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## Expected Competencies for Effective Provision of Online Public Access Catalogue in Nigerian University Libraries

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**Expected Competencies for Effective Provision of Online Public Access Catalogue in  
Nigerian University Libraries**

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## **Abstract**

The study examined the skills expected to provide the OPAC (Online Public Access Catalogue) at university libraries in Nigeria. The study population comprised of professionals and para-professional catalogues. A survey description was conducted, three study guidance objectives were created, the sample size for the study was 21 respondents and three institutions from 6 in the Southwest States of Nigeria were randomly sampled. A structured questionnaire was utilized as an instrument for data gathering. Simple percentages were used in the analysis of the acquired data. The study showed that competences expected to deliver the OPAC include: OPAC data storage creation, working knowledge of cataloging tools, competencies in information literacy and technical knowledge in the catalog. The following strategies were developed to make Internet connections available; Librarians should be trained in the digital realm of libraries. The study concludes that university administration should vote adequate fund for the university libraries, Cataloguers should be exposed to skill acquisition platforms such as workshops, seminars and symposia in order to acquire the competencies required for provision of OPACs, and advances in cataloguing and knowledge of the tools for OPAC such as metadata, Resource Description and Access (RDA) etc., and these should be included in the curricula of library schools in Nigeria were made. The provision of information communication technologies and stable internet is highly needed for OPAC provision.

**Keywords:** Cataloguers, Competencies, OPAC, Resources Description and Access, University Libraries,

## **Introduction**

University libraries are largely established to pursue and assist the university's goals such as teaching, learning and research. They are library systems created, run and funded for a university to meet the demands of its students, teachers and staff for knowledge, studies and curricula (Ihejirika, 2014). The availability of the customers present within the university society means that the library is the center of the institution's intellectual life; its quality is consequently judged by its strength due to its unique role in the collection (Mole & Mesagan, 2017). This also explains why Benny (2015) claimed that university libraries were primarily responsible for carrying out tasks such as the collection and acquisition of learning material (both printed and non-printed), the configuration of these tools, knowledge and data system services, and bibliographic and documentation services, and user training programmes.

Competence can be referred to as skill sets with demonstrable features that enable a specific task to function more effectively. These span from computer use skills, internet browsing skills, etc. OPAC (Online Public Access Catalog) is a public-open bibliography of the collection of electronic libraries. (Adigun et al., 2011) described OPAC as the search system for publications and other library materials. Upon development of this product, consumers should flip or scan a collection of index cards in a file office to get information on each item in the library collection. OPAC improves the search and recovery of bibliographical documents easily and quickly. IT development and increasing user expectations have contributed to changes in user behaviour. Coyle & Hillmann (2007) stated that the users in today's library have different information abilities than before the debut of the search engine. This tendency of explosion of information as a result of technology developments in libraries has a favorable impact on the way libraries operate. The introduction of OPACs has given academic libraries the opportunity to take advantage of new technological possibilities to deliver an adequate information service for their purposes. Utulu (2007) emphasized that "the

university libraries have continually invested in electronic resources as a center of knowledge for researchers." OPACs provide these libraries, it is considered, would broaden the research opportunities of the institutions they serve by making these electronic resources accessible for users. It is absolutely true that OPACs promote the use of libraries and access to knowledge, without which the library was conventional in its old ways. It is a recovery mechanism that offers many ways to search books and other library materials. The inventory aspect of OPAC has significantly altered conventional openness to library services. Networked computers already substitute library shelves with internet access; computer laboratories replace traditional reading rooms; currently the OPAC is used via catalog cabinets. The use of OPAC is also intended to support the user and give the least fortunate user access to what is available in other library collections. OPAC is optimally employed at most university libraries in Europe and America to improve access and use of library customers' information services (Mole & Mesagan, 2017).

However, despite the value of OPAC, it is of considerable curiosity that several university libraries still run handwritten catalogs in this modern period. Therefore, library members have difficulty searching for important information on their job and their bursary. They encounter several delays to access the most vital, secure and up-to-date library materials. The absence of OPAC has also reduced the quality of the research work done by university graduates. Notwithstanding the OPAC importance, it seems from the literature that there has been no extensive evaluation of the competences required for delivery of OPACs in Nigerian university libraries (Mole & Mesagan, 2017). What skills are necessary for OPACs in Nigerian university libraries despite its customer service patronage? What challenges have there been with the provision of OPACs in Nigerian school libraries? These are among the themes that comprise the focus of this research.

