there is need to optimise the editorial capabilities of cataloguers to ensure quality control of records added to the database or catalogue.

Library of Congress (2007) in its report on the changing nature of cataloguing notes that the catalogue operates against a backdrop of flat or declining use of library collections, flashy and powerful alternatives for information discovery, rapid changes in information technology, rising expectations of library patrons, mass digitisation projects, and an incipient revolution in scholarly information exchange. It called on library managers to move swiftly to establish the catalogue within the framework of online information systems of all kinds.

The report challenges librarians and indeed cataloguers to consider the following issues as they seek to manage the change which is imminent:

- What is the current state of standards and technologies to support unified access to multiple repositories, including catalogues?
- What are the future roles of MARC and cataloguing content rules?
- What are the challenges to the economic sustainability of the current model of the catalogue?
- What do 21st century information seekers need from catalogues?
- In what ways might libraries leverage catalogue data for new uses?
- What partnerships are worthy of pursuing with the publishing, systems, scholarly and information technology communities?

There is need therefore for library catalogues to provide access to more content and offer significantly enhanced functionality based on the features of popular search engines. More users want, expect, and pursue full text. In increasing numbers, they look beyond the catalogue when searching for electronic journals, databases and websites.

Computer Literacy Skills and On-line Cataloguing

Computer literacy skills are the ability to use computers to perform a variety of tasks, which in today’s world is very fundamental to the learning process. Computer literacy skills refer to the comfort level someone has in using computer programmes and other applications associated with the computer. A valuable component of computer literacy is knowledge of how computers work and operate. To have basic computer skills is a significant asset to librarians. Computer literacy entails the ability to operate a computer and to understand the language used in working with a specific system or systems. According to Igwe (2011), computer literacy refers to the level of computer knowledge of an individual and the degree

to which such knowledge can be used in problem solving. Computer literacy skill is also seen as the ability to achieve the desired outcome through a computer. The task comprising computer literacy, according to Zaid (2012), varies in different environments. For users, computer literacy could be defined as having three components: understanding the basic computing principles, knowing how to use, at least one computer operating system, and proficiency with specific software programmes.

The Impact of the World Wide Web on Cataloguing and Classification

The Internet has linked the world's online catalogues together and the web has provided them with a relatively similar interface. The communication revolution caused by the internet has enabled far greater flexibility. Not only can cataloguers more easily share information about their work but so can administrators and vendors. Lon (1997) noted a number of ways cataloguers are using the internet to enhance their cataloguing practices. This boils down to two basic findings: (a) cataloguers use the internet to search other catalogues and to communicate with other cataloguers. Searching other catalogues has enabled better and faster copy cataloguing and authority work for many libraries. (b) It can also be cheaper for smaller or underfunded libraries who might not be able to acquire the latest editions of classification schemes to check other trusted libraries' catalogues.

Cataloguers can now share information in a wide spectrum of ways which can speed up their work and promote cooperation. The internet has changed how cataloguers and other cataloguing department staff communicate with each other, with colleagues in other libraries even with users. It has created a cadre of virtual co-workers within and outside any given library. E-mail is the most visible instrument of this change, but web pages and web-based catalogues are new communication tools used by staff in cataloguing units. This communication tools have dramatically changed how cataloguing staff share work information with each other. The overall effect of this communication revolution according to Oketunji (2007) has drawn the profession closer together as a working community.

Library of Congress On-line Catalogue

Library of Congress Online Catalogue is another technical service that cataloguers can use free of charge. The Library of Congress information database has over 110 million items available online at www.catalog.loc.org. The Library of Congress Online Catalogue provides the platform for both basic and guided Search. It is important for cataloguers to be aware of and understand the differences between each search type available. Each session expires after 5 minutes. It is imperative that cataloguers be fast in conducting their search.

The Basic Search which offers the largest variety of direct search option can be accessed through the following steps:

- (1) Click on your internet explorer
- (2) Type in the library of congress website (<http://catalog.loc.org>)

- (3) Click on basic search
- (4) Choose one search word in the search textbox
- (5) Choose your search strategy either by title, author/creator, subject, ISBN/ISSN etc.
- (6) You have an option to choose your display latitude by clicking number records per page 25, 50, 75 or 100 records per page.
- (7) Then click on begin search.

Objectives of the Study

Specifically, the objectives of this study are to:

1. ascertain the nature of collections acquired by Ekiti State University library
2. investigate the availability and use of ICT in the cataloguing of library materials in EKSU.
3. find out those that carry out cataloguing and classification in EKSU library.
4. determine the problems hindering the use of ICT for cataloguing activities in Ekiti State University library.

Research Questions

1. What is the nature/type of collections acquired by Ekiti State University library?
2. What is the extent of availability and use of ICT in the cataloguing of library materials in EKSU?
3. Who are those that carry out cataloguing and classification in EKSU library?
4. What are the problems hindering the use of ICT for cataloguing activities in Ekiti State University library?

Methodology

The study adopted a descriptive research survey method. The population and sample of the study include the librarians in charge of cataloguing in Ekiti State University; data were generated through the use of questionnaire which was administered to them. Items on the questionnaire focused on the nature of materials acquired for processing in cataloguing and classification, availability of ICT for cataloguing, capacity building programmes for cataloguers, and challenges to on-line cataloguing. The use of frequency count and percentages method of data analysis was adopted for this research work. The main library

handles all acquisition and cataloguing procedures, already processed books are sent to the faculty libraries.

