Issues in Acquisition and Application of Conventional and Online Complementary Cataloguing Competencies in Nigerian University Libraries

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Issues in Acquisition and Application of Conventional and Online Complementary Cataloguing Competencies in Nigerian University Libraries

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Abstract

The study investigated issues in acquisition and application of conventional and online complementary cataloguing competencies in Nigerian university libraries with a view to proffering appropriate solution. Five research questions guided the work. The study adopted a descriptive survey research design. The population of the study comprised 168 librarians drawn from six university libraries. The universities used for the study were: University of Ife, University of Ibadan, University of Benin, University of Lagos, University of Port Harcourt and University of Nigeria. The instrument used for data collection was a questionnaire (CAACOCCQ). The instrument was face validated by three professional experts. The Cronbach's Alpha reliability test procedure was used to determine the degree of internal consistency of the questionnaire items. The result of the trial test showed that the overall internal consistency of the questionnaire was 0.93. On the overall, 98.8 percent of the distributed copies of the questionnaire were correctly filled and returned and were used for discussions while 1.2% of the questionnaire was not returned and data obtained in the work were presented in tables and analyzed using percentages, means and Standard deviations. Findings of the study indicated that some of the issues in acquisition and application of conventional and online complementary cataloguing amongst cataloguers in Nigerian university libraries include inappropriate cataloguing tools, poor information communication technology skills, and poor interest in conventional cataloguing. To address these issues, libraries should make it easy for cataloguers to acquire cataloguing competencies, eliminate the problem of diversification amongst cataloguers and provide relevant cataloguing tools to encourage cataloguers to practice complementary cataloguing in the university libraries.

Keywords: Complementary, Acquisition, Application, Online Cataloguing, Conventional Cataloguing, University Libraries
Introduction

University libraries are academic libraries set up basically to satisfy the teaching, learning and research needs of their student population, staff and visitors with information resources. They are a hub of knowledge and information services in their institutions and are usually established along with their mother institutions as an integral part (Abubakar, 2011; Mirza and Mahmood, 2009). According to Mole (2010), university libraries are central to the universities’ objective of promoting research and scholarship. As a result, they are always struggling to acquire and catalogue printed and non-printed forms of materials. (Hardesty as cited in Mole, 2010).

Cataloguing is the process of describing each of the books and information materials that a library has (Ekere and Mole, 2014). They added that it is the process of describing an item of a collection with a view to determining its bibliographical attributes. Adeyemi (2002) defined cataloguing as the correct and accurate description of the physical properties of a document, whether it is print, non print, audio-visual or both.

There are basically two cataloguing practices or modes: conventional and online. Conventional cataloguing is the traditional method of cataloguing documents. It refers to the descriptive and subject processing of information materials. It requires the mastery of a set of rules such as the AACR2 or other cataloguing rules and the use of cataloguing tools to catalogue information materials while online cataloguing deals with searching and locating cataloguing data through online cataloguing databases, which give the cataloguer access to an unlimited number of bibliographic data online (Ruteyan, 2007). In terms of competency, conventional cataloguing may require competencies in descriptive cataloguing, subject cataloguing, critical and analytical thinking, and evaluation of information while online cataloguing requires data mining competencies, computer and web navigation competencies, combined with system
appreciation competencies. The advent of online cataloguing has resulted in casting the traditional library operations in new methods of work; for conventional cataloguing, it is searching the literature and asking critical questions, for online cataloguing it is data mining. Online cataloguing makes the task of finding metadata easy.

The task of cataloguing is usually done by librarians trained as cataloguers. Cataloguers in university libraries are academic librarians; they undertake the task of describing information materials for the catalogue in the Library. They organize library materials for easy storage and retrieval by determining the main entry, added entries, subject headings and call numbers (Ode and Omakaro, 2007). Accuracy and consistency are usually cited as the competencies a good cataloguer requires. Competency is synonymous with the term skill. It means ability to execute a given work, as a result of experience, formal training or practice. It is the ability to combine and apply acquired expertise on a particular job. This involves application of high levels of knowledge, standards and capacity to assigned work (Ofodu, 2015).

Complementary acquisition and application of conventional and online cataloguing competencies amongst cataloguers refers to the capacity of the cataloguer to obtain and utilize corresponding skills in conventional and online cataloguing for a dynamic and efficient practice of cataloguing in the library. Adeleke and Olorunsola (2006) noted that in developed countries of the world, conventional and online cataloguing complement each other. It is necessary that cataloguers in these countries have dynamic competencies in processing library materials with conventional or online cataloguing techniques complementing each other. However as Srider (2004) noted the reality is that there is a significant gap between these countries and developing nations such as Nigeria. He nonetheless stated that with the advent of electronic driven library
services, there is a decline in conventional cataloguing competencies of librarians even in advanced countries.

In Nigeria, university libraries right from their outset practice conventional cataloguing. In the recent time, online cataloguing is the preferred cataloguing method (Adeleke and Olorunsola, 2009). This is because it is faster and less tedious than conventional cataloguing in cataloguing of information materials. This may set a dangerous precedent as cataloguers may no longer strive to develop their conventional cataloguing competencies. This is very critical because conventional cataloguing plays a vital role in confirming that metadata derived from these online cataloguing databases are correct; besides, not all information materials in the library being catalogued are in these online cataloguing databases which zero down to using the conventional cataloguing method to catalogue these materials that are not found in the online cataloguing databases. Cataloguers could also switch to conventional cataloguing when there is lack of power supply (usually experienced in Nigeria) to run the computer systems used for online cataloguing in the federal university libraries.

