

# **MANUAL CATALOGUING AND CLASSIFICATION SKILL ACQUISITION AND PRACTICES AMONG CATALOGUERS IN FEDERAL AND STATE UNIVERSITY LIBRARIES**

**BY**

**Okonkwo, Lucy Ndidiamaka**

Department of Library and Information Science  
National Open University of Nigeria

[ndynebe@yahoo.com](mailto:ndynebe@yahoo.com)

**&**

**Obiora Cyril Nwosu**

Department of Library and Information Science  
Nnamdi Azikiwe University Awka, Nigeria

## **Abstract**

This study investigated manual cataloguing and classification skill acquisition and practices among cataloguers in Federal and State University libraries in South – East, Nigeria. The researcher employed the descriptive survey research design. The population of the study comprised 201 professional cataloguers and librarians in the university libraries in South- East. The entire population was used for the study. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. Two instruments titled: “Librarians Cataloguing and Classification practices (LCCPQ) and “Test of Cataloguing and Classification Skills of Cataloguers (TCCSC) were used for data collection. The instruments were validated by three experts from Nnamdi Azikiwe University, Awka. The reliability index of 0.70 and 0.81 were obtained for two parts of the LCCPQ while 0.71, 0.73 and 0.86 were obtained for TCCSC using Cronbach Alpha and K-R 21 Method. Mean was used to answer the research questions while t-test was used to test the hypotheses at 0.05 level of significance. The findings of the research were based on the research questions. The findings on research question one (1) shows that

manual cataloguing skills acquisition scores of cataloguers in federal university libraries are slightly more than those in the state university libraries. The findings on research question two (2) were in favour of cataloguers from state university libraries which indicated that cataloguers from state university libraries have higher or slightly more manual cataloguing and classification practices than federal university libraries. However, in the test of null hypothesis, the mean rating of the two groups (federal and state university libraries) among cataloguers shows that their manual cataloguing and classification skills acquisition and practices did not differ significantly. In conclusion, cataloguers in federal university libraries acquire manual cataloguing and classification skills more when compared to those cataloguers in state- owned university libraries while those in state university libraries practiced more of manual cataloguing than federal university libraries. It is therefore, imperative that accessibility to information resources in these libraries would also vary. Thus, there is still need for both institutions to be upgraded . Based on the findings, it was recommended that cataloguers in federal and state university libraries should be trained in order to improve their manual cataloguing and classification skill acquisition and practices.

**Key Words:** Manual Cataloguing and Classification, University Libraries, Skill, Practices, Cataloguers

## **Introduction**

Libraries are indispensable and vital subset of any institution of learning or organization. They are also the center point around which other academic activities revolve. Acknowledging the central role of libraries, Aguolu (cited in Salifu, 2014) stated that one cannot expect an excellent academic programme in any educational institution without the support of well-equipped libraries. Having school library, special library, university/academic library, public library, private library, research library among others as types of libraries, the paper focus more on University

libraries. The university as an institution is generally regarded as a custodian of knowledge where students from different disciplines acquire knowledge and skills for self-development. Any library attached to University is called University library.

The university library supports the academic programmes of the university by providing relevant information so as to respond to the increasing information demand of the users which comprises the students and the academic of the university. The University libraries are libraries established to cater for the academic and research needs of the university. The target goals of any University are teaching, learning, and community service. In support, Aina (2004) opines that the objectives of universities, involves learning, teaching, research and services.

University libraries serve the reading and research interests of undergraduates, postgraduates, lecturers, researchers, and other users. They are big repositories of information and knowledge from all fields of learning to the academic community of students and staff that they serve. According to Aguolu and Aguolu (2002), the university library is the university's principal instrument in the conservation of knowledge through its rational, systematic and comprehensive acquisition of all types of human communication records, published and unpublished, written or oral, in recorded form that embody the ideas of knowledge of the past. The university library relates to the society as the memory does to an individual by making available and accessible to its users, information resources needed for teaching and students' independent study. The great role of academic library was made clear by Oyesiku and Oduwale, (2004) when they declared that any academic institution without library is tantamount to a person without a brain. University library is usually established,

administered and funded by the university to meet the information research, and curriculum needs of its students, faculty and staff.

