Open Access Resources for Academic Libraries in Africa: Selection and Evaluation

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Abstract:

The abundance of open access resources supports scholarly communication and research within academic libraries throughout the continent of Africa. The pursuit and use of open access resources among African universities narrows the information divide between developed and less developed countries and enables African based information professionals to fulfil the information needs of their researchers and students. The lack of quality resources lead to low research output. Weak and unreliable technological capacities generally found at African academic institutions challenge librarians to increase academic research by providing free access to valid, current and scholarly information found on the internet.

The explosive growth and scope of open access resources continues to make sharing of scholarly resources easier and cheaper, however, for the librarian it means increased scrutiny and thorough assessment of sources to ensure high quality and valid information for users. Consultation with faculty colleagues and subject experts becomes even more important in determining which resources are reliable.

A preliminary examination of library websites of several African university libraries indicates a strong presence of open access resources. A subsequent survey of African university libraries confirms the important role of open access resources in academic collection development and examines the criteria used to select OA resources that are relevant and reputable.
Free or inexpensive access to full text scholarly and authoritative content, ease of navigation and integrated searching are basic features academic librarians look for in selecting open access resources. As discovered in the survey such attributes represent a small part of the assessment

process conducted by the academic librarian. Relevancy, content consistency, and perpetuity are also major concerns in OA resource selection. This paper will examine the growth of open access (OA) resource use in African university libraries in spite of technological shortcomings; how librarians assess OA material and the implications for collection development at African academic institutions.

Introduction

The Open Access (OA) Movement was once perceived as an alternative to traditional models of scholarly publishing. Now a major contender, the OA philosophy has resulted in more publishing opportunities and more access to scholarly content throughout the world by facilitating the flow of information between industrialized and less industrialized nations. As subscription costs for print and commercial online resources escalate African academic librarians are--like their colleagues worldwide--looking to the internet for relevant and reliable open access alternatives to supplement library collections and they are finding them by the thousands.

Open Access represents the classic way of thinking about information and how it is shared, yet it is a novel approach for researchers and librarians who are accustomed to viewing information as a commodity that is meant to be purchased. Twelve years ago, the concept of 'Open Access' developed at the Budapest Open Access Initiative. 'Open Access' is defined as "[the] free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself" (BOAI, 2002).

Likewise, the Bethesda Statement on Open Access Publishing (2003) defines open access, where "The author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, worldwide, perpetual right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship as well as the right to make small numbers of printed copies for their personal use".

The term *open access* introduced two types of access: Green and Gold (Poynder, 2010). Today, there are many variations of the Green OA and Gold OA models. Simply defined, Green OA refers to self-archiving of scholarly communications where authors provide free access to their own published works in an institutional repository or digital collection. Gold OA are those academic articles in an open access journal (Bosman, 2013). Both types of OA materials are used by researchers in African academic libraries. The establishment of institutional repositories (IRs) at African universities to preserve African cultural traditions, publish articles and other research is a major goal of academic librarians at African institutions. However, university administrators and government funders must become convinced of the value of the internet and right of information access for all citizens.

Inadequate funding, poor technology infrastructure, the high cost of information communication technologies and scarcity of professional development opportunities are known challenges faced by African academic libraries. Other factors such as censorship, shipping cost and time, and lack of adequate library buildings also play a major role in preventing African libraries establishing strong internet presence (Haliso, 2011, Anunobi, 2013, Krubu and Osawaru, 2011).

In spite of monetary and technological shortcomings, there is growing evidence of collaboration among Africa-based information professionals, university administrators, government and non-governmental entities to improve and expand internet access. For example, the Alliance for Affordable Internet in Abuja, Nigeria launched a program to reduce "artificially high internet prices in developing countries". The Alliance vows to reduce access prices to the target of below 5 percent as set by the UN Broadband Commission and expand internet service to 12 countries by 2015. The Alliance, formed by the World Wide Web Foundation, includes representatives from governmental and civic organizations in developed and developing countries that share a common goal of universal access (Cyber Media Ltd., 2013).