There are eighteen (18) federal universities in Southern Nigeria. Majority of these universities have standard functional cataloguing sections practicing conventional and online cataloguing. These university libraries use the Library of Congress Classification Scheme because of the scheme’s suitability for organizing large library collections. Other tools used in cataloguing include The Library of Congress Subject Heading List, and the Cutter Sanborn Three Figure Author Table.

The six federal universities selected for this study are Obafemi Awolowo University, Ile Ife, University of Benin, Benin, University of Ibadan, Ibadan, University of Lagos, Akoka, University of Nigeria, Nsukka and University of Port Harcourt, Port Harcourt. These six
university libraries are owned and funded by the federal government of Nigeria. The six federal universities were established between 1960 and 1975. They have very large volumes of collections. These collections include monographs, periodicals, pamphlets, maps, rare books, government publications, journals, theses and dissertations (both physical and electronic), audiovisual materials covering various disciplines. Their institutional repositories are powered by D-space Institutional Repository Software. The holdings comprise thousands of physical information materials and millions of e-resources domiciled in international databases. These online resources are categorized into password, Internet protocol, and open access based databases.

These university libraries serve the teaching, learning and research needs of staff, students, and visitors of the university. They have both card catalogue and Online Public Access Catalogues (OPACs) through which users access the library holdings. The OPAC in these university libraries is powered by a library management software (LMS) known as KOHA. The university libraries have functional cataloguing sections practicing both conventional and online cataloguing. In these university libraries, cataloguers catalogue the library collections for proper storage of the information materials and easy retrieval by users. Considering the critical role played by cataloguers in cataloguing the information resources of these university libraries for storage and easy access, this study is undertaken to determine issues in acquisition and application of conventional and online complementary cataloguing competencies in Nigerian university libraries with a view to proffering appropriate solution.
Statement of the Problem

Cataloguers need to key into new techniques as well as the conventional practice of cataloguing. However, these new methods and techniques may at the same time affect either the conventional cataloguing competencies of cataloguers thereby affecting their work output. This is sad because preference of one cataloguing method over another may in the long run affect the competencies of cataloguers and their performance on the other. It is of great concern that many cataloguers in Nigerian university libraries now prefer online cataloguing to conventional cataloguing which may in the long run make them to lose critical cataloguing competencies due to dependence on online cataloguing.

Online cataloguing was actually not introduced to replace conventional cataloguing but to complement it. The researcher is worried by cataloguers’ inability to adopt online cataloguing and acquire competencies in both conventional and online cataloguing processes as the dynamics of the profession require. The researcher is also concerned that with the advent of online cataloguing, cataloguers seem to be losing focus and competency in conventional cataloguing. This has left a negative impact on the cardinal objective of the university library in particular and the university in general. There is need therefore, to determine issues in acquisition and application of conventional and online complementary cataloguing competencies in Nigerian university libraries with a view to proffering appropriate solution. It is of great concern that despite the pertinent need for a study to determine issues in acquisition and application of conventional and online complementary cataloguing competencies in Nigerian university libraries, no such study has been carried out. This justifies the need for this study.
Research Questions

The following research questions were formulated to guide the study;

1. What is the state of application of conventional and online cataloguing in university libraries in Nigeria?

2. What methods are required for acquisition and application of conventional and online complementary cataloguing competencies in the libraries?

3. What are the methods employed for acquisition and application of conventional and online complementary cataloguing competencies in Nigerian university libraries?

4. What problems affect the complementary acquisition and application of conventional and online cataloguing competencies amongst cataloguers in the libraries?

5. What measures can be employed to address the issues?

Literature Review

Cataloguing is an essential process in any library or information centre in order to provide information access to all learning resources to library patrons (SirsiDynix, 2008). Conventional cataloguing is the system of organizing information materials following the Anglo American Cataloguing Rules (AACR) (Blake, 2000). Conventional cataloguing is captured by Manitoba Education and Training (1997) as original cataloguing which refers to cataloguing an item by examining certain parts of it to obtain information needed to describe it. Manitoba Education and Training further argued that original cataloguing allows for on-site, immediate, and locally applied cataloguing.

Kao (2001) stated that conventional cataloguing processes causes certain inconveniences including time consuming, duplication of cataloguing processes, inconsistency in subject choice and class mark. Online cataloguing is referred to as the use of online cataloguing databases to
catalogue information materials. According to Kao (2003) and Chandrakar and Arora (2010), it is the process of cataloguing information materials using bibliographic data derived online.

Online cataloguing, according to Gerolimos (2009), is copy cataloguing. It is the adaptation of a pre-existing bibliographic records e.g. Online Computer Library Center (OCLC), Library of Congress (LC), Research Libraries Information Network (RLIN), or some other bibliographic database to fit the characteristics of the item in hand with little modification to reflect on the local cataloguing agreement of the library. Cataloguers can copy the bibliographic information of the work with a change in the Cutter number. The author / subject / title number of the main heading must be changed, using the Three Figure Author Cutter Sanborn Table of the library. Previously, the lack of access to current cataloguing and classification tools in developing countries was a major problem hindering conventional cataloguing (Reitz 2004). Beyond this was the inability of cataloguers to catalogue efficiently and accurately. This was due to the use of outdated tools in cataloguing. New fields of knowledge are not covered well in the outdated cataloguing tools; thereby bringing inconsistency in most of Nigerian academic library catalogues. Ogunrombi (2010) stated that online cataloguing involves a Machine-Readable Record (MARC) from other libraries in a network.