Objective of the study

The purpose of this study is to: 1. assess the skills required for OPAC deployment in Nigerian university libraries.

2. Find out about OPAC usage difficulties in university libraries in Nigeria

3. Recommend measures to enhance library distribution of OPACs

### **Review of literature**

Skills are collections of characteristics (i.e. abilities, knowledge, self-conception, features and motifs) that enable us to engage successfully with others at work, at school, in the family and in our entire community. Collection of features/ideas (i.e. abilities, knowledge, self-conceptions, attributes and reasons), which enables one to succeed in interacting in one's work, school, family and the community. The competences of librarians and employers for providing online catalogs of public access borders on ICT skills. Dyer (2012) argues that the abilities and competences which catalogers already need to make them fully suitable to exercise control over the World Wide Web and exploit the opportunities offered by technology to collect and exhibit data. According to Aliu et al. (2011), no library can meet the need of the customer with the manual library method in the present age of information explosions. This is particularly the case in university libraries where speed and flexibility should be seen as a precious precondition for bibliographical research as computer skills among librarians, which would facilitate the computing of libraries and functions that meet the demands of ever growing customers. Odunewu & Aluko-Arowolo (2018) describes computer skills as basic knowledge of what a computer is and how it may be used as a resource. Csapo (2011) has listed several basic computer skills, such as the use of computers and files, word processing, tablets, databases, the internet and e-mail, in this category. Mastromatteo, (2009) argues that the competences of librarians in the digital age are the following in a broader category: Competences in information management They types of competences are the most essential of conventional librarians; (these are quite prevalent)

cataloging, grading and indexing skills;; Technological competences- they are linked to the usage of ICTs, which may be more challenging depending on the activities of the digital librarian; Information Literacy skills- Bibliographers play essential roles in informational literacy, and librarians have recently become trainers, teaching their users and why not large communities how to use information effectively. Information Literacy related skills OPAC is a cataloging product which is the most technical obligation of a professional librarian (Nwalo, 2005) Is the way to explain a novel and emphasizes the topic material that basically places the story in a context. The role of indexing is consequently directed to ensuring that the user has access to the information material on the shelf or online, as appropriate. However, the two main processes involved in the cataloging include: the Descriptive Cataloging comprises all physical descriptions (i.e., series, publisher, date and place, illustrations, ISBN) of the materials and the subject cataloging, which goes beyond mere description and extends to the intellectual description of the material on which they are working. It is all about characterizing and determining the subject content of the items to be classified in the field of study. To Mole, (2010), the subject cataloging includes all the professional techniques or processes to identify or choose the subject matter and suitable words from the list. The cataloguer is able to choose a specified subject for the materials. This topic can be heading or heading number. It is said that anything should be made available to people who use it. The provision of a library setting provides the innate ability of the librarian to provide users with the means they need to manually or electronically access and use all services in effective ways known as the Online Public Access Catalogue, but librarians/cataloguers need other competence for this purpose.

Regarding the provision OPAC, Dyer, (2012) proposes in the following terms the competencies of library workers, in particular catalogers: Technical expertise (catalogue, database design, electronic method, routine cataloging, retrospective translation) e.t.c;

capability to identify and resolve catalog irregularities; comprehension of workflow and procedures on technical services; fresh ideas and attitudes, because it is a transition from the usual work of cataloging; internet tools assessment, general identification; Omoike & Oke, 2014) portray OPAC as an online library bibliography of a public library collection. It is a computer-based catalog accessible via a library's computer terminals. There is no wonder why Fabunmi & Asubiojo (2013) classified OPAC as an information-finding interface that supports information searchers in accessing library(s) resources via a number of access points. In the true sense, the aim is to search and retrieve bibliographic documents of information items rather than the whole text of all resources. It is an online database of resources that are housed in a library or set of libraries, providing a platform for searching and finding the physically available books and other materials in the library. It is a retrieval system that offers several book and other library resources search options (Adigun et al., 2011). An enormous quantity of information is available by pressing the button regardless of location, position of items and their format. He said that the shift of manual-to-digital information management has changed the way cataloged data are accessible and used. Aina, (2014) expressed the view that OPAC is due to its flexibility the most current and efficient form of catalogue. Its use seeks to provide a great customer service through the access to what is available in other libraries by the least fortunate people. Butterfield, (2013) also supported Ukpebor (2012) by noting that with the evolution of Online Public Access Catalogs (OPAC), a universally networked, accessible entity, the library collections were made feasible without pulling three drawers by five cards. To Thanuskodi (2012), the OPAC is an information recollection system with short bibliographical entries, especially books, journals and audiovisual content in a certain library. As Adedibu (2008) pointed out, OPAC first appeared in its rudimentary form in the late 1970s and early 1980s, undergoing