The accomplishment of the above University goals can only be possible through a functional library with relevant materials and information resources like books and ebooks, academic journals, magazines, newspapers, conference papers, Proceedings and databases, among others which are all organized to meet the needs of users in achieving the objectives of the university. Organization of library materials and information resources stood out as the most important among other roles of the library because it facilitates easy accessibility to users. This is because continuous acquisition of these resources without organization makes them inaccessible to users, no matter how relevant these resources are. In addition, without proper organization, dissemination of these resources will also be difficult (Chollom & Daniel, 2003). Therefore, it became imperative that all library resources must be organized. More so, cataloguers play a great role by organizing these resources orderly for easy retrieval for the users. Indeed, Nwalo (2003) states that a building filled with books is not necessarily a library unless those books have been catalogued, organized and made available for use. Cataloguing and classification is a professional term used for addressing processed materials.

The cataloguing and classification must follow a standardized rule. The reason library collections are catalogued using the standardized rules and practices are to enable users retrieve information in an effective manner, quickly, efficiently, and ultimately to maximize the usage of the collection anywhere in the world. The process of standardized cataloguing and classification results in the creation of a library catalogue. Catalogue help to

provide the location point of each document in the collection. Catalogue can also be referred as a surrogate to the actual information resources in a library. In addition, catalogue is more or less an access tool or list or retrieval tool which constitutes a record of the entire document through the access points, such as, author, title, subject and so on (Aina, 2015). This means that information resources are useless when inaccessible and the collection of library resources equally useless without the catalogue (Ola, 2007; Orbih & Aina, 2014).

Cataloguing and classification are interrelated library processes that serve the same purpose of creating easy access to information resources in a library. Cataloguing is a forerunner of classification and none goes in isolation and are the foundation on which all other services or activities of a library are built. Cataloguing is a Physical bibliographic description of materials and resources that constitutes a record of the entire document through the access points, such as, author, title, subject and so on, while classification is the grouping of library information resources according to their classes and subject they treat which involves the assignment of subject headings according to the subject treatment of the books. Cataloguing and classification are carried out by professional librarians called cataloguers. Cataloguers are librarians that are professionally trained to carry out the cataloguing and classification practices. Cataloguers are specially trained to obtain skills for the intellectual analysis of information materials before it could be identified, processed, organized and retrieved by users. Skill refers to as the knowledge and experience needed to perform a specific task or job, or capabilities of an individual, definable by content, to be acquired and activated through related professional training (The Council of European Professional Informatics Societies (CEPIS), 2005). Skills, knowledge and competencies of cataloguers are of great value in

organizing and storing of information for use in the library. It is also beneficial to library users, the university and the society that cataloguers should adopt appropriate cataloguing practices. Practice is a repetitive type of behavior which consists of several elements connected to one another having forms of mental activities with a background knowledge in the form of understanding know-how and motivational knowledge.

Cataloguing and classification practices form the basis of organizing knowledge and information resources in the library. The major task of any librarian is to see that maximum use are been made of the library resources. Cultivating a good cataloguing and classification practices in libraries effectively aid the library in providing better services to users. Although cataloguing and classification practices are of two types – Manual cataloguing and classification skill acquisitions and practices and Electronics cataloguing and classification skill acquisitions and practices but this study focuses on manual cataloguing and classification skill acquisition and practices. In actual sense, without skills, knowledge and competence, manual cataloguing and classification practices could not be possible. The cataloguers must be skilled enough to perform bibliographic description of all kinds of resources of both local and international publications with the use of appropriate manual bibliographic tools, such as subject heading list, and among others. Cataloguing and classification practices form the basis of organizing knowledge and information resources in the library. It involves all services such as processing, arranging, describing and housing records in order to make them accessible. Manual cataloguing and classification practices is referred to as an original cataloguing which means creating a fresh bibliographic record without reference to other bibliographic records for the same item or different editions of the item. Manual cataloguing involves examining

certain parts of material or resources to obtain information needed to describe it.

The kind of manual cataloguing and classification skills acquisition and practices among cataloguers in the Federal and state University libraries differ and also determines the kind and the level of access the users can have to the library resources and because manual cataloguing and classification skills acquisition and practices vary in different libraries, a comparison of the cataloguing and classification practices on the different libraries becomes worthwhile.

A comparative research according to the Wikipedia (2020) is a research methodology that aims to make comparison across different groups. It is the act of comparing two or more things with a view to discovering something about one or all of the things being compared.

More so, the extent to which appropriate cataloguing and classification practices are adopted depends on the level of skills acquired by the cataloguers. Likewise, the extent to which the right practices are utilized by the cataloguers in manual cataloguing and classification skill acquisition and practices determines to a large extent, the extent to which the library materials and resources are accessed. Considering these, there is every possibility that comparing the manual cataloguing and classification acquisition skills and manual cataloguing and classification acquisition practices acquired by the cataloguers in the Federal and state university libraries will tell a lot about the state of manual cataloguing and classification and subsequent access to the library resources. Therefore, the main purpose of this study was to compare the manual cataloguing and classification skill acquisition and manual cataloguing and classification practices of cataloguers in federal and state university libraries.