However, the arrival of the online cataloguing has actually revolutionized the accuracy, stability and up-to-datedness of catalogued materials. Librarians today can rely on computer networks to perform cataloguing and classification work (McCallum, 2004). Online cataloguing has brought a huge relief to cataloguers in the cataloguing of information resources in this new information age (Saye and Bohannam, 2000). The Importance of online cataloguing are as follows: it saves the time of the cataloguer, maintains the accuracy of the work, maintains consistency, develops cataloguers electronically, reduces duplication of efforts, bibliographic
details of catalogued resources of other libraries can be fully copied, collection of a library can be compared with other libraries collections, knowledge creation is enhanced, it increases cataloguing efficiency of cataloguers, it also improves speed and ease of accessibility of catalogued materials.

Ivey (2009) listed the following as barriers to online cataloguing: lack of funds, lack of competencies and training lack of ICT and other infrastructural facilities like steady power supply, Internet facilities and even adequate number of computers to support online cataloguing and inadequate numbers of professionals, most libraries in Nigeria do not have enough professionals to man their online cataloguing and classification. Other factors as stated by Manaf et al (2009) include poor network; lack of power supply; limited number of good computers; unqualified online cataloguers; lack of training on new development; poor incentive to the cataloguers.

Cataloguers, according to Nwosu (2015), can be said to be the first service professionals whose identity, functions, and requirements are well established, defined and understood. As stated by Ocholla (2009), cataloguers have a key body of professional knowledge and a set of professional competencies which they deploy in the performance of their professional chores. Cataloguing librarians are professionals that decide where in the library an item should be shelved using classification scheme; they also create access to information resources for users. They are regarded as the most vital part of an effective and efficient library and information services (Cerbo, 2011).

Myung (2013) defined cataloguing librarian as a librarian who has an MLIS or MLS degree and catalogues without managerial or supervising duties. His/her primary responsibilities are to prepare bibliographic records to represent items acquired by the library and to provide
efficient access and retrieval for library users. A good cataloguer, according to Myung should have the qualities of: competence, accuracy, efficiency, consistency, adaptability, judgment, problem solving, commitment, research ability, and self discipline.

Nwosu and Nwokocha (2015) maintained that cataloguers are moving into new roles as they provide enhanced access to information resources not only books, but also CD-ROMs, computer discs, and multi-format items and add the records they create to a shared international database. They glossed around the concept of dynamics of competencies in the contemporary period; they however failed to address the issue of retaining traditional competency when acquiring online cataloguing competencies.

On a similar note, Park and Lu as cited in Nwosu (2014) noted that traditional cataloguing tasks and practices are still highly relevant and are being integrated with the activities of metadata creation and electronic resources management that characterize the key roles that metadata professionals play in the digital environment. Nwosu, after evaluating the threats on traditional cataloguing competencies emphasized that people are questioning traditional practices, the expense on cataloguing operations, and the usefulness of library cataloguers themselves. Cataloguers all over the world are required to possess competencies for the purpose of being efficient in the cataloguing process. Every cataloguer should possess the competency on how to use the cataloguing rules for uniformity.

**Research Methodology**

The design of this study is descriptive survey. The area of study is Southern Nigeria. Southern Nigeria is one of the two major blocks of the country and made up of three geo political zones, namely: South East, South South and South West. There are 17 states in Southern Nigeria. Each of these geo political zones has six states except the South East which has five. There are
eighteen federal universities spread across the three geo-political zones (National Universities Commission, 2009).

The population of this study comprised librarians (cataloguers) in eighteen (18) federal universities who were involved in cataloguing of information materials in the university libraries in Southern Nigeria. The population of librarians (cataloguers) who catalogued information materials in the eighteen federal universities is two hundred and ninety three (293), (Librarians Registration Council of Nigeria, 2014).

The sample for this study is one hundred and sixty eight (168). This was drawn from six university libraries located in the South East, South West and South South geopolitical zones of Nigeria. The universities for this study were selected based on purposive sampling technique. Therefore, a number of criteria were set as standard for selection. These include: existence of a standard and functional cataloguing section in the university libraries; application of conventional cataloguing the university libraries must be; application of online cataloguing in the university libraries, and duration of application for at least five (5) years. In using the above criteria for selection of the universities for this study, six (6) federal universities met these standards thus they were selected for this study. The total population of cataloguers in the six selected universities is one hundred and sixty eight (168). Since the population of this study is not too large, there was no need for further sampling.

A Questionnaire was used to elicit responses from the respondents. For decision taking, any mean rating of 2.50 and above was considered positive or accepted, while any mean rating below 2.50 was considered negative and rejected.
Results

The presentation of result is guided by the five research questions. The results of the study were presented in tables according to individual research questions.

**Research Question 1**: What is the state of application of conventional and online cataloguing in university libraries in Nigeria?