numerous generations of evolution. Automation in the library provides quick, precise and efficient access to extensive and diversified collections

## Methods

The study employed the method of descriptive survey. The study was driven by three goals, the sample size for the study is 21 respondents and three institutions in the South-West State were selected with a random sampling. Lagos University (UNILAG), Obafemi Awolowo University, Ife University (OAU) and Ibadan University (UI) They were selected because OPAC works for its users. Based on research questions and data gathered from respondents for the study, structured questionnaires were produced. All data collected via questionnaire have been examined by simple statistics (Mean).

## Results

What are the competencies possessed for provision of OPAC in chosen university libraries?

Table 1: Mean response on the competencies possessed for effective provision of OPAC in the selected universities libraries in Nigeria

**\*Insert Table 1**

S/N	Competencies	UNILAG STAFF X	Remark	OAU STAFF X	Remark	UI STAFF X	Remark	OVERALL X	Rank	Decision
1	Creation of OPAC data storage	3.87	VHP	3.88	VHP	3.50	VHP	3.75	1 <sup>st</sup>	VHP
2	Working knowledge of cataloguing tools	3.62	VHP	3.88	VHP	3.75	VHP	3.75	1 <sup>st</sup>	VHP
3	Information Literacy related Competencies	3.38	HP	3.63	VHP	3.50	VHP	3.50	2 <sup>nd</sup>	VHP
4	Technical knowledge of the catalogue itself	3.87	VHP	3.50	VHP	3.00	HP	3.47	3 <sup>rd</sup>	HP
5	Technological Competencies	3.75	VHP	3.63	VHP	3.00	HP	3.46	4 <sup>th</sup>	HP
6	Classification and indexing skills	3.25	HP	3.50	VHP	3.50	VHP	3.42	5 <sup>th</sup>	HP

7	Information Management Competencies	3.63	VHP	3.50	VHP	3.00	HP	3.38	6 <sup>th</sup>	HP
8	Technical knowledge of the record structure	3.50	VHP	3.38	HP	3.00	HP	3.29	7 <sup>th</sup>	HP
9	Technical knowledge of retrospective conversion	3.25	HP	3.38	HP	3.00	HP	3.21	8 <sup>th</sup>	HP

**KEYS:** VHP (Very Highly Possessed), HP (Highly Possessed), MP (Moderately Possessed), NP (Not Possessed).

The competences of the OPAC cataloguers in the three universities assessed in this study are shown in Table 1 above. OPAC data storage creation (3.75), working knowledge of cataloging tools (3.75) and catalog technical knowledge itself (3.50) have been highly regarded, while technical knowledge of retrospective conversion is judged to be extremely relevant to OPAC provision in the three universities. However categorization and indexing skills and literacy skills (3.50) were regarded to be extremely highly owned by the OAU and the UI and were strongly owned by UNILAG (3.25). Information management competences (3.63, 3.50) and technological skills (3.75, 3.63) in UNILAG and UI were judged very appropriate in the case of OAU.

What are the problems associated with the provision of OPAC in University Libraries in Nigeria?

