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Application of Information and Communication Technology (ICT) In Reference and Information Services in Academic Libraries in Gombe State

ABSTRACT

This study focused on the Application of information and Communication Technology (ICT) in Reference and Information Services in academic libraries in Gombe State was carried out using 130 respondents which comprised of 120 registered users (students) and 10 staff of Gombe state university library. Questionnaires as the only instrument for data collection, survey method was adapted for this study. The data collected was analyzed using percentages and frequencies, of the facilities, limited duration of use, denials to information into storage media, like diskettes and flash drives as some of the major threats and challenges of the optimal utilization of these facilities among the selected academic library under study' Reference sections, suggestions and recommendations were proffered such as: the bodies responsible for funding academic libraries should ensure that the amount budgeted for the library is completely utilized in developing the library, and not diverting it to other sections. The library on its own should also develop some fee-based electronic reference service as, selective dissemination of information, abstracting and indexing services to individuals etc. this will help them generate funds internally to augment what is being allocated to them for the acquisition of additional ICT facilities to enable larger number of users to access them; With the acquisition of more facilities, the duration of use by users should be extended so that they will have enough time to adequately utilize them; The library should embark on price reduction for the use of these ICT facilities so as to encourage higher patronage from clientele; Alternate source of power supply should be provided by the library to forestall problem of power outage since power Holding company of Nigeria (PHCN) is not reliable with power supply.

Keywords: *Information and Communication Technology; Reference Service; Information Service*

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1.1 Introduction

It has been observed that many scholars and authors have written at different times on information communication

technology (ICTs) and Reference service in Nigeria Academic Libraries, but none have concentrated on threats and challenges of ICT use in reference service as its main subject. It

has also been observed that there are differences in the definition and understanding of the term, reference service. This however could be said to reflect the varying ideas, perspectives, image and principals of the researchers.

Reference service, which literarily means the service or function performed by the reference section of the library, is not so easy to define. Some see it from literary perception of using reference materials in the library while others refer to it as a personal assistance given to persons in search of information either from within the library or outside the library.

Although the traditional reference service of using the printed reference sources is still being practiced, most reference libraries around the world are now attending to users' information needs via 'the use of information communication technologies (ICTs). The traditional desk-bound reference services are now being complemented by remote reference services. The evolution of the use of information communication technologies in reference services has made it possible for librarians to communicate with 'the users through E-mails, telephone cells, chats and other instant messaging software that help clients get their questions answered information needs satisfied from remote places without face to face interaction with the reference librarians seated behind the reference desk.

Achebe (2012) opined that reference and information service (RIS) is an aspect of library services in which contact between the reader and library materials is established through staff assistance, matching the user with the library materials which could be printed or electronic.

The roles of reference libraries have thus evolved in response to new societal and technological developments. They now use the new technologies to search for information and communicate the reference

library patrons on their information needs. Information communication technology (ICT) has indeed become a basic ingredient for information availability, accessibility and dissemination. The services of the reference librarian in the presence of ICT are no longer being restricted by the library opening hours just like the scope of information resources now also includes both printed and electronic resources.

The application of ICT to library services has generally been accepted by academic libraries as the most means of providing timely, accurate and efficient information services. Though it has been established that its application in libraries and specifically in reference services is of enormous advantage, most reference sections of academic libraries in Nigeria cannot still boast of having them in their libraries. In some libraries where are available, a lot of factors still pose as threats and challenges to its optimal utilization in the area of service delivery, especially due to the fact that it is a new innovation in Nigeria.

1.2 Statement of Problem

Reference services establish a contact between the librarian and the user, and this is a well-established and standard feature of any library regardless of the size of its collections or the type of clientele. Recently, there has been a paradigm shift from the traditional way of offering services, to electronic way. But this modern way of offering such services tend to be plagued by multiple of problem. At the heart of the problem lie the key challenges inherent in infrastructure provision, particularly the provision of bandwidth. The study pointed bandwidth for particular attention because of its importance to ICT planning and implementation. The greater the capacity, the more likely it is that downloads will be faster.

Very often, however bandwidth numbers represent theoretical or peak

performance; bottlenecks which slow down data transfer can occur as a result of network overload. Most libraries in Nigeria do not have sufficient bandwidth. It is expensive and in general bandwidth rates are at least ten times higher in Africa than they are in North America and can be up to 100 times more costly for broadband connections (Partnership for Higher Education in Africa, 2004).