The summary of the result is presented in Table 1.
Table 1: Percentage Response of the Respondents on the State of Application of Conventional and Online Cataloguing in University Libraries in Nigeria (N=166)

<table>
<thead>
<tr>
<th></th>
<th>OAU (n=28)</th>
<th>UI (n=29)</th>
<th>UNIBEN (n=26)</th>
<th>UNILAG (n=28)</th>
<th>UNIPORT (n=28)</th>
<th>UNN (n=27)</th>
<th>OVERALL (n=166)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional cataloguing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventional cataloguing was recently introduced in my Library</td>
<td>0%</td>
<td>100%</td>
<td>5.5%</td>
<td>94.5%</td>
<td>0%</td>
<td>100%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Conventional cataloguing is used to catalogue Books in my library</td>
<td>100%</td>
<td>0%</td>
<td>77.7%</td>
<td>22.3%</td>
<td>93.8%</td>
<td>6.2%</td>
<td>82.3%</td>
</tr>
<tr>
<td>Conventional cataloguing is no longer applied in my library</td>
<td>5.8%</td>
<td>94.2%</td>
<td>22.3%</td>
<td>77.7%</td>
<td>6.2%</td>
<td>93.8%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Conventional cataloguing has never been applied in my library</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>My library employs conventional cataloguing on all types of materials</td>
<td>0%</td>
<td>100%</td>
<td>16.6%</td>
<td>83.4%</td>
<td>0%</td>
<td>100%</td>
<td>35.2%</td>
</tr>
<tr>
<td>My library employs conventional cataloguing methods on certain types of material only</td>
<td>94.2%</td>
<td>5.8%</td>
<td>77.7%</td>
<td>22.3%</td>
<td>100%</td>
<td>0%</td>
<td>82.3%</td>
</tr>
<tr>
<td>Online cataloguing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online cataloguing was recently introduced in my Library</td>
<td>5.8%</td>
<td>94.2%</td>
<td>38.8%</td>
<td>61.2%</td>
<td>6.2%</td>
<td>93.8%</td>
<td>58.8%</td>
</tr>
<tr>
<td>Online cataloguing is used to catalogue Books in my library</td>
<td>100%</td>
<td>0%</td>
<td>94.4%</td>
<td>5.6%</td>
<td>100%</td>
<td>0%</td>
<td>94.2%</td>
</tr>
<tr>
<td>Online cataloguing is no longer applied in my library</td>
<td>0%</td>
<td>100%</td>
<td>5.6%</td>
<td>94.4%</td>
<td>0%</td>
<td>100%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Online cataloguing has never been applied in my library</td>
<td>0%</td>
<td>100%</td>
<td>5.6%</td>
<td>94.4%</td>
<td>0%</td>
<td>100%</td>
<td>5.8%</td>
</tr>
<tr>
<td>My library employs online cataloguing on all types of materials</td>
<td>0%</td>
<td>100%</td>
<td>27.7%</td>
<td>72.3%</td>
<td>0%</td>
<td>100%</td>
<td>35.2%</td>
</tr>
<tr>
<td>My library employs online cataloguing methods on certain types of material only</td>
<td>64.4%</td>
<td>35.6%</td>
<td>83.3%</td>
<td>16.7%</td>
<td>62.5%</td>
<td>37.5</td>
<td>94.2%</td>
</tr>
</tbody>
</table>
Table 1 shows the state of application of conventional and online cataloguing in university libraries in Nigeria. The result shows that conventional cataloguing was applied in cataloging books in the libraries; and on certain types of materials. The libraries also employed online cataloguing on certain types of materials. From the above findings, the study extrapolates that the surveyed libraries practiced both conventional and online cataloguing. It was evident from the results that conventional cataloguing and online cataloguing were not recently introduced in the libraries. Conventional and online cataloguing were not used to catalogue all categories of books in the library; nevertheless both cataloguing methods are crucial for enhancing access to library resources. The finding is in agreement with the assertion that libraries have merged conventional and modern methods of work to provide enhanced access to information resources not only books, but also CD-ROMs, computer discs, and multi-format materials (Nwosu and Nwokocha, 2015). Therefore, conventional and online cataloguing were used to catalogue information materials in the studied libraries. This reveals that both cataloguing practices complement each other.

The two cataloguing practices are important because they complement each other and this enables libraries to have dual cataloguing options to ensure that they would not fail in cataloguing information materials no matter the situation. Conventional cataloguing serves as a cataloguing practice which cataloguers can fall back on if there is power or system failure. By implication, online cataloguing serves as a fast cataloguing option that enables libraries to catalogue the enormous amount of information materials that inundate the library.

**Research Question 2:** What methods are required for complementary acquisition and application of conventional and online cataloguing competencies in the libraries?

The Summary of the result is presented in Table 2.
Table 2: Mean Response of the Respondents on the Methods Required for Complementary Acquisition and Application of Conventional and Online Cataloguing in the Libraries (N=166)