Table 2: Mean response to the problems associated with the provision of OPAC in the selected university libraries

**\*Insert Table 2**

S/N	Problems	UNILAG STAFF		OAU STAFF		UI STAFF		OVERALL		
		X	Remark	X	Remark	X	Remark	X	Rank	Decision
1	Database conversion problem	3.50	SA	3.88	SA	2.75	A	3.78	1 <sup>st</sup>	SA
2	Unstable Power Supply	3.63	SA	3.88	SA	3.50	SA	3.67	2 <sup>nd</sup>	SA
3	Consistent system breakdown	3.13	A	3.25	D	3.75	SA	3.38	3 <sup>rd</sup>	A

4	The high cost of purchasing and maintenance	3.00	A	3.25	A	3.50	A	3.25	4 <sup>th</sup>	A
5	Inadequate relevant technical staff	3.38	A	3.13	A	3.00	A	3.17	5 <sup>th</sup>	A
6	Lack of steady internet connection	3.75	SA	3.00	A	2.75	A	3.16	6 <sup>th</sup>	A
7	Insufficient number of Computers	3.38	A	2.75	A	3.25	A	3.13	7 <sup>th</sup>	A
8	Frequent changes in technology	3.62	SA	3.00	A	3.25	A	3.12	8 <sup>th</sup>	A
9	Inadequate ICT skilled workers in the Library	3.00	A	3.00	A	3.00	A	3.00	9 <sup>th</sup>	A
10	Copyright Issue	2.75	A	2.50	A	3.25	A	2.83	10 <sup>th</sup>	A
11	Inadequate Manpower and lack of committed personnel	3.13	A	2.88	A	1.75	D	2.59	11 <sup>th</sup>	A
12	Lack of cooperation among staff	1.00	SD	1.00	SD	1.75	D	1.25	12 <sup>th</sup>	SD

**KEYS:** SA (Strongly Agree), A (Agree), D (Disagree), SD (Strongly Disagree).

Table 2 demonstrates that interviewees from all three universities have agreed firmly on the inconsistent supply of power as an OPAC issue. Although UNILAG and OAU have strongly endorsed the conversion of databases as an issue, UI has agreed to it. Moreover, the absence of permanent Internet connectivity and rapid technological changes in UNILAG were firmly accepted and agreed with in OAU and UI. However, UNILAG agreed on the consistent system breakdown, disagreed with the OAU, and strongly endorsed in UI as a concern with the OPAC clause. While the UNILAG and OAU agreed about inadequate workforce and lack of devoted employees, there was disagreement in the UI, including the absence of cooperation between the staff firmly agreed in UNILAG and OAU and in the UI.

What are the strategies for improving the provision and utilization of OPACs in the university libraries in South West Nigeria?

Table 3: Mean response on the strategies for improving the provision of OPAC in the selected federal universities in South-West Nigeria

**\*Insert Table 3**

S/N	Strategies	UNILAG STAFF		OAU STAFF		UI STAFF		OVERALL		Rank	Decision
		X	Remark	X	Remark	X	Remark	X	Rank		
1	Internet connection should be made available in the university community by the university management	4.00	VA	3.75	VA	3.75	VA	3.83	1 <sup>st</sup>	VA	
2	Keeping OPAC up to date by adding new entries and replacing the old ones	3.87	VA	3.88	VA	4.00	VA	3.83	1 <sup>st</sup>	VA	
3	An alternative source of power supply should be made available by the university administrative	3.87	VA	3.62	VA	4.00	VA	3.83	1 <sup>st</sup>	VA	
4	OPAC provision should be used together with the card catalogue so that if there is a failure in one, the other will work	3.75	VA	3.50	VA	4.00	VA	3.75	2 <sup>nd</sup>	VA	
6	Librarians should be Educated to Work in the Digital Arena	3.63	VA	3.88	VA	3.75	VA	3.75	2 <sup>nd</sup>	VA	
7	The library should train and retrain its staff on OPAC operation	3.88	VA	3.88	A	3.50	VA	3.75	2 <sup>nd</sup>	VA	
8	The library should devise a means of protecting all intellectual content of published work online	3.63	VA	3.50	VA	4.00	VA	3.71	3 <sup>rd</sup>	VA	
9	The library should employ more committed staff to do the available library job	3.38	A	3.63	VA	4.00	VA	3.67	4 <sup>th</sup>	VA	
10	There should be provision for more computers	3.63	VA	3.50	VA	3.75	VA	3.63	5 <sup>th</sup>	VA	
11	Library administrative should employ more staff who are well trained in ICT	3.75	VA	3.25	A	3.50	VA	3.50	6 <sup>th</sup>	VA	
12	The library should seek for funds from external bodies	3.25	A	3.25	A	3.75	VA	3.42	7 <sup>th</sup>	A	

**KEYS:** VA (Very Appropriate), A (Appropriate), FA (Fairly Appropriate), NA (Not Appropriate).

Table 3 shows that all the techniques suggested in items 1 to 11 are judged to be highly suitable for improving the OPAC offering in the three libraries. However, this library is regarded to be extremely suited at UNILAG to seek money from outside bodies.