A vastly diverse continent, Africa has over 50 different countries, thousands of cultural traditions and languages which represent great advantage and potential in electronic collection development. A robust technological infrastructure is critical to economic growth and sustainability in Africa. Unfortunately, internet access continues to be weak, inconsistent and expensive. Access to digital research material is easier in some African countries than others. Academic institutions in southern and northern Africa appear to have more stable technical infrastructure than those in the western and Sub-Saharan region of the continent (Masakazi, 2009, Gyamfi, 2005).

African institutions and governments are becoming more aware of the need to increase electronic access within higher education, business, industry and agriculture (Hultman, 2013). Open Access resources are available from all parts of the world and in a variety of languages. Library professionals and researchers at African universities actively use OA resources and contribute research, African cultural heritage and language content for world-wide use thereby fully participating in the OA movement.

Institutional repositories (IRs) are defined as online archive or digital collection of the intellectual output of research institution or university. The institutional repository (IRs) is viewed the most efficient way to disseminate scholarly research material produced by campus-based/local researchers. Universities in southern and eastern Africa have an advantage over those institutions in the western region of Africa. University IRs enables campus researchers to participate as producers as well as consumers of scholarly communications available through OA channels (Gyamfi, 2005). More significantly, IRs can deliver local and global access to scholarly output from African-based researchers. Still in the developmental stage within most African academic libraries, IRs has the potential to increase the availability of African-based research, the visibility of the author who publishes works in the institutional repository, and enhance the reputation of the institution (Ezeani & Ezema, 2011). The use of OA resources and the evidence of IR development in West Africa represent increasing participation in the Open Access movement. However, continued expansion of African educational institutions is dependent upon the academic institution's

commitment to steady development and stabilization of internet access and the promotion of technical skills among library professionals (Anunobi, 2013).

Recent Studies

A comparative study of citation use in the sciences report that articles that had one or more researchers from an African country cited works from Open Access (OA) domain twice as often when compared to articles that did not have an author from Africa (Taha & Kraus, 2013). Similar findings noted in a study examining the adoption of OA for scholarly communication in Tanzanian public universities, find that 62% of researchers simply accessed free online content more than those (20%) who also disseminated their scholarship through OA (Dulle, Minish-Majanaja, & Cloete, 2010).

Matheka, et al., (2014) argued that accessing up to date academic research constitute a great challenge to the majority of researchers in low- and middle-income countries (LMICs) especially in Africa, where journal subscriptions or one-time access fees are cost-prohibitive. Open access (OA) publishing can help in removing this barrier by allowing unrestricted access to scientific and scholarly information to researchers all over the globe. A recent survey by Kusekwa & Mushowani, (2014) on current state of open access (OA) initiatives in Zimbabwean universities found that "most universities in Zimbabwe are going to have institutional repositories that promote open access to information and most institutions in Zimbabwe are already working on putting open access policies in place in a bid to promote open access". The findings of a study conducted on the management of local content materials for open access institutional repositories in Nigerian universities found that an increase in the visibility of the authors, promotion of university ranking and efficient dissemination of research findings were among the benefits of publishing in institutional repositories (Ezema, 2013).