Reference and Information Service is the most demanding of the entire library services and close to the patrons. Management of reference section in academic library is the most difficult task facing librarians in the world today. The reference materials of most academic libraries are outdated and irrelevant to meet demand of potential user. Undergraduate students in Nigerian universities are supposed to use the reference unit of the library, yet the expectation is far from real,

1.3 Objectives of the Study

The specific objectives of the study are:

- i. To find out the exact ICT facilities that are used in the reference section of the library.
- ii. To examine the efficiency of the ICT facilities in reference services.
- iii. Find out the threats and challenges of ICT facilities by the users.
- iv. To make recommendation based on the findings of the study.

2.1 Review of Related Literature

2.2 Library services

In meeting the objectives of the parent institution, the library designed a group of services to fulfill the institutional mission and goals which include reference services. According to Igwe and Onah (2013), the services of libraries and information centers are broadly categorized into technical services (such as collection development, cataloguing, classification, etc.) and readers' services,

which are those services that have direct impact on the users for the satisfaction of their information needs. This means that they are services directed at actively exploiting the collection of information resources in response to users' information requirements. Readers services include lending services, reference services, current awareness services (CAS), selective dissemination of information (SDI), indexing and abstracting services, interlibrary loan and document delivery services, resource sharing, and others. Arua (2014) opined that the lecturers require the service of a well-stocked (balanced) and up-to-date library for the preparation of their lectures and research while the students need it for class assignments, research, projects, term papers, and further readings.

The author further identified the following services to library registered users: loan services, reference services (both digital and print), interlibrary cooperation services, photocopy services, bibliographical services, binding services, lamination services, document printing services, computer services like internet browsing, CD-ROM search, and readers' advisory services, etc. Thus, the focus of this study is on e-reference services but before discussing e-reference services, a reference service is briefly looked into.

2.3 Reference services

The ultimate aim of any university library is to transmit knowledge to library users. It is said that information is an indispensable tool for survival. This purpose will only be achieved therefore, when the library resources are maximized, effectively and efficiently utilized. It is also true that only when the library and its resources are effectively, maximally, and efficiently utilized that the objectives of the library can be achieved. Reference services fulfill the functions of dissemination of information. Nonetheless,

reference services are likely to vary from one library to the other. Odiase, Unegbu and Haliso (2003) categorized reference service into two: retrospective searching; and current awareness services and selective dissemination of information.

Reference sources such as dictionaries, abstracts, encyclopedias, bibliographies, etc. are reference tools used to help patrons meet their information needs. Reference sources provide answers to a specific question, such as brief facts, statistics, and technical instructions; they give background information; or direct users to additional information sources. Simmonds and Andaleeb (2001) in Ademodi (2011) stated that given that the use of academic libraries is influenced most by a user's perceived familiarity with a library and its resources, it is the duty of the librarians to thoroughly acquaint users with their information resources and to teach them to profitably use these resources. Such orientation is not limited to the brick and mortar location but extends to remote use of resources as well.

2.4 Application of Information and Communication Technology in Reference Services

Information communication technology which most often is interchangeably used with the term "information technology" refers to the application of modern electronic and computing capabilities (technologies) to the creation and storage of meaningful and useful facts or data (information), and its transmission to users by various electronic media.

Ordinarily, information communication technology encompasses two (2) terms. These are;

1. **information technology**; This refers to the items or equipment (hardware) and computer program (software) that allows us to access, retrieve, organize,

manipulate and present information by electronic means. Personal computers, scanners and digital cameras fit into the hardware category while the database storage program and multimedia programs fit into the software category.

2. **Communication Technology**; this refers to the telecommunication equipment through which information can be sought, accessed and transferred. Example are telephones, facsimile, modem, etc. the bringing together of the above two components have brought about great improvement in the quantity and quality of library services to users and also an amazing reduction in the time of delivery.

In recent time, there has been an increased usage of ICT in provision of services in the library including the reference services. The fast growth and advancement of these ICTs has led to massive and progressive changes in the services offered and delivered to library clients. This is the reason Egunjobi and Awoyemi (2013) opined that the application of ICTs such as computers, internet, e-mail as well as other networked technologies, has opened up new and wider possibilities and opportunities to global library and information services and products which the traditional library cannot provide.