### Discussion

The findings have shown that the creation of the OPAC data storage, working knowledge of cataloging tools, information management skilfulness, classification and indexing skills,

information literacy skills, technical knowledge of the catalog itself and technical knowledge of the record structure have to be considered. This is consistent with Batool & Ameen (2012), who think it is extremely important for librarians to have adequate skills for the provision of OPAC, for example technological competencies, the integrated expertise in the library system used to track items and the applicability of technological skills in the working environment. Omoike & Oke (2014), however, had an opposite opinion when they pointed out that the use of OPAC in Nigeria was heavily imposed by a lack of competent staff to give the necessary technical competence in the use of OPAC. In addition, it should be noted that the competences highlighted by librarians in the studied libraries are crucial for the online public access catalogue. The researchers found that this has improved their working patterns more and that in a few years time, they began to automate the operation and use of the library. The results have demonstrated problems related to OPAC's provision, such as poor internet connectivity, inadequate computer systems levels, a consistent system breakdown, insufficient ICT professionals in the library, high cost of purchases and maintenance, insufficient computers, unstable power, inadequate technical personnel involved, frequent changes in technology, and the proof of the results. It is interesting to note that many of these issues are the same or similar to those mentioned in (Oketunji, 2009; Okoroma, 2011), including the general deficiency of the relevant infrastructure level, especially in telecommunications facilities and the supply of human resources; a vast local computer market for local operations is unsatisfactory following sales for service and support. In light of the aforementioned, effective preparations are needed to address these obstacles as they are prevalent challenges that restrict the provision of public online catalogs in university libraries. The strategies that could be utilized in OPACs were also presented in the study. The respondents stated that: the university management should provide internet access in the university community, the users should be provided Librarians should be trained to work in

the digital environment, maintaining the OPAC's current status by adding new entries and removing the old ones with librarian support from OPAC terminals for optimum use, training and retraining the library to run OPAC, providing an alternative source of electricity by university management, providing additional computer and bibliothèque shouts This is supported by Vellucci (1996), who found out that library workers need be trained to work in the digital realm to satisfy today's requirements. It also supports Kuma & Ranjana's recommendations (2010) The library should have a Windows-based OPAC program with easy search options and incorporated into OPAC to optimize its online user assistance and coordinated quality training programs for the use of various techniques and strategies in order to gather document information in a wide variety of ways.

### **Conclusions**

The study result demonstrated that OPAC is a platform via which library customers can effectively and efficiently access and utilise the library's online resources. The findings revealed that most of the skills indicated are owned by the professional librarian. The key difficulties of OPAC as found in this study include a power failure and high purchase cost. 1. Librarians (professional and para-professional) should be trained to work in the digital environment, since this will effectively add to the service provided to users in the Nigerian University Library. The following is proposed.

2. The librarian must be exposed to skill acquisition platforms to gain the abilities needed to supply the OPACs.
3. Nigerian University Libraries should also try to teach and retrain its personnel in today's ICT professional trends in order to keep their counterparts in other developed countries shorter.
4. The Nigerian University Library should invest more in the development of human resources by financing its workers for academic careers outside Nigeria.