### **Statement of the Problem**

Cataloguing and classification practices are the core course of professional librarians in university libraries. Cataloguers in federal and state libraries are expected to adopt appropriate cataloguing and classification practices if users are to gain access to the library resources. Manual cataloguing as one aspect of cataloguing and classification practices involves the physical description of library materials and resources from a scratch without the use of preexisting catalogue record or copy from already prepared database. In university libraries, it is expected that every librarian must acquire the skill involved in cataloguing and classification practices. However, it appears that the knowledge and skills intellectual access and information organization for cataloguers requires that one should know how to use the cataloguing tools, rules and other resources completely for efficiency effective delivery of materials and information to the users. Furthermore, Orbih and Aina (2014) revealed that the major challenges facing cataloguers in academic libraries could be the inability to use cataloguing tools and inability to apply the cataloguing and classification rules. Subsequently, a comparison of the skills acquired by the cataloguers and the practices adopted by the cataloguers in federal and state University libraries might raise some issues that will help in improving the practices in required areas. This study is therefore set to fill this gap.

### **Purpose of the study:**

This study compared the manual cataloguing and classification skill acquisition and practices among cataloguers in federal and state university libraries in the South East Nigeria. Specifically, the study sought to:

1. Compare the manual cataloguing and classification skills acquisition mean scores of cataloguers in federal and state university libraries in South-East, Nigeria.



2. Compare the manual cataloguing and classification practices of cataloguers in federal and state university libraries in South-East, Nigeria.

### **Research Questions:**

The study was guided by the following research questions:

1. What are the manual cataloguing and classification skills acquisition mean scores of cataloguers in federal University libraries as compared to those in state university libraries in South-East Nigeria?
2. What are the manual cataloguing and classification practices of cataloguers in federal university libraries as compared to those in state university libraries in South-East Nigeria?

### **Null Hypotheses**

The following two null hypotheses were formulated and tested at .05 alpha levels:

**Ho1:** There is no significant difference between manual cataloguing and classification skill acquisition mean scores of cataloguers in federal and state university libraries as compared to those in state university libraries in south-east

**Ho2:** There is no significant difference between manual cataloguing and classification practices of cataloguers in federal university libraries as compared to those in state university libraries in south-east?

### **Methods**

This study employed a survey research design. Nworgu (2015) defined survey research design as one in which a group of items or people are studied by collecting and analyzing data from only a few people or items

considered to be representative of the entire group. This design was considered appropriate for the present study which seeks the opinion of professional cataloguers and librarians to ascertain if difference exists in the cataloguing and classification, skill acquisition and practices in federal and state university libraries. The population of the study was 201 comprising all professional cataloguers and librarians in federal and state libraries in south-east Nigeria. The entire population of 201 was studied. Hence there was no sampling. Patten (2005) recommended that when the population of a study is small, it is adequate to conduct a census by studying every member. Two instruments which include structured questionnaire and a cognitive test were used for data collection for this study. The face validity of the instruments was ascertained by three experts. The reliability of the instrument was established using Cronbach Alpha Method for research question. The coefficients of the internal consistency of the items were 0.70 and 0.81 respectively. The reliability for the cognitive ability test was tested with KR-21formular (Kuder-Richardson). The reliability coefficients were 0.71, 0.73 0.86. Mean was used to answer the research questions while t-test was used to test the hypotheses at 0.05 level of significance. For the hypotheses, the null hypothesis was rejected if the calculated p-value associated with the calculated t was less than the stipulated level of significance 0.05, whereas the null hypothesis was not rejected if the calculated p-value associated with the calculated t was greater than the stipulated level of significance 0.05. All analysis was done using the Statistical Package for Social Sciences (SPSS).

### **Analysis and Results**

**Research Question 1:** What are the manual cataloguing and classification skills acquisition scores of cataloguers in federal and state university libraries as compared to those in state university libraries in south-east?

**Table 1:** Mean Score on the Manual Cataloguing Skills Acquisition Score among Cataloguers in Federal as compared to State University Libraries in South-East

	Federal (N=144)			State (N=57)		
	Mean	SD	Remark	Mean	SD	Remark
Manual cataloguing and classification skills acquisition score	68.92	14.84	Moderate	64.69	18.47	Moderate

The analysis in Table 1 shows that the manual cataloguing skills acquisitions mean scores of cataloguers in federal university libraries is 68.92 while that of those in the state libraries is 64.69. There was no big difference in the mean scores of library staff in both University types. However, cataloguers from federal university libraries have slightly more manual cataloguing skills acquisition mean score of 4.23 compared to cataloguers from state libraries. The interpretation of standard deviation (SD) in research question one (1) indicated that the standard deviation scores for the two groups are 14.84 and 18.47 respectively showed that the items for federal university libraries are lower and more homogeneous in nature with SD differences of 3.63 compared to the state university libraries that is higher and more heterogeneous in nature. This simply means that the SD scores for the two groups showed that the items are heterogeneous in nature.