<table>
<thead>
<tr>
<th>Items</th>
<th>OAU n=28</th>
<th>UI n=29</th>
<th>UNIBEN n=26</th>
<th>UNILAG n=28</th>
<th>UNIPORT n=28</th>
<th>UNN n=27</th>
<th>OVERALL n=166</th>
<th>RANK</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-training and development</td>
<td>3.79</td>
<td>0.42</td>
<td>3.58</td>
<td>0.73</td>
<td>3.92</td>
<td>0.27</td>
<td>3.29</td>
<td>0.81</td>
<td>3.74</td>
</tr>
<tr>
<td>Mentoring by colleagues in the profession</td>
<td>3.79</td>
<td>0.42</td>
<td>3.55</td>
<td>0.74</td>
<td>3.92</td>
<td>0.27</td>
<td>3.21</td>
<td>0.79</td>
<td>3.75</td>
</tr>
<tr>
<td>Linkage programmes in other libraries</td>
<td>3.75</td>
<td>0.44</td>
<td>3.62</td>
<td>0.56</td>
<td>3.92</td>
<td>0.27</td>
<td>3.21</td>
<td>0.63</td>
<td>3.71</td>
</tr>
<tr>
<td>Correspondence programmes</td>
<td>3.75</td>
<td>0.44</td>
<td>3.51</td>
<td>0.74</td>
<td>3.92</td>
<td>0.27</td>
<td>3.04</td>
<td>0.79</td>
<td>3.71</td>
</tr>
<tr>
<td>Seminars on cataloguing and classification</td>
<td>3.42</td>
<td>0.50</td>
<td>3.48</td>
<td>0.51</td>
<td>3.46</td>
<td>0.51</td>
<td>3.50</td>
<td>0.51</td>
<td>3.39</td>
</tr>
<tr>
<td>Formal education in library schools</td>
<td>3.32</td>
<td>0.48</td>
<td>3.34</td>
<td>0.48</td>
<td>3.15</td>
<td>0.37</td>
<td>3.64</td>
<td>0.49</td>
<td>3.21</td>
</tr>
<tr>
<td>On-the job training</td>
<td>3.32</td>
<td>0.48</td>
<td>3.38</td>
<td>0.49</td>
<td>3.15</td>
<td>0.37</td>
<td>3.54</td>
<td>0.64</td>
<td>3.25</td>
</tr>
<tr>
<td>Workshops on cataloguing and classification and similar areas</td>
<td>3.32</td>
<td>0.48</td>
<td>3.34</td>
<td>0.48</td>
<td>3.15</td>
<td>0.37</td>
<td>3.46</td>
<td>0.51</td>
<td>3.21</td>
</tr>
<tr>
<td>Conferences</td>
<td>3.25</td>
<td>0.44</td>
<td>3.38</td>
<td>0.49</td>
<td>3.07</td>
<td>0.27</td>
<td>3.43</td>
<td>0.50</td>
<td>3.25</td>
</tr>
<tr>
<td>Training in informal cataloguing classes by private organizations</td>
<td>3.32</td>
<td>0.48</td>
<td>3.07</td>
<td>0.65</td>
<td>3.15</td>
<td>0.37</td>
<td>3.04</td>
<td>0.64</td>
<td>3.14</td>
</tr>
<tr>
<td>Total</td>
<td>3.50</td>
<td>0.46</td>
<td>3.43</td>
<td>0.59</td>
<td>3.48</td>
<td>0.33</td>
<td>3.34</td>
<td>0.63</td>
<td>3.43</td>
</tr>
</tbody>
</table>

Where VHR = Very Highly Required, HR = Highly Required, LR = Less Required, NR = Not Required (Criterion Mean = 2.50)
The respondents’ response as presented on Table 2 indicate that, self training, mentoring, linkage programmes in other libraries, and correspondence programmes had the highest total mean ratings of 3.67, 3.66, 3.65 and 3.60 for methods required for complementary acquisition and application of conventional and online cataloguing competency in the libraries. On-the job training, workshops on cataloguing and classification and similar areas, conferences, training in informal cataloguing classes by private organizations recorded lower mean ratings of 3.31, 3.30, 3.27 and 3.15.

Based on the results in Table 2, it is pertinent to note that the mean ratings recorded are higher than the criterion mean of 2.50. Given the results, the study adopted all the listed competences on the table as methods required for complementary acquisition and application of conventional and online cataloguing in the libraries under study.

The results of the study revealed that respondents agreed that self-training and development and mentoring by colleagues were methods required for complementary acquisition and application of conventional and online cataloguing in the libraries. This is however, in contrast with the views of Rowley (2015). Self training and mentoring by colleagues in the profession is very essential for complementary acquisition and application of conventional and online cataloguing competencies amongst cataloguers in the libraries and should not be overlooked.

**Research Question 3:** What are the methods employed in the acquisition and application of conventional and online cataloguing competencies amongst cataloguers in Nigerian university libraries?

The summary of the result is presented in Table 3.
Table 3: Mean Response of the Respondents on the Methods Employed in Acquiring Conventional and Online Cataloguing in the Libraries (N=166).