## References

- Adedibu, L. O. (2008). Catalogue use by science students at the University of Ilorin. *Libri*, 58, 58–62.
- Adigun, G. O., Salvador, O., Mutiat, Y., & Abdulazeez, O. B. (2011). An Assessment of Online Public Access Catalogue (OPAC) Utilization in Two Selected University Libraries in Lagos State, Nigeria. *The Information Manager*, 1&2.
- Aina, L. O. (2014). *Library and Information Science Text for Africa*. Third Word Information Services.
- Aliu, I. M., Aliu, G. I., & Emese, G. I. (2011). The Impact of Computerization of Library Operations on Library Services and Use: A Case Study of John Harris Library University of Benin. *Journal of Information and Knowledge Management*.
- Batool, H. S., & Ameen, K. (2012). *Status of Technological Competencies: A Case Study of University Librarians*. <http://www.fla.org/iv/ifla73/index.htm>
- Benny, L. (2015). Selection and acquisition of e-resources in academic libraries: Challenges. *International Journal of Digital Library Services*, 5(2), 124–137. [http://www.ijodls.in/.../vol-5,\\_issue-2.124-137](http://www.ijodls.in/.../vol-5,_issue-2.124-137)
- Butterfield, K. (2013). *Online Public Access Catalogs*. In M. A. Drake (Ed.) *Encyclopedia of Library and Information Science*. Marcel Dekkar, Inc.
- Coyle, K., & Hillmann, D. (2007). Resource Description and Access (RDA): Cataloging Rules for the 20th Century. *D-Lib*. <http://www.dlib.org/dlib/january07/coyle/01coyle.html>
- Csapo, N. (2011). Certification of Computer Literacy. *The Journal of Social Sciences*, 30(1), 46.
- Dyer, L. (2012). *The Role of the Cataloguer in the 21st Century* Title. <http://highvisibilitycataloguing.wordpress.com/professional-positive-advocacy/the-role-of-the-cataloguer-in-the-21st-century/>
- Fabunmi, O. M., & Asubiojo, B. O. (2013). *Awareness and use of online public access catalogue by students of Obafemi Awolowo University, Ile-Ife, Nigeria*. 922.
- Ihejirika, K. (2014). *Online Cataloguing and Use of online public access catalogues in selected federal university libraries in Southern Nigeria*. University of Nigeria, Nsukka, Nigeria.
- Kuma, S., & Ranjana, V. (2010). Online public access catalogue usage at Panjab University Library, Chandigarh. *Journal of Library and Information Technology*, 31(4), 302–310.
- Mastromatteo, M. J. (2009). *Exploring a categorization of Main Competencies for digital Librarians*. [http://eprints.rclis.org/16640/1/Exploring a Categorization of Main C ompentencies for Digital Librarians.pdf](http://eprints.rclis.org/16640/1/Exploring_a_Categorization_of_Main_Compentencies_for_Digital_Librarians.pdf)
- Mole, A. J. C. (2010). *Lecture on the organization of knowledge*. University of Nigeria, Nsukka.
- Mole, A. J. C., & Mesagan, F. O. (2017). Provision of Online Public Access Catalogs for Effective Utilization of Library Resources in Three University Libraries in Nigeria. *Library Collections, Acquisitions and Technical Services*, 40(1–2).
- Nwalo, K. I. N. (2005). *Subject cataloguing and computerization: Current trends*.
- Odunewu, A. O., & Aluko-Arowolo, T. K. (2018). Information Literacy, Computer Competency and Use of Electronic Resources by Olabisi Onabanjo Faculty Members. *Journal of Information Engineering and Applications*, 8(4). [www.iiste.org](http://www.iiste.org)
- Oketunji, I. (2009). Cataloguing out sourcing: issues and options. In J. et al Lasisi (Ed.), *Proceeding of Selected Papers of Cataloguing. Classification and Indexing Section of the Nigeria Library Association, 2007 – 2008* (p. 40). Nigerian Library Association.
- Okoroma, F. (2011). *The retrospective conversion of card catalogue: a case study of*



- Kenneth Dike library , University of Ibadan , Nigeria. 1(4), 105–113.*
- Omoike, A., & Oke, T. A. (2014). Online Public Access Catalogue [OPAC] In Nigerian Libraries: A Case Study of the Kenneth Dike Library and University Of Lagos Library. *Ozean Journal of Social Sciences*, 6(3).
- Thanuskodi, S. (2012). Use of online public access catalogue at Annamalai University of Lagos Library. *International Journal of Information Science*, 2(6). [www.unilag.ed.ng](http://www.unilag.ed.ng)
- Ukpebor, C. O. (2012). Restoring the Library OPAC towards Usability by Undergraduates Students of the University of Benin. *International Journal of Science and Technology*, 1(4).
- Utulu, S. C. A. (2007). Webometric Ranking and Nigerian Private Universities : A Case Study of Bells University of Technology , Ota. In *Issues in Informing Science & Information Technology* (pp. 1–12).
- Vellucci, L. S. (1996). Future catalogers: essential colleagues or anachronism? *College & Research Libraries*, 7, 422.