**Research Question 2:** What are the manual cataloguing and classification practices of cataloguers in federal as compared to those in state university libraries in South-East.

**Table 2:** Mean Ratings on the Manual Cataloguing and Classification Practices among Cataloguers in Federal as compared to State University Libraries in South-East

	Mean	SD	Remark	Mean	SD	Remark
1. Describe the bibliographic details of the books on cataloguing slips manually	4.60	.81	Agree	4.56	1.04	Agree
2. Manually crosscheck the existing author/title and subject cards before cataloguing	4.30	.96	Agree	4.37	1.13	Agree
3. Give a unique number known as call numbers for proper identification and access point	4.69	.67	Agree	4.79	.62	Agree
4. Classify library materials with Dewey decimal classification Scheme (DDC)	2.49	1.71	Disagree	2.25	1.72	Disagree
5. Enter information about a book or other library materials into the library catalogue for easy retrieval for users	4.44	1.02	Agree	4.74	.74	Agree
6. Use Subject Headings Manual for subject cataloguing	4.50	.83	Agree	4.63	.86	Agree
7. Use LC Cutter table for the authors	4.39	1.03	Agree	4.74	.70	Agree
8. Provide access entries for author, title and subject	4.53	.77	Agree	4.82	.60	Agree
9. Manually use only Anglo American cataloguing rules AACR	4.20	1.07	Agree	4.39	1.13	Agree
10. Cross-check catalogued materials with the library catalogue holdings to avoid duplication	4.36	.79	Agree	4.42	.91	Agree

Table 2 indicates that cataloguers in both federal and state university libraries agree or are alike on the nine items of cataloguing and classification practices in the table above namely:- describing the

bibliographic details of the books on cataloguing slips manually; manually crosscheck the existing author/title and subject cards before cataloguing; giving a unique number known as call numbers for proper identification and access point; entering information about a book or other library materials into the library catalogue for easy retrieval for users; using Subject Headings Manual for subject cataloguing; using LC Cutter table for the authors; proving access entries for author, title and subject; manually use only Anglo American cataloguing rules AACR; and cross-check catalogued materials with the library catalogue holdings to avoid duplication. On the other hand, cataloguers in federal and state university libraries also are alike in disagreeing on one item, 'Classifying library materials Dewey Decimal Classification Scheme (DDC)' as one of the manual cataloguing and classification practices.

In the interpretation of data, the mean for the nine items ranged from 4.20 to 4.69 for cataloguers in federal university libraries and from 4.37 to 4.82 for those in state university libraries. The mean for the item four (4) has 2.49 and 2.25 respectively. This shows that there was no big difference in the mean scores of library staff in both University types. However, mean differences of 0.07, 0.1, 0.3, 0.13, 0.35, 0.29, 0.19 and 0.06 for items 2, 3, 4, 5, 6, 7, 8, 9 and 10 in favour of cataloguers in state libraries shows that they are slightly more disposed to manual practices compared to cataloguers in federal university libraries.

The interpretation of standard deviation (SD) in research question two (2) indicated that the standard deviation scores for the two groups, federal and state university libraries are 0.97 and 0.95 respectively. This showed that the items for federal university libraries are higher and more heterogeneous in nature with SD differences of 0.02 compared to the state university libraries that are more homogeneous in nature. This simply means that the

SD scores for the two groups' federal and state university libraries is an indication that the items on manual cataloguing and classification practices among cataloguers are homogeneous in nature spread across towards the mean.

**Hypothesis 1:** There is no significant difference between manual cataloguing and classification skill acquisition scores of cataloguers in federal and state university libraries in south-east.

**Table 3:** T-Test of difference between Manual Cataloguing and Classification Skill Acquisition Scores among Cataloguers in Federal as compared to State University Libraries in South-East.

Source of variation	N	Mean SD	df	t-cal	P-value	Decision
Federal	144	68.92 14.84	199	1.69	.09	Not-Sig
State	57	64.69 18.47				

The results in table 3 shows that the mean score for Federal University libraries in South-east ( $M=68.92$ ,  $SD=14.84$ ) was not significantly greater than that of the state ( $M=64.69$ ,  $SD=18.47$ );  $t(199) 1.69$ ,  $p=.09$ . The null hypothesis of no significant difference between the two groups on their manual cataloguing and classification skill acquisition scores was therefore accepted.