This is evident by the evolution and emergence of virtual, digital, or libraries without borders. Velmurugan (n.d.) also posited that changes in recent years have dramatically altered how information is accessed, stored and disseminated. Whereas information provision in academic libraries was previously based upon the collection of physical library materials, it is now increasingly the case that academic libraries are moving into the virtual arena, providing access to information on local, regional, national and international, overcoming the traditional barriers of time and space.

Iwhiwhu, Ruteyan and Eghwubare

(2010) noted that before the advent of ICTs, communication in the library it was done through books, newspapers, microforms, slides, etc. The use of telephones and computers led to the internet. They also note that the application of telecommunications to an automated library system can bring more efficiency to library services. Just as the Global System for Mobile Communication (GSM) has revolutionized the daily lives of individuals, so has it enhanced library operations, including the reference service? This implies that operations carried out manually and physically in the reference section of the library can be done electronically.

Lotts and Graves (2011) assert that reference services are becoming more mobile as technology allows librarians to expand service points and outreach opportunities. They note that the iPad is used primarily for roving reference by the reference and instruction librarians. When librarians are scheduled for a “roving reference” shift, they can check out an iPad from a locked staff drawer at the information Desk (Lotts & Graves, 2011). Oulton and Fisher (1995) remarked that reference plays an important role in reaching patrons (international students and general public). In this era of information and communication technologies, users can request a service via the internet, ask a question and send to the reference librarian by a text, request for a document to be scanned and sent to him/her, make a call to a reference librarian, and much more. Zickuhr, Rainie and Purcell (2013) found in their study that a notable share of Americans say they would embrace even wider uses of technology at libraries which include but are not limited to online research service allowing patrons to pose questions and get answers from the librarians.

Elahi and Islam (2014) affirmed that

mobile devices and application provide access to information in the comfort of people's homes and offices, using their cellular phones or personal digital assistance. Hence the authors established in their study of “Go fast, go with mobile ...” a satisfactory response of students on the status of mobile phone usage for library services.

Herman (2007) in Elahi and Islam (2014) noted that short message services (SMS) has become a popular way of communication particularly, among the younger generation. In the same vein, Maxymuk (2009) declared that text messaging offers a variety of ways to stay vital and visible to younger patrons with whom libraries most need to establish a relationship to ensure their future. Fox (2010) in Elahi and Islam (2014) expressed that the fabric of our lives has become interwoven with mobile technology as our day-to-day means of operation have, by necessity, become more mobile in the education context, factors such as the increasing role of distance education enhance the need for mobile technology. Libraries that add mobile technologies to their traditional services will not make them only available but also more relevant to their users. Mobile technologies can be used to present the following services: library websites, Short Message Services (SMS) reference, and Mobile Online Public Access Catalogue (MOPAC) (Murray, 2010).

Massey-Burzio (2002) in Malik and Mahmood (2014) however expressed that although libraries own authentic and credible resource, students computer use and internet connectivity often compromise quality for convenience. Malik and Mahmood (2014) stated that the literature reveals that a large number of students perceive Google as a solution to every problem despite the dilemma of irrelevant and unauthentic retrieval due to insufficient searching skills. Zanin Yost

(2004) submitted that having access to sophisticated technology and more information does not necessarily mean that users have better searching skills. Thus, this is where librarians come in to help users sieve relevant information from the myriad of information. Dunn and Morgan (2003) and Massey-Burzio (2002) in Malik and Mahmood also believe that this state of affairs gave libraries an impulse to reach users electronically where they are and provide quick access to relevant, credible and authentic sources. Therefore, taking these services as a challenge, librarians are moving aggressively towards designing new types of services, accessible virtually to remote users by incorporating modern technologies like fax, cellphone, e-mail, chatting and video conferencing.

According to Nicholas (2011) digital/electronic reference services may be divided into two main categories – asynchronous or delayed, and synchronous or real-time service. Asynchronous services include services such as web-based email, web form service, 'ask-a' service, and online pathfinders. These services share a number of similarities and disadvantages. Although they are easy to use, convenient and cheaper to implement, they are often criticized for their lack of interactivity and immediacy. The possibility of librarians conducting reference is either limited or non-existent. The other category of service, synchronous, is described as real-time communication between librarian and the patrons over the internet. The methods used to provide this type of service include chat and instant messaging (IM), real-time live web chat reference using web-based contact software, and 24/7 (24hours a day/7 days a week) collaboration. One main characteristic is that these services allow the patron to be online during the reference process. Added features of the web chat services and the cooperatives include co-browsing, electronic queuing of patrons,

sending of webpages, pre-defined text messaging, chat transfers among librarians, conferencing, complete transcript record of the entire session, and a knowledge base.