Data Presentation and Discussion of Results

Below is the comprehensive presentation of data and findings based on the responses received from the respondents through the use of questionnaire. Out of the twelve (12) copies of questionnaire distributed, eleven (11) copies (91.67%) were returned with valid responses. while one copy was not returned.

Table A: Materials Acquired for Processing in Cataloguing and Classification

S/N	Statements	S.A	A	Undecided	D	S.D
1	Books	7(64%)	3(27%)	1(9%)	0(0%)	0(0%)
2	Journals	6(55%)	4(36%)	1(9%)	0(0%)	0(0%)
3	CD-ROMS	1(9%)	1(9%)	2(18%)	4(36%)	3(27%)
4	Realia	0(0%)	0(0%)	0(0%)	6(55%)	5(45%)
5	Cartographic Materials	3(27%)	3(27%)	2(18%)	1(9%)	2(18%)
6	Electronic Resources	5(45%)	3(27%)	1(9%)	2(18%)	0(0%)

This section presents findings on the nature of materials acquired for processing in the cataloguing and classification Department of Ekiti State University. 91% of the respondents agreed that the library acquired books and journals for processing, while 63% of them disagreed on the acquisition of CD-ROMS for processing. Also, all the cataloguers 100% disagreed on the acquisition of realia for processing in cataloguing and classification department. On cartographic materials acquisition, only 54% of the cataloguers were in agreement. 72% of the respondents agreed with the assertion that the library acquires electronic resources.

Table B: Availability and Use of ICT for Cataloguing

S/N	Statements	Available	Undecided	Not Available	Total
1	Computer for cataloguing	3(27%)	0(0%)	8(73%)	11(100%)
2	Computer for library routines	7(45%)	0(0%)	4(55%)	11(100%)
3	Computer for administrative use	8(73%)	0(0%)	3(27%)	11(100%)
4	Functional internet	3(27%)	0(0%)	8(73%)	11(100%)

Based on the findings on the availability and use of ICT for cataloguing, 73% of the respondents were of the opinion that computers and functional internet were not available for

cataloguing, while 55% had a negative assertion on the availability of computers for library routines. Also, 73% of the cataloguers were of the opinion that there are computers for administrative use in the library.

Table C: Capacity Building Programmes for Cataloguers

S/N	Statements	S.A	A	Undecided	D	S.A
1	Conferences attended	2(18%)	1(9%)	0(0%)	4(36%)	4(36%)
2	Workshop and seminars attended	1(9%)	1(9%)	1(9%)	3(27%)	5(45%)
3	In house training	3(27%)	4(36%)	0(0%)	2(18%)	2(18%)
4	Computer appreciation courses attended	3(27%)	3(27%)	0(0%)	2(18%)	3(27%)

Findings on the capacity building programmes for cataloguers revealed that 72% of the respondents were of the opinion that they have not been attending conferences, workshops and seminars on the application of ICT to cataloguing of information resources. Quite a good number of the respondents 63% agreed that they had in house training in on-line cataloguing, while 54% of them agreed to have attended computer appreciation courses.

Table D: Challenges to on-line Cataloguing

S/N	Statements	S.A	A	Undecided	D	S.A
1	Lack of adequate ICT skills on the part of cataloguers	1(9%)	3(27%)	0(0%)	3(27%)	4(36%)
2	Insufficient number of professional cataloguers	5(45%)	4(36%)	0(0%)	1(9%)	1(9%)
3	Lack of basic amenities such as constant and regular electricity supply	4(36%)	4(36%)	0(0%)	2(18%)	1(9%)
4	Lack of adequate basic infrastructures such as computers, internet, and scanners	3(27%)	4(36%)	1(9%)	2(18%)	1(9%)
5	Copyright challenge	2(18%)	2(18%)	3(27%)	2(18%)	2(18%)
6	Web resources difficult to catalogue due to their unstableness	3(27%)	2(18%)	2(18%)	1(9%)	3(27%)
7	I don't understand computer languages such as XML, HTML, RDF 1, MIME, MARC, and SGML	4(36%)	3(27%)	2(18%)	1(9%)	1(9%)

8	License agreement	2(18%)	3(27%)	2(18%)	2(18%)	2(18%)
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Findings on the challenges of on-line cataloguing showed that 63% of the respondents disagreed that they lack adequate ICT skills to carry out on-line cataloguing. Also, majority of the cataloguers were of the opinion that the number of professional cataloguers are insufficient, while 72% of them agreed that the library lacked amenities such as regular electricity supply. 63% of the respondents agreed that basic infrastructure like computers, internet and scanners are not available, they also do not understand computer languages such as XML, HTML, RDF1, MIME, MARC and SGML. While 45% of them opined that web resources are difficult to catalogue due to their unstableness and ambiguous licence agreement.

Conclusion

Training and re-training of cataloguers is very essential. To keep up with international standards, cataloguers have to attend workshops, seminars, and other related functions where their skills can be sharpened. Staff exchange with other universities will also be beneficial. This will enhance professional exposure and capacity building and ensure that best practices in cataloguing are adopted

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