Survey of Open Access (OA) Resources use in African Academic Libraries

Methodology

While there are numerous studies that focus on the many challenges of OA use in African universities, few investigate the actual use of OA content among African academic libraries. Fewer still, are studies focusing on how librarians evaluate and select OA digital resources. A survey of academic librarians in African universities questionnaire was designed to collect data to gain insight about how selection and use of OA resources is performed. The instrument consisted of 10 questions that asked librarians about collection development criteria and tools used in OA selection. Open-ended responses and comment boxes were used to capture information the respondent was willing to share.
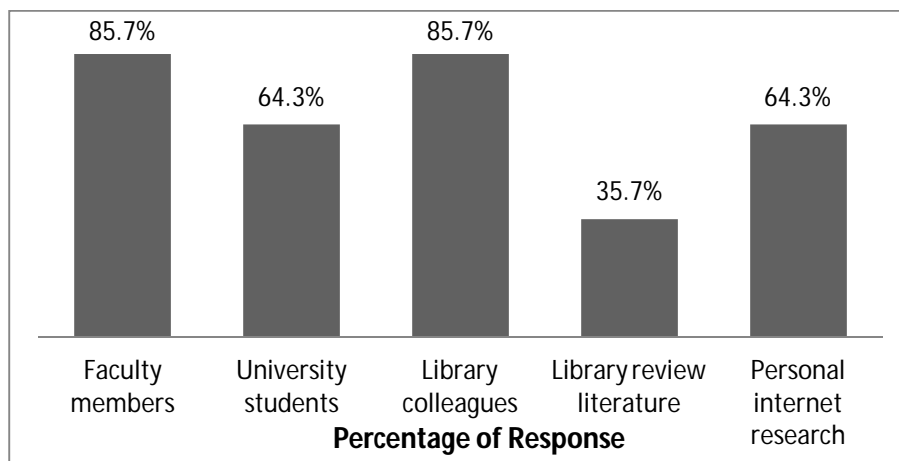
The survey was distributed electronically to 40 academic librarians and 4 national library organizations in Nigeria, Ghana, Tanzania, Zimbabwe, Botswana and South Africa. The sample was randomly selected from websites, university library web pages and press releases. The web-based popular survey program, "*SurveyMonkey*" was used to prepare and disseminate the survey via link and it was delivered by email. Participation in the survey was voluntary and anonymous. No personal data was collected in the survey.

Results

There was a 15% response rate to the questionnaire and 85% of the 14 respondents reported 'high and moderate' use of OA resources among both faculty and student researchers within African universities. Faculty was considered to be top users of OA resources in two libraries while the remaining 12 respondents reported that OA use among students and faculty was considered to be 'moderate' or 'high'.
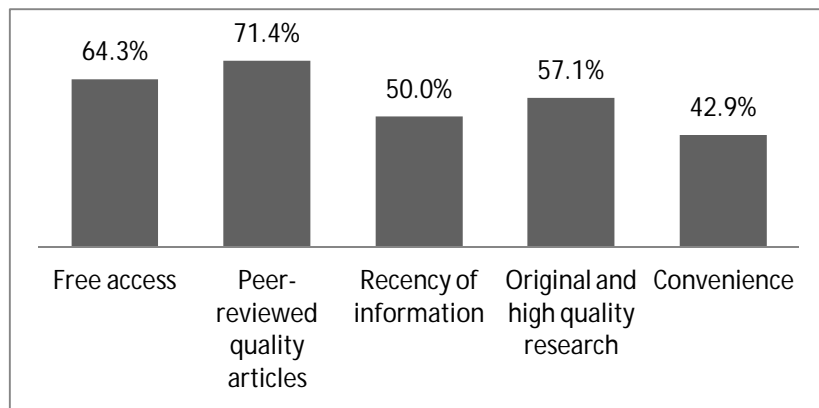
One of the basic responsibilities of academic librarianship is to provide researchers access to current, high quality materials. In most Africa university libraries this often means locating free electronic peer-reviewed material--if internet service is available. When assessing OA sources librarians use standard collection development principles to determine the quality of the resource. Librarians routinely accept recommendations from faculty to satisfy the information needs of users and build a relevant collection. The survey affirms that faculty expertise is valued by libraries in OA collection development and further illustrates that librarians value input from library colleagues more so than from library literature, students, or their own personal internet research (Chart 1).