Nicholas (2011) further stated that recently, there has been an increased usage of Web 2.0 applications, mobile technologies, and virtual world in the provision of reference services. However, their application is dependent on the skills and knowledge of the reference librarians or the preferences of the librarians. Librarians are encouraged to assist patrons where they need help – in the stacks, at the OPAC terminal, and in the hallways. The roving librarian concept makes it possible for the librarian to answer patrons' call and at the same time be in contact with other librarian either on other floors or at other branches. Nicholas advised that reference should never be seen as a place; it is a service which can be provided from anywhere – at home or on the move.

Libraries, generally are regarded as the intellectual hub of academic institutions, the reference section of library is the 'heartbeat' that sustains the library and makes it indispensable. The success of the teaching, research and knowledge advancement function of the academic institutions is completely dependent on the reference section of the library, without which these function can never be achieved.

However, the services of the reference section of academic libraries can be deduced from the definition of the term, reference service according to Edeka (2000) is the personal assistance given by the libraries to individuals, in search of information for whatsoever purpose. Bunge (1999) and (1997) also defined reference service as personal assistant given by librarians to individual users who are in pursuit of information. Nwalo (2000) opines that reference work is all about the librarian's professional effort in making information and knowledge more readily available to those

who need them.

In effect, reference service simply means professional assistance given by the librarians in order to satisfy the information needs of users from either within the library or from outside of the library. From the above definitions, the services of the reference section of academic libraries include; provision of needed information, assistance in locating information materials both from within the library and outside of the library, provision of information in anticipation, etc.

According to the American library Association (ALA) Reference service division, there are two (2) recognizable essential types of reference services. These are direct and indirect services. Under directly reference services, personal provide directly to the user. It may take the form of library instruction or information service consists of preparation and development of indexes, bibliographies and other selection aids. Madu (2004) listed three (3) major areas of library operation that are particularly amenable to the application of information technology to include, housekeeping functions, compact disk Read Only Memory (CD-ROM) searching, and Networking.

Generally, information communication technologies application to

reference services is evidenced in the following areas; The reviews above have demonstrated that there is paucity of the literature on the influence of ICT on reference collections. Additionally, most studies that are somehow related were conducted outside Nigeria especially Asia and Europe. Examining the impact of ICT on reference collections and services in Nigeria academic libraries will make literature and data available that reflect the Nigeria academic libraries context. This could also serve as reference point to future relevant studies in Africa as a whole.

3.1 Research Methodology

Survey Research method was adapted for this study. The total population includes 130 registered users of the library made up of students from various schools, faculty members, postgraduate students, and community users. A questionnaire was used for data collection, which was distributed to the respondents in the library to ensure they are library users within the period of two weeks. Out of the 130 copies of the questionnaire distributed, 120 (70%) were duly completed and returned. The data collected was analyzed using frequencies and percentages. Presented in tables.

4.1 Result and Data Analysis

Table 1: Response on a available ICT facilities being used in the reference services of the library

ICT facilities	yes	No	No response	Total
CD-ROM	120 (100%)	-	-	120 (100%)
Facsimile	-	120 (100%)	-	120 (100%)
internet	120 (100%)	-	-	120 (100%)
printer	109 (90.83%)	11 (9.17%)	-	120 (100%)
computer	120 (100%)	-	-	120 (100%)
scanner	70(58.33%)	50 (41.66%)	-	120 (100%)
telephone	120 (100%)	-	-	120 (100%)

Response on available ICT facilities being used in the reference services of the library

Table 1 above indicates 100% presence of CD-ROM, Computer and internet connectivity in the library under study. A number of one hundred and nine being

98.83% respondents also accepted the presence and use of printer in the service delivery of the reference section of the library. On the other hand, some users denied the use and presence of facsimile, scanner and telephone in the library's service to its users.