**Hypothesis 2:** There is no significant difference between manual cataloguing and classification practices of cataloguers in federal and state university libraries in south-east.

**Table 4:** T-Test of difference between Manual Cataloguing and Classification Practices among Cataloguers in Federal and State University Libraries in South-East

Source of variation	N	Mean SD	df	t-cal	P-value	Decision
Federal	144	4.25 .59	199	-1.34	.18	Not-Sig
State	57	4.37 .50				

The results in table 4 shows that the mean score for Federal University libraries in South-East ( $M=4.25$ ,  $SD=.59$ ) was not significantly less than that of the state ( $M=4.37$ ,  $SD=.50$ );  $t(199) -1.34$ ,  $p=.18$ . The null hypothesis is of no significant difference between the two groups on their manual cataloguing and classification practices was therefore accepted.

### Discussion of Results:

The findings on research question one (1) shows that manual cataloguing skills acquisition scores of cataloguers in federal university libraries are slightly more than those in the state university libraries. The finding of this study is consistent with the results obtained from previous conducted studies. For instance, Arinola, Adigun, Oladeji, and Adekunjo (2012), in their study found that librarians have a moderate level of skills in cataloguing. In line with this, Cabanero (2013) found that cataloguing and classification skills of library and information science practitioners is average. However, cataloguers from federal university libraries have slightly more manual cataloguing skills acquisition mean score of 4.23 and standard deviation (SD) differences of 3.63. The SD scores for the two groups showed that the items are heterogeneous in nature.

The finding on research question two (2) indicates that cataloguers in



federal and state university libraries are alike and agree to nine of the 10 items in the table as the manual cataloguing and classification practices which are: describing the bibliographic details of the books on cataloguing slips manually, manually crosscheck the existing author/title and subject cards before cataloguing, give a unique number known as call numbers for proper identification and access point, enter information about a book or other library materials into the library catalogue for easy retrieval for users, use subject headings manual for subject cataloguing, use LC Cutter table for the authors, Provide access entries for author, title and subject, manually use only Anglo American cataloguing rules AACR and cross-check catalogued materials with the library catalogue holdings to avoid duplication. The finding of this study is consistent with that of Salifu (2014) and Oketunji (2009). These researchers found that librarians use shelf organization, table and conventional catalogue as method of organizing resources. However, mean differences of 0.07, 0.1, 0.3, 0.13, 0.35, 0.29, 0.19 and 0.06 for items 2, 3, 5, 6, 8, 9 and 10 in favour of cataloguers in state libraries shows that they are slightly more disposed to manual practices compared to cataloguers in federal university libraries. SD differences of 0.02 compared to the state university libraries that are more homogeneous in nature. This simply means that the SD scores for the two groups' federal and state university libraries is an indication that the items on manual cataloguing and classification practices among cataloguers are homogeneous in nature spread across towards the mean.

### **Implications of the study**

The findings of the study have far reaching implications since findings showed that the cataloguers in the federal university libraries acquired manual cataloguing and classification skills slightly more than their counterparts in state university libraries; there is need for the state

university library management to make necessary provisions for their cataloguers to measure up in this regard. Not doing the needful here would result in disparities on the extent of access to information resources in these libraries.

In comparing the manual cataloguing and classification practices of cataloguers in federal and state university libraries, the findings revealed that cataloguers in both federal and state university libraries are alike. They carry out almost the same practices. Although standard deviations of state university libraries are slightly higher compare to the federal university. There is great need that the management in the federal university libraries should measure up to meet up with the standard of state university libraries in the processing of library materials and resources to avoid backlog.

## **Conclusion**

Cataloguing and classification are both very essential procedures in the processing and organization of information materials in the library for easy access and location by the users. In this study, it has been revealed that there are variations in a number of core issues pertaining to cataloguing and classification skills and practices of cataloguers in federal university libraries and those in the state university libraries. Cataloguers in federal university libraries acquire manual cataloguing and classification skills more when compared to those cataloguers in state- owned university libraries. Also a comparison of manual cataloguing and classification practices are carried out by cataloguers in state university libraries more than cataloguers in federal university libraries. It is therefore, imperative that accessibility to information resources in these libraries would also vary.