<table>
<thead>
<tr>
<th>Items</th>
<th>OAU N=28</th>
<th>UI N=29</th>
<th>UNIBEN N=26</th>
<th>UNILAG N=28</th>
<th>UNIPORT N=28</th>
<th>UNN N=27</th>
<th>OVERALL N=166</th>
<th>RANK</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring by colleagues in the profession</td>
<td>3.57</td>
<td>0.50</td>
<td>3.69</td>
<td>0.60</td>
<td>3.92</td>
<td>0.27</td>
<td>3.61</td>
<td>0.50</td>
<td>3.43</td>
</tr>
<tr>
<td>Self-training and development using online resources</td>
<td>3.57</td>
<td>0.50</td>
<td>3.72</td>
<td>0.53</td>
<td>3.92</td>
<td>0.27</td>
<td>3.54</td>
<td>0.58</td>
<td>3.39</td>
</tr>
<tr>
<td>Self-training and development using physical cataloguing resources</td>
<td>3.50</td>
<td>0.51</td>
<td>3.79</td>
<td>0.41</td>
<td>3.92</td>
<td>0.27</td>
<td>3.50</td>
<td>0.58</td>
<td>3.54</td>
</tr>
<tr>
<td>Formal education in library schools</td>
<td>3.54</td>
<td>0.51</td>
<td>3.34</td>
<td>0.48</td>
<td>3.77</td>
<td>0.42</td>
<td>3.29</td>
<td>0.53</td>
<td>3.68</td>
</tr>
<tr>
<td>Correspondence programme</td>
<td>3.46</td>
<td>0.51</td>
<td>3.75</td>
<td>0.44</td>
<td>3.92</td>
<td>0.27</td>
<td>3.39</td>
<td>0.74</td>
<td>3.32</td>
</tr>
<tr>
<td>Seminars on cataloguing and classification</td>
<td>3.43</td>
<td>0.50</td>
<td>3.44</td>
<td>0.51</td>
<td>3.46</td>
<td>0.51</td>
<td>3.36</td>
<td>0.56</td>
<td>3.54</td>
</tr>
<tr>
<td>On-the job training</td>
<td>3.54</td>
<td>0.51</td>
<td>3.31</td>
<td>0.47</td>
<td>3.15</td>
<td>0.37</td>
<td>3.32</td>
<td>0.47</td>
<td>3.64</td>
</tr>
<tr>
<td>Workshops on cataloguing and classification and similar areas</td>
<td>3.54</td>
<td>0.51</td>
<td>3.31</td>
<td>0.47</td>
<td>3.15</td>
<td>0.37</td>
<td>3.17</td>
<td>0.48</td>
<td>3.75</td>
</tr>
<tr>
<td>Training in informal cataloguing classes by private organizations</td>
<td>3.54</td>
<td>0.51</td>
<td>3.28</td>
<td>0.53</td>
<td>3.65</td>
<td>0.49</td>
<td>3.14</td>
<td>0.52</td>
<td>3.36</td>
</tr>
<tr>
<td>Conferences on cataloguing and classification</td>
<td>3.46</td>
<td>0.51</td>
<td>3.28</td>
<td>0.47</td>
<td>3.07</td>
<td>0.37</td>
<td>3.14</td>
<td>0.48</td>
<td>3.71</td>
</tr>
<tr>
<td>Linkage programmes in other institutions</td>
<td>3.43</td>
<td>0.50</td>
<td>3.34</td>
<td>0.48</td>
<td>3.31</td>
<td>0.47</td>
<td>3.36</td>
<td>0.56</td>
<td>3.29</td>
</tr>
<tr>
<td>Total</td>
<td>3.51</td>
<td>0.51</td>
<td>3.48</td>
<td>0.49</td>
<td>3.57</td>
<td>0.37</td>
<td>3.35</td>
<td>0.55</td>
<td>3.51</td>
</tr>
</tbody>
</table>

Where VHE = Very Highly Employed, HE = Highly Employed, LE = Less Employed, NE = Not Employed (Criterion Mean = 2.50)
Table 4 captured the mean responses of cataloguers in the six sampled universities: OAU, UI, UNIBEN, UNILAG, UNIPORT and UNN on methods employed for complementary acquisition and application of conventional and online cataloguing competencies in the libraries. The respondents’ response indicate that, mentoring by colleagues in the profession, self-training development using online resources, self-training using physical cataloguing resources and formal training in library schools garnered mean responses of 3.61, 3.61, 3.61, and 3.57 respectively. The results on the table reveal that training in informal cataloguing classes by private organizations and conferences generated mean ratings of 3.39, 3.36 and 3.34 respectively on methods required for complementary acquisition and application of conventional and online cataloguing competencies in the libraries.

The analysis of the results reveals the methods employed in the complementary acquisition and application of conventional and online cataloguing competencies amongst cataloguers in Nigerian university libraries. These methods are mentoring by colleagues in the profession, self training using online resources, self training using physical cataloguing resources and formal education in library schools. This statement contradicts the assertion made by Hill (2014) that cataloguers are unaware of a whole lot of competencies waiting to be obtained. The knowledge of the methods means that the cataloguers understand how they could enhance the complementary acquisition and application of conventional and online cataloguing competence in the libraries. However, libraries having newly graduated degree holding librarians may lack the competent professional staff that holds the key to managing it successfully.

**Research Question 4:** What problems affect the acquisition and application of conventional and online complementary cataloguing competencies amongst cataloguers in the libraries?

The summary of the result is presented in Table 4.
Table 4: Mean response of the Respondents on Problems Affecting Acquisition and Application of Conventional and Online Cataloguing in the Libraries (N=166).