Table 2: Response on Efficiency of ICT facilities

ICT Facilities	Not at All	Some times	regularly	Very regularly	No response	Total
CD-ROM	-	29(24.16%)	35(29.17%)	56(46.67%)	-	120 (100%)
Facsimile	120(100%)	-	-	-	-	120 (100%)
Internet	5(4.17%)	20(16.67%)	40(33.33%)	55(45.83%)	-	120 (100%)
Printer	30(14.9%)	24(4.6%)	47(39.17%)	14(11.67%)	5(4.17%)	120 (100%)
Scanner	87(72.50%)	33(27.50%)	-	-	-	120(100%)
Telephone	-	15 (12.50%)	90(75%)	-	15(12.50%)	120 (100%)

Response on Efficiency of ICT facilities

The above table gives the sum total of regular and very regularly response for CD-ROM as 35% and 56.5% respectively. Internet received very regularly response 45.83%. Printers are disclosed to be performing very regularly by 39.17% of the respondents while 72.50% declared its efficiency to be just 'regular'. While the remaining respondents' response for telephone indicated, they

received 'not efficient at all' response of 75% respectively while the remaining respondents did not give any response.

From observation, the researcher was able to find out that the indifferent responses from respondents on facilities like facsimile, scanner and telephone was due to the fact that they (Respondents) have never seen nor used these facilities in the service delivery of the library.

Table 3: Response on threats and challenge to optimal utilization of the facilities

S/N	Challenges	SD	D	A	SA	No response	Total
1.	Inaccessibility to these facilities	-	7 5.83%	50 41.67%	57 47.50%	6 5%	120 100%
2.	Inadequate number of these Facilities	9 7.50%	3 2.50%	76 63.33%	32 26.67%	-	120 100%
3.	Skills to use these facilities	27 22.50%	13 10.83%	40 33.33%	40 33.33%	-	120 100%
4.	Irregular power supply	-	3 2.50%	76 63.33%	41 34.17%	-	120 100%
5.	Duration of use is limited	-	-	37 30.83%	27 22.50%	56 46.67%	120 100%
6.	Cost charged are expensive	-	33 27.50%	48 9.1%	39 32.50%	-	120 100%
7.	Printing costs are expensive	-	19 15.83%	59 49.17%	42 35%	-	120 100%
8.	Saving information into storage media is not allowed	-	15 12.50%	86 71.67%	19 15.83%	-	120 100%

Key; SD=strongly disagree; D=disagree; A=agree and SA=strongly agree.

Response on threats and challenge to optimal utilization of the facilities

The above table reveals that the major threats to the use of these ICT facilities, as generally accepted by the entire study population, are in adequate number of the facilities as well as not being allowed to save information into storage media. Limited duration for use was accepted by of the population as another threat and challenge to the facilities usage. Inaccessibility of these facilities was equally attested to by some of respondents as another factor challenging their use. Printing cost was also indicated as another factor by few members of the study population.

Possible solution to the threats and challenges

The respondents were also asked to suggest possible solution to the various threats and challenges that inhibit the optimal utilization of these ICT facilities in the library. Their suggestions are as follows;

- Users should be allowed to save information into storage medium such as flash drive.
- The library authorities in the concerned institutions should provide alternate source of power supply for these facilities.
- Printing cost should be reduced to three naira per page.

Also, from interaction with the librarians, apart from the above listed inhibitors, lack of adequate training on the of the library personnel is also a serious problem inhibiting adequate utilization of these facilities. The researcher was made to understand that most of the personnel in the reference section of the library lack the skill to efficiently utilize these facilities hence skilful staff members from other section of the library (outside reference section) manage this

facilities.

Conclusion

There is no doubt that reference sections of academic libraries are the power generating house of the academic libraries without which the libraries without which the library will remain irrelevant in today's information age.

The statement also, that ICT application to reference services guarantees effective and efficient services unquestionable. At the same time, it is not also surprising that a lot of factors stand as threats and challenges to the efficient and effective use of ICT facilities in reference section of academic library especially, as the use of these facilities are new innovations in Nigeria libraries. In the light of these, if the libraries must live to continually fulfill their primary goal which is, the satisfaction of information needs of users, the following recommendations means to check these challenges should be considered and implemented.

Recommendations

1. The bodies responsible for funding academic libraries should ensure that the amount budgeted for the library is completely utilized in developing the library, and not diverting it to other sections. The library on its own should also develop some fee-based electronic reference service as, selective dissemination of information, abstracting and indexing services to individuals etc. this will help them generate funds internally to augment what is being allocated to them for the acquisition of additional ICT facilities to enable larger number of users to access them.
2. With the acquisition of more facilities, the duration of use by users should be extended so that they will have enough

- time to adequately utilize them.
3. The library should embark on price reduction for the use of these ICT facilities so as to encourage higher patronage from clientele.
 4. Alternate source of power supply should be provided by the library to forestall problem of power outage since power Holding company of Nigeria (PHCN) is not reliable with power supply.