## Recommendations

Based on the findings of the study, the following recommendations were made:

1. Cataloguers in federal and state university libraries should be trained in order to improve their manual cataloguing and classification skills. This will help them to constantly display high level in manual cataloguing and classification skills while carrying out their daily routine.
2. Cataloguers in federal and state universities should be conversant with rules guiding the manual cataloguing and classification practices which will enable them avoid unnecessary errors and help improve their efficiency.

## REFERENCES

- Adebayo, O. (2013). Challenges associated with cataloguing electronic resources in selected university libraries in Southwest Nigeria. *Chinese Librarianship: an International Electronic Journal*, Pp. 35-40
- Adedibu, L. O., Akinboro, E.O. & Abdussalam, T. A. B. (2012). *Cataloguing and classification of library resources in the 21<sup>st</sup> century*. IGI Global, Pp. 313-314.
- Adeleke, A. A. & Asaolu, A. (2015). Evolving a union catalogue for Nigerian libraries. *The Nigerian cataloguer*, 2(1), 1-12.
- Adeleke, A. A. & Olarunsola, R. (2010). *ICT and library operations: more on the online cataloguing and classification tools and techniques in Nigerian libraries*. Retrieved from : <http://www.emeraldinsight.com/journals.htm?>.

- Ahonsi, A. (2014). *Resource Description and Access (RDA) handbook for facilitating the understanding of RDA rules by librarians and cataloguers in English-speaking countries in sub-Saharan Africa*. University of Illinois, Urban- Champaign.
- Aina, L. O. (2004). *Library and Information Science text for Africa*. Ibadan: Third world Information Service, Pp. 367-375.
- Aina, L.O. (2012). *Mentoring in cataloguing: Bridging the gap between the young and adult*. Paper Presented at the 32nd Annual Seminar/ Workshop Organized by Nigerian Library Association, Cataloguing, Classification and Indexing Section, Pp. 88-93.
- Aina I. O. (2015). Mentoring cataloguing: Bridging the Gap between the Young and the Adult. *The Nigerian Cataloguer*, 2(1), 80-88.
- Akintunde, S. A. (2011). *Metadata for web resources: How metadata works on the web*. A Paper presented at the cataloguing, classification and indexing section of Nigerian Library Association, Pp. 65-75.
- Atimo, M. I. (201). *New directions in cataloguing and metadata management*. Nigeria Library Association (NLA).31<sup>st</sup> annual cataloguing, classification and indexing seminar/workshop. Pp 124-135.
- Bello, M.A. Manson, Y. (2010). *Cataloguer mentoring: a survey of cataloguers' perception in mentoring for skills development in academic libraries*. Asia-Pacific Conference: Library & Information Education & Practice, 5(2), 12-25
- Bello, M. & Mansur, Y. (2011). *Cataloguer mentoring: a survey of academic libraries*. Asia Pacific Conference on Library and Information education  
& practice 2011. (A-LIEP2011): issues, Challenges and Opportunities. <http://eprints.ptar.unitm.edu.y/3125>

- Bello, M. A. and Thompson, E. S. (2003). Recruiting the cataloguers for tomorrow: The need for succession planning in Ghanaian academic libraries. *Library Management*, 24 (6-7).
- Bolt, N. M. (2000). *Serving state government: Librarian skills, user education, services and support*. Available <: <http://www.La-hq.org.uk/groups/glg/ifla/papers.html>.
- Cabonero, D. A. & Dolendo, R. B. (2013). *Cataloging and classification skills of library and information science practitioners in their workplaces: A case analysis Library Philosophy and Practice (e-journal)*. Retrieved from <http://digitalcommons.unl.edu/libphilprac/960>
- Chao, S. J. (2016). *Resource description and access: International, teaching and learning*. CUNY Academia, 7(2), 210-215.
- Chen (2009). E-journal cataloging in an age of alternatives: A survey of academic libraries. *The Serials Librarian*, 57(1), 96–110.
- Chollom, K. M. & Daniel, A. (2013). Importance of cataloguing and classification in libraries. *International journal of Research in Multi-Disciplinary studies*, 1 (1), 11-15.
- Chukwuma, O. (2004). *Use of library for knowledge and research*. Sound and sense. Pp. 100-119.
- Cloete, L. M. (2003). Training cataloguing students using a mix of media and technologies. *Aslib Proceedings*, 55(4), 223-233.
- Emerald (2012). *Access library and information science trends and research in Europe*. Edited by A. Spink and J. Heinstrom. Pp. 5(2), 112-124.
- Eze, J.U. (2012) *Cataloguing in the era of ICT: What's happening in public libraries of South East Nigeria*. Library Philosophy and Practice. 7(2), Pp 17-31.