<table>
<thead>
<tr>
<th>Items</th>
<th>OAU n=28</th>
<th>UI n=29</th>
<th>UNIBEN n=26</th>
<th>UNILAG n=28</th>
<th>UNIPORT n=28</th>
<th>UNN n=27</th>
<th>OVERALL n=166</th>
<th>RANK</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inappropriate cataloguing tools</td>
<td>3.53</td>
<td>3.48</td>
<td>3.69</td>
<td>3.61</td>
<td>3.67</td>
<td>3.60</td>
<td>0.57</td>
<td>1st</td>
<td>VHR</td>
</tr>
<tr>
<td>Poor ICT skills</td>
<td>3.46</td>
<td>3.34</td>
<td>3.73</td>
<td>3.50</td>
<td>3.48</td>
<td>3.52</td>
<td>0.55</td>
<td>2nd</td>
<td>VHR</td>
</tr>
<tr>
<td>Poor interest in cataloguing</td>
<td>3.50</td>
<td>3.34</td>
<td>3.65</td>
<td>3.54</td>
<td>3.51</td>
<td>3.52</td>
<td>0.57</td>
<td>2nd</td>
<td>VHR</td>
</tr>
<tr>
<td>Conservative leadership in libraries</td>
<td>3.32</td>
<td>3.31</td>
<td>3.54</td>
<td>3.36</td>
<td>3.26</td>
<td>3.38</td>
<td>0.62</td>
<td>3rd</td>
<td>VHR</td>
</tr>
<tr>
<td>Poor foundation in cataloguing</td>
<td>3.43</td>
<td>3.38</td>
<td>3.15</td>
<td>3.21</td>
<td>3.37</td>
<td>3.30</td>
<td>0.52</td>
<td>4th</td>
<td>HR</td>
</tr>
<tr>
<td>Inadequate cataloguing tools</td>
<td>3.46</td>
<td>3.03</td>
<td>3.15</td>
<td>3.25</td>
<td>3.59</td>
<td>3.30</td>
<td>0.57</td>
<td>4th</td>
<td>HR</td>
</tr>
<tr>
<td>Transition challenge/Phobia. e.g. Fear, Conservatism, Ageism</td>
<td>3.39</td>
<td>2.90</td>
<td>3.38</td>
<td>3.29</td>
<td>3.30</td>
<td>3.27</td>
<td>0.66</td>
<td>5th</td>
<td>HR</td>
</tr>
<tr>
<td>Difficulty in acquiring new skills</td>
<td>3.43</td>
<td>3.07</td>
<td>3.15</td>
<td>3.14</td>
<td>3.33</td>
<td>3.22</td>
<td>0.61</td>
<td>6th</td>
<td>HR</td>
</tr>
<tr>
<td>Problems of diversification amongst cataloguers</td>
<td>3.46</td>
<td>3.21</td>
<td>3.15</td>
<td>3.14</td>
<td>3.04</td>
<td>3.21</td>
<td>0.61</td>
<td>7th</td>
<td>HR</td>
</tr>
<tr>
<td>Total</td>
<td>3.44</td>
<td>3.23</td>
<td>3.40</td>
<td>3.34</td>
<td>3.39</td>
<td>3.37</td>
<td>0.59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree (Criterion Mean = 2.50)
Table 4 captures the mean responses of cataloguers in the six sampled universities; OAU, UI, UNIBEN, UNILAG, UNIPORT and UNN on problems affecting acquisition and application of conventional and online complementary cataloguing competencies in the libraries. The respondents’ responses reveal that inappropriate cataloguing tools, poor ICT skills and poor interest in cataloguing generated the highest mean ratings. Other problems such as transition challenge/phobia, e.g. fear, conservatism, ageism, difficulty in acquiring new skills, and problems of diversification amongst cataloguers also generated higher mean ratings but not as high as the former.

The results revealed that inadequate cataloguing tools, transition challenge, phobia, e.g. conservatism and ageism, conservative leadership, poor ICT skills, poor interest in cataloguing, were the major problems affecting complementary acquisition and application of conventional and online cataloguing competencies amongst cataloguers in the libraries. This is in agreement with the assertion that most Nigerian libraries do not have current cataloguing tools (Oketunji, 2009, Hawkins, 2003). It is quite obvious that most libraries in Nigeria have inappropriate cataloguing tools. Cataloguing information materials in the library with inappropriate cataloguing tools is as good as not cataloguing it at all (Wong, 2012).

Poor ICT skills amongst librarians will hurt their capacity to develop into full fledged cataloguers who possess complementary cataloguing competencies. Moreover, poor interest in cataloguing is a very big problem as it will also make it difficult for cataloguers to develop complementary competency in cataloguing practice in the libraries. If cataloguers have poor interest in cataloguing then there must be a reason making them to prefer a particular cataloguing practice over another.
Research Question 5: What strategies can be used to enhance acquisition and application of conventional and online cataloging competencies amongst cataloguers in the libraries?

The summary of the result is presented in Table 5.
Table 5: Mean Response of the Respondents on Strategies for Enhancing the Complementary Acquisition and Application of Conventional and Online Cataloguing in the Libraries (N=166).