References

- Ademodi, O. (2011). Reference service in academic libraries: Accommodation of international students. *Library Philosophy and Practice* (e-journal).
- Arua, U. (2014). Access and use of Nigerian academic libraries: A case study. In Arua, U., Uzuegbu, C.P.
- Bunge, A.C (1999). From past – present to future challenge of Contemporary reference service. New York; Haworth Information Press.
- Dunn, K. & Morgan, A. (2003). Going where the students are. *The Reference Librarian*, 38(79), 201 – 213.
- Edoka, B.E (2000) Introduction to Library Science Onitsha; Palma Publishing and Links Company Limited, P 14.15.133.142, 151
- Egunjobi, R.A. & Awoyemi, R.A. (2013). Provision of electronic information services in academic libraries. In Issa A.O., Igwe, K.N. and Uzuegbu, C.P. (2013). Provision of library and information services to users in the era of globalization.
- Elahi, md. H. and Islam, md. S. (2014). Go fast, go with mobile: Students perception on implementing mobile based library services at Dhaka University Library. *Library*
- Fox, R. (2010). Library to go. *OCLC Systems & Services* (online), 26(1), 8-13. Available at:
- Herman, S. (2007). SMS reference: Keeping up with your clients. *The Electronic Library* (online) 25(4), 401 – 408. Available at: <http://10.1108/02640470710779817>. Accessed April 5, 2015.
- Igwe, K.N. and Onah, F.A. (2013). Issues and concerns in service delivery system of libraries to users in the globalization era. In Issa, A.O., Igwe, K.N. and Uzuegbu, C.P. *Provision of library and information services to users in the era of globalization*. Lagos: Waltodanny Visual Concept. Pp. 20 – 41.
- Iwhiwhu, B.E., Ruteyan, J. O. and Eghwubare, A. (2010). Mobile phones for library services:
- Lotts, M. and Graves, S. (2011). Using the iPad for reference services: Librarians go mobile. *College and Research Libraries News* 72(4), 217 – 220.
- Madu, E.C (2004) (ed) Technology for Information Management and Services Ibadan revised Publications p. 1
- Malik, A. and Mahmood, K. (2014). Readiness for digital reference service (DRS) in university libraries: a survey in the Punjab, Pakistan. *Information Development* (30), 181 – 188.
- Massey-Burzio, V. (2002). Facing the competition: the critical issue of

- reference service. *College and Research Library News* 63(11) 774 - 775.
- Maxymuk, J. (2009). Library texts. *The Bottom Line: Managing Library Finance*, (online) 22(1), 24-26. Available at: <http://dx.doi.org/10.1108/08880450910955413>. Accessed April, 2, 2015.
- Murray, L. (2010). Libraries “like to move it, move it”. *Reference Services Review* (online), 38(2), 233-249. Available at: <http://dx.doi.org/10.1108/00907321011045007>. Accessed April 2, 2015.
- Nicholas, P. (2011). Creating a digital reference agenda for academic libraries in Jamaica: An exploratory case study. *Libri* 61, 258 – 280.
- Nwalo, K.I.N. (2000). Reference services; Ibadan external studies. *Programmed Series. Ibadan University of Ibadan centre for External Studies* p. 42.
- Odiase, J. O. U., Unegbu, V. E. and Haliso, Y. L. (2001). Introduction to the use of libraries and information sources. Benin City: Nationwide Publications.
- Oulton, T. and Fisher, S. (1995). Using libraries. *Library Management*, 16(5), 20. *Philosophy and Practice* (e-journal). <http://digitalcommons.unl.edu/libphilprac/1197>. Accessed April 29, 2015.
- Zanin-Yost, A. (2004). Digital reference: what the past has taught us and what the future will hold. *Library Philosophy and Practice*, 7(1), 1 – 13. <http://digitalcommons.unl.edu/libphilprac>. Accessed April 22, 2015.
- Zickuhr, K., Raine, L. and Purcell, K. (2013). Library services in the digital age. Pew Research Center Internet & American Life. <http://libraries.pewinternet.org>. Accessed April 22, 2015.