- Eze, J.U. (2013). Re-equipping the Nigerian public library system and services for the 21<sup>st</sup>. Academic journals. *International journal of library and information science*, 5 (10), 30-305.
- Folashade, Y.K. (2014). Altitude of library and information Science students in industrial Training towards cataloguing and classification study of Lagos State Polytechnic. *Intellectual Journal of Management Sciences and Humanities*, Pp. 2 (1), 29-43.
- Gaur, Kavita (2013). Knowledge Organization: classification and cataloguing theory, Lovely Professional University, Phagwara; New delhi Pp. 6(4), 310-327.
- Hall-Ellis, S. D. (2008). Cataloguing competencies...what do employers require? *Cataloguing & Classification Quarterly*, 46(3), 305-330.
- Hill, J. S. (2002). *Education for cataloging and the organization of information: pitfalls and the pendulum*. Binghamton, N.Y: Harworth, Pp. 330-350
- Hundie, K. (2003). Library operations and internet resources. *The Electronic Library*, 21(6), 555- 564.
- Imo, N.T. & Igbo, U.H. (2009). *Providing access to knowledge in Africa: the need for capacity building in classification, indexing & abstracting skills*. Paper presented at the First International Conference on African Digital Libraries and Archives (ICADLA-1), Addis Ababa, Ethiopia, 8(7) 99-120.
- Iwuji, H.O.M. (2005). *Creating standards in technical processing*. Paper published in the proceedings of selected papers of the cataloguing, classification and indexing section of the Nigerian Library Association, Nigeria. Pp. 23-35
- Kim, K. (2003). Recent work in cataloguing and classification, 2000-2002. *Library Resources & Technical Services*, 47(3), 96-108.
- Kumar, G. T.; & Kumar, B. T. (2008). *Use of electronic information sources*

*by the academic community: A comparative study.* 6th International CALIBER-2008 (University of Allahabad, 5(10), 20-205.

Manaf, Z. A.; Nadzar, F.M.; &Ibrarrahim, I. (2015).*Assessing the cataloguing practices in libraries of private colleges Lahiri.* Library: A Store House of Knowledge Concept Research foundation, 50(5), 113-333.

Lor, P. (2011). Store house of knowledge.The role of libraries in preserving and promoting indigenous knowledge. *African Journals Online*, 3(1), 95-115.

Mason, M.K. (2004). *Automation: Has it de-professionalized the work if cataloguing librarians?* Available at <http://www.moyak.com/papers/automation-cataloguing>.

Mavume, P. (2013).*The new roles and skills of cataloguers in managing knowledge in an academic library, with special reference to Walter Sisulu University Libraries, Eastern Cape, South Africa.* Conference: Chartered Institute of Library and Information Professionals (CILIP), Umbrella Conference 2013. Manchester University, United Kingdom. 1(2), 40-55

Miksa, S.D. (2004). *A survey of the extent and utilization of cataloging tools and resources within technical services in the North Texas Public Libraries.* Retrieved from [http://courses.unt.edu/smiksa/documents/Miksa\\_proposal\\_CTRNT](http://courses.unt.edu/smiksa/documents/Miksa_proposal_CTRNT). Pdf 20(7)97-106.

Mosuro, T. (2000).*Potential impact of new information technologies on libraries and the library user: Library automation for the information age.* Edited by Ajibola, B. and Tiamiyu, N.Ibadan, centre for leveraging information technologies on libraries and the library user. 22(7) 445-464.

Nkamnebe, E.C.; Okeke, I. E.; Udem, O.K.;& NKamnebe, C. B. (2015).Technology extent of information and communication technology skills possessed by librarians in university: Libraries in



Anambra state, Nigeria. *Information and knowledge management*, 5(9), 2-12.