CHART 1: When reviewing open access resources I consider recommendations from...
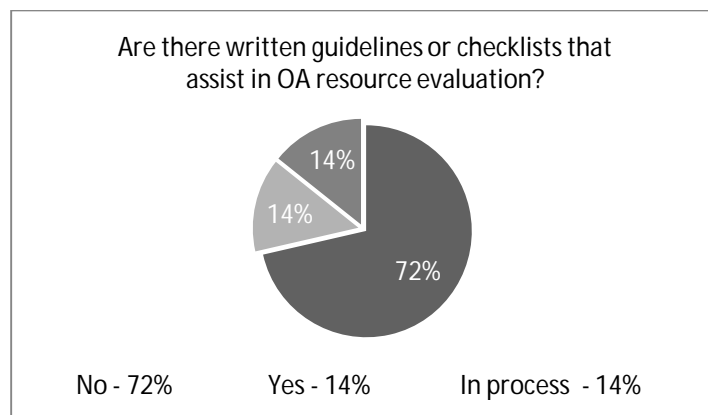

The selection of OA resources requires thorough examination of each characteristic and special feature. Standard collection development principles are suitable for evaluating OA resources. The survey found that 71% of the responses ranked 'peer review' and 'authority of source' as essential characteristics in the selection process. Free access to information is attractive; however, the collection of original research and high quality scholarship is the goal of academic librarians (57.1%). Long-term availability and relevancy of OA resources are also significant factors for librarians when assessing content value (Chart 2).

CHART 2: What features are evaluated when you review OA resources?

Surprisingly, the majority of the respondents (72%) reported that no written policy or guidelines exist for OA resource selection. Of the remaining libraries, 14% have written collection policies governing the OA resource selection and 14% reported to have policies "in process". When asked which collection development tools are used in evaluation, it was found that librarians use established in-house guidelines, questionnaires, whether or not a source is included in the Directory of Open Access Journals (DOAJ), the Directory of Open Access Books (DOAB) or indexed in a commercial database subscribed to by their library.

CHART 3: Written guidelines for OA resource evaluation?

Promotion of OA use in African libraries is considered by all respondents to be essential for the growth of research, the continuing relevance of library services and reputation of the institution. Collaboration of library professionals with university, commercial or government agencies is sought to improve electronic access at the university level. Eighty per cent of the respondents reported that they are working with national organizations or regional consortiums to promote OA use among researchers in Africa. The majority of the respondents affirmed than their library have plans to establish institutional repositories within 2-5 years. Three respondents reported to have active repositories at their institution that are managed by the university library staff.

Discussion

Evaluation of material in the OA domain requires librarians to know what to look for when examining such sources. Many university libraries have posted extensive collection development policies and excellent guides that can assist in the creation of checklists to help determine what resources are valid and those that are of poor quality and questionable origins. Canada's Ryerson University Library and Archives provides an excellent list of questions and tips for evaluating OA resources. Of particular importance to the evaluator are journal metrics, the peer review standard and article acceptance procedure (Ryerson University Library and Archives, 2014). The benefits of OA to academicians is clearly defined on the Stellenbosch University Library website and are useful to academic librarians considering writing their own OA collection guidelines or policies (Stellenbosch University Library and Information Services, 2011).

Membership or affiliation with well-known OA organizations and directories such as Open Access Scholarly Publishing Association (OASPA) the Directory of Open Access Journals (DOAJ) and the Director of Open Access Books (DOAJ) indicates that the resource is committed to publishing and disseminating high quality research. Although, Jeffrey Beall's List is controversial the website should be consulted as part of a thorough evaluation process (Beall, 2009). Consultation with library colleagues and faculty subject specialists can be helpful in decision-making related to the validity of OA resources under review. The inspection of editorial board membership, research affiliation and the presence of articles by recognized experts are also important factors to examine. These and other pertinent questions are readily available on countless library and OA resource websites. These tools combined with traditional collection development principles can be used to fulfil the resource needs of most academic libraries.

Conclusion

Better understanding of the benefits of Open Access (OA) among researchers and university administrators will lead to widespread advocacy for increased financial support for the expansion of information and communication technology infrastructure. The desire of faculty to have their research published in the OA domain will continue to promote OA use and IR development. Collaborative Initiatives to launch IRs will steadily improve scholarly access and dissemination.

Additionally, the role of librarians will also change to reflect new responsibilities related to scholarly publishing and electronic information dissemination by African universities. With the investment of universities, governments and other stake holders, the link between information access and continuing development becomes less abstract and more of a reality.

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