<table>
<thead>
<tr>
<th>Items</th>
<th>OAU n=28</th>
<th>UI n=29</th>
<th>UNIBEN n=26</th>
<th>UNILAG n=28</th>
<th>UNIPORT n=28</th>
<th>UNN n=27</th>
<th>OVERALL n=166</th>
<th>RANK</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making it easy for cataloguers to acquire cataloguing competence</td>
<td>4.00</td>
<td>3.72</td>
<td>3.92</td>
<td>3.64</td>
<td>3.86</td>
<td>3.85</td>
<td>3.83</td>
<td>1st</td>
<td>VA</td>
</tr>
<tr>
<td>Elimination of problems of diversification amongst cataloguers</td>
<td>4.00</td>
<td>3.66</td>
<td>3.73</td>
<td>3.57</td>
<td>3.82</td>
<td>3.62</td>
<td>3.73</td>
<td>2nd</td>
<td>VA</td>
</tr>
<tr>
<td>Libraries should provide relevant cataloguing tools to encourage cataloguers to practice conventional cataloguing</td>
<td>3.89</td>
<td>3.62</td>
<td>3.88</td>
<td>3.64</td>
<td>3.61</td>
<td>3.78</td>
<td>3.73</td>
<td>2nd</td>
<td>VA</td>
</tr>
<tr>
<td>Laying of adequate foundation in cataloguing</td>
<td>4.00</td>
<td>3.76</td>
<td>3.26</td>
<td>3.71</td>
<td>3.79</td>
<td>3.78</td>
<td>3.72</td>
<td>3rd</td>
<td>VA</td>
</tr>
<tr>
<td>Provision of adequate cataloguing tools</td>
<td>3.96</td>
<td>3.72</td>
<td>3.31</td>
<td>3.64</td>
<td>3.75</td>
<td>3.67</td>
<td>3.68</td>
<td>4th</td>
<td>VA</td>
</tr>
<tr>
<td>Provision of enabling environment for adequate ICT competence</td>
<td>3.89</td>
<td>3.66</td>
<td>3.23</td>
<td>3.79</td>
<td>3.60</td>
<td>3.81</td>
<td>3.67</td>
<td>5th</td>
<td>VA</td>
</tr>
<tr>
<td>Cataloguers should show adequate interest in cataloguing</td>
<td>3.89</td>
<td>3.62</td>
<td>3.19</td>
<td>3.71</td>
<td>3.64</td>
<td>3.74</td>
<td>3.62</td>
<td>6th</td>
<td>VA</td>
</tr>
<tr>
<td>Dynamic leadership in libraries</td>
<td>3.89</td>
<td>3.62</td>
<td>3.23</td>
<td>3.50</td>
<td>3.68</td>
<td>3.56</td>
<td>3.58</td>
<td>7th</td>
<td>VA</td>
</tr>
<tr>
<td>Elimination of transition challenge/Phobia E.g. Fear, Conservatism, Ageism</td>
<td>3.96</td>
<td>3.55</td>
<td>3.23</td>
<td>3.46</td>
<td>3.68</td>
<td>3.56</td>
<td>3.58</td>
<td>8th</td>
<td>VA</td>
</tr>
<tr>
<td>Total</td>
<td>3.94</td>
<td>3.66</td>
<td>3.44</td>
<td>3.63</td>
<td>3.71</td>
<td>3.72</td>
<td>3.68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where VA = Very Appropriate, A = Appropriate, FA = Fairly Appropriate, NA = Not Appropriate  (Criterion Mean = 2.50)
Table 5 displays the mean response of the respondents based on the sampled six universities (OAU, UI, UNIBEN, UNILAG, UNIPORT and UNN) on strategies for enhancing complementary acquisition and application of conventional and online cataloguing competencies in the libraries. The respondents’ response revealed that, making it easy for cataloguers to acquire cataloguing skills and elimination of problems of diversification amongst cataloguers had the highest mean ratings of 3.83, and 3.73 respectively.

In addition, other strategies for complementary acquisition and application of conventional and online cataloguing competencies amongst cataloguers which are dynamic leadership and elimination of transition challenge/phobia, e.g. fear, conservatism and ageism generated lower mean ratings of 3.60 and 3.58 respectively.

The study identified some strategies for enhancing the complementary acquisition and application of conventional and online cataloguing competencies amongst cataloguers in Nigerian university libraries. There should be easy and affordable training, workshops and conferences on cataloguing and classification in libraries for cataloguers (Imeremba, 2011); elimination of problems posed by diversification amongst cataloguers and the provision of relevant cataloguing tools to encourage cataloguers to practice conventional cataloguing. This is in consonance with the assertion that current cataloguing tools should be made available in libraries (Omeje, 2010) because of the importance of current cataloguing tools in proper cataloguing practice (Carvalho, 2005).

The provision of relevant cataloguing tools will encourage cataloguers to practice conventional cataloguing effectively in the libraries. This is apparently why it is difficult for them to transit from one cataloguing practice to the other. These bottlenecks should be
eliminated so that the cataloguers can achieve complementary acquisition and application of conventional and online cataloguing competencies.

**Recommendations**

The following recommendations have been made based on the findings of the study:

1. Library management should ensure that none of the two cataloguing practices suffers neglect as a result of preference for one in the library.
2. Policies should be made and implemented to make conventional and online cataloguing effectively complement each other in the libraries.
3. The competency required by cataloguers and the methods employed for complementary acquisition and application of conventional and online cataloguing should be consolidated to boost the capacity of cataloguers to practice conventional and online cataloguing efficiently in the libraries.
4. Appropriate and relevant tools should be provided by university libraries to stimulate the interest of cataloguers to practice conventional and online cataloguing in the libraries without hindrance.
5. Poor ICT skills amongst cataloguers should be eliminated by giving cataloguers regular training on ICT capacity building of cataloguers as this would ensure that the ICT competencies of the cataloguers are constantly updated and developed so that they could handle any type of cataloguing work before them.

**Conclusion**

The support of teaching, learning and research in universities requires information materials. Access to these information materials is facilitated by the acquisition and application of conventional and online complementary cataloguing competencies amongst cataloguers in the
university libraries. The major purpose of this study therefore was to determine issues in acquisition and application of conventional and online complementary cataloguing competencies in Nigerian university libraries with a view to proffering appropriate solution. Findings of the study indicated that some of the issues in acquisition and application of conventional and online complementary cataloguing amongst cataloguers in Nigerian university libraries include inappropriate cataloguing tools, poor information communication technology skills, and poor interest in conventional cataloguing. To address these issues, libraries should make it easy for cataloguers to acquire cataloguing competencies, eliminate the problem of diversification amongst cataloguers and provide relevant cataloguing tools to encourage cataloguers to practice complementary cataloguing in the university libraries.
REFERENCES