- Nwalo, K. I. N. (2003). *Subject cataloguing and computerization: Current trends*. In J. Lasisi, O. K. Odusanya, S. E. A. Sonaike, E. O. Okegbola, F. Balogun, & L. F. Osinulu(Eds.), *Proceedings of selected papers of the cataloguing, classification and indexing section of NLA*. Nigeria: NLA Cataloguing, Classification and Indexing Section. 5(7), 28-36.
- Nwalo, K.I.N. (2005). *The cataloger in the knowledge age: A search for relevance*. A Paper Published in the Proceedings of Selected Seminar Papers of the Cataloguing, Classification and Indexing Section of the Nigerian Library Association, Nigeria. 2(5), 22-40.
- Nwalo, K.I.N. (2006). *Subject cataloguing and classification: Current trends*. A paper published in the Proceedings of Selected Seminar Papers of the Cataloguing, Classification and Indexing Section of the Nigerian Library Association, Nigeria. 6(5), 12-35
- Nwalo, K. I. N. (2005). *The 21<sup>st</sup> century cataloguer: Challenges education and training in Nigeria*. In proceedings of selected seminar paper of the cataloguing, classification and indexing section of the Nigerian Library Association 1995-2000. J. Lasisi; O.K. Odusanya; S.E.A. Sonaike; E. O. Okegbola; F. O. Balagun; L. F. Osinulu; and J.O. Akidi eds., Lagos: NLA/CLI. 7(2), 28-45.
- Nwalo, K. I. N. (2011). *New mode of universal access: Challenge to Nigerian cataloguers*. A paper presented at the 31st Annual Cataloguing, Classification and Indexing Seminar/Workshop of the Cataloguing, Classification and Indexing Section of the Nigerian Library Association Badagry. 10(5), 55-75.
- Nwalo, K.I.N. (2013). New mode of universal access: Challenge to Nigerian Cataloguers. *The Nigerian Cataloguer*, 1(1), 89 – 100.
- Nwosu, O. C. (2012). *Principles of cataloguing and classification with AACR2, MARC21, and classification schemes*. (With a brief note on

- RDA).Enugu, Sound and Since. Pp. 1-45
- Obiora, C. (2004). *Use of library for knowledge and research*. Enugu: Agbani road, Nigeria. Pp. 1-23
- Okoro, O. (2004). *Cataloguing and classification of library materials*. A lightening Owen: global press, Pp 284-456.
- Oketunji, S. F.; &Iyoro, A. O. (2009).*Effective workflow for cataloguing and handling problem materials in cataloguing departments*. A Paper presented at the Cataloguing, Classification and Indexing Section of Nigerian Library Association. 1(3), 80–91.
- Ola, O. (2001).*Basic cataloguing and classification principles*. In Ola, C. O. (ed), practical approaches to cataloguing and classification of information resources in libraries. Ibadan: End-Time. Pp. 50-85
- Oladapo, S.T.A. (2006). *The challenges of Information and Communication Technologies (ICT) to cataloguing and bibliographic services*. In Ikpahindi, resource sharing in cataloguing, bibliographic, and indexing services in an Information and Communication Technology (ICT) age. Paper presented at the 26th Annual Cataloguing, Classification and Indexing Seminar/ Workshop, Abeokuta. 1(1), 1-120.
- Oniyide, D.B., Olaojo P.O. &Aramide, K.A. (2009).*Approach to organizing library media centers and other libraries*. Ibadan. Pp. 25-70.
- Orbih, D.E. &Aina, A.J. (2014). Benefits and challenges of original cataloguing versus copy cataloguing: The Experience at the Lagos State University. *International Journal of Library and Information Science*, 16 (5), 88-97.
- Rao, K.N. &Babu, K.H. (2001).Role of librarian in Internet and World Wide Web Environment. *Information Science*, 4 (1), 1-53.
- Reitz, J. M. (2003). *Online dictionary for library and information science*. Connecticut: Libraries Unlimited. Pp 435-495.

- Sales, M.H. (2005). Cataloguing and Classification. Retrieved from <http://circle.adventist.org/files/jae200467021804.pdf> on 22/11/12/1014.
- Salamu, I.O. (2013). *Management of educational resource center*. Course material for NOUN. Pp. 1-127
- Sharma, A. K. (2007). *Library Classification*. Atlantic Publishers & Dist. Pp. 674-750
- Sharma, D. B. (2007). *Library automation software packages used in academic libraries of Nepal: A comparative study*. National Institute of Science Communication and Information Resources, CsirSatsangVihar Marg, New Delhi. Pp. 335-493
- Swain, N. K. (2000). *Introduction to cataloguing theory*. Bangalore: Chandos publishing. Pp. 342-495
- Taylor, A. G. (2006). *Introduction to cataloguing and classification*. 10th ed. London: Libraries Unlimited. Pp. 589-650.
- Ugwunwa, C.E. (2013). Current trends in cataloguing and the challenges of a cataloguer in the digital age. *Journal of Information and Knowledge Management*, 4 (2).12-39.
- Wynar, B. S. (1992). *Introduction to cataloguing and classification*. London: libraries Unlimited, Pp. 633-793.
- Yusuf, F. & Nkiko, C.(2010). Involvement of non-professionals in cataloguing: a survey of practices in three academic libraries in Nigeria. *Malaysian Journal of Library & Information Science*, 15 (1), 83-90
- Zaid, Y.A. (2008). *Cataloguing and classification of library materials: The internet as a tool*. A paper presented at the Cataloguing, Classification and Indexing Section of NLA. 2(1), 39-45.