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**Integration of Open Access Agenda in Research and Civic
Literacy**

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Abstract

Since the day of the first printing press, i.e. the famous Gutenberg Press in 1440, which lay the foundation for mass publication, publications have continued to proliferate and have surpassed the wildest dreams of the Gutenberg's inventors with the internet, arguably the greatest revolution (in the infosphere) of all time, and Google taking the lead in Open Access (OA). As a result of the internet, the publishing industry is increasingly taking on a new shape where Open Access plays a crucial role for increased information access to some of the remotest parts of the world that exist in Africa, and elsewhere, that would not have had access to information –

freely - as they do today. Thus, the publishing industry is swiftly moving away from print/traditional publishing to electronic publishing and from the control of large, traditional publishing firms to small, private or personal publishing initiatives and activities, introducing new, but pleasant, challenges such as those originating from social media. In this paper, we examine Open Access (OA) within the context of civic literacy as a whole and, in particular, in Africa . Our work is based on personal knowledge and experiences, observations and desk research.

Keywords. Open Access, civic literacy, information literacy, Africa

Introduction

Publishing is popularly known to be the process of making information and knowledge public or known by distributing and circulating that knowledge or information beyond the jurisdiction of its origination or source, largely through the publication of content in print and electronic format , but also in other formats such as through the Word of Mouth (WOM). A large number of general and scholarly publications now occur in both print and electronic format and web based publications- the life line for Open Access(OA)- are becoming increasingly popular, particularly among the academic community, for the rapid dissemination of research results. Scholarly publishing/publication differs from other types of publication in their characteristics. Largely, they are conveyors of scientific research output, but they can be used alongside other publications for civic literacy. In this paper, we examine Open Access (OA) within the context of civic literacy as a whole and, in particular, in Africa . The paper is divided into four sections: i) Conceptualising and contextualising Open Access and civic literacy, ii) The role OA plays in civic literacy, (iii) Challenges of OA and civic literacy, and, (iv) Open Access Agenda in civic literacy in Africa. Our work is based on personal knowledge and experiences, observations and desk research.

2. Conceptualising and contextualising Open Access and civic literacy

Fundamentally, Open Access should be informed by human rights as those captured in the Universal Declaration of Human Rights in 1948¹. Thus, in the Universal Declaration of Human Rights(UDHR), which provides common standards for all nations and information workers whether from Africa or other parts of the world, Article 19 stipulates that: *“Everyone has the right to*

¹ See <http://www.un.org/overview/rights.html>

freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers”(UDHR 1948). Recognizing such fundamental rights would mean defining Open Access from an inclusive paradigm. That is perhaps why, we assume , OA in the Budapest Open Access Initiative is defined as “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. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited” (BOAI 2002). Equally elaborate is the definition of Open Access by IFLA in the IFLA Statement on Open Access to Scholarly Literature and Research Documentation (IFLA 2003), IFLA, 2003): “IFLA (the International Federation of Library Associations and Institutions) is committed to ensuring the widest possible access to information for all peoples in accordance with the principles expressed in the Glasgow Declaration on Libraries, Information Services and Intellectual Freedom.”

In the IFLA document, an Open Access document must meet the following two conditions:

1. “The author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, world-wide, perpetual (for the lifetime of the applicable copyright) right of access to, and a licence to copy, use, distribute, perform and display the work publicly and to make and distribute derivative works in any digital medium for any reasonable purpose, subject to proper attribution of authorship, as well as the right to make small numbers of printed copies for their personal use.
2. A complete version of the work and all supplemental materials, including a copy of the permission, as stated above, must be presented in a suitable standard electronic format and deposited immediately upon initial publication in at least one online repository that is supported by an academic institution, scholarly society, government agency, or other well-established organisation that seeks to enable Open Access, unrestricted distribution, interoperability, and long-term archiving” .This definition is similar, in most cases, to what is in the Berlin declaration (2003) .

Open Access initiatives have evolved rapidly in the recent past. Peter Suber (2007) provides a useful ‘Timeline of the Open Access Movement’ that lists

(528 events from 1966-2007) what he calls 'landmark events' from 1966 to 2007. Although there is significant contribution to the timeline by libraries, universities, journal publishers and professional organisations and societies, African initiatives are almost non-existent.

Open Access agenda and civic literacy.

The literacy landscape has grown and extended massively in recent years as more and more technology driven literacy's (such as computer literacy, media literacy, multimedia literacy) continue to surface. Civic literacy is one of the literacy's that responsible citizens are supposed to or expected to possess, but do not necessarily have. We argue that civic literacy succeeds when there is sound education, literacy, information literacy and information access – that Open Access increasingly provides - in the society. UNESCO defines literacy as the "ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts" (UNESCO, 2004), but notes that such literacy "involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society" (UNESCO 2004). Closely linked to this definition is that of information literacy. Thus, "information literacy is a set of abilities requiring individuals to recognise when information is needed and have the ability to locate, process, and use effectively the needed information. Information literacy forms the basis for lifelong learning" (Association of College and Research Libraries 2000:2-3). Essentially 'new literacy's' are becoming increasingly essential for civic literacy as well and, therefore, should be given attention. On the other hand, civic literacy "embodies the knowledge and skills that we need for effective participation in the community, government, and politics" (Civic Literacy n.d). Thus, civic literacy enables a person/citizen to know their responsibilities and rights in the society and thereby to participate knowingly and responsibly in the domestic, community, political, economic, social and technological life/affairs of their country or living environment. Logically, the tool for such literacy would be education, at least functional literacy, information literacy and new literacy's. Most countries are investing heavily- most often unconsciously - into civic literacy through the education of their citizens and improvement of literacy, which is the backbone of civic literacy. Some countries, such as the United States - and other democratic countries worldwide in the developed world- give civic literacy greater attention (see Enlightened Citizenship 2011) for enabling an enlightened citizenry. However, even such countries report very disturbing challenges to literacy as a whole, such as illiteracy. For example, a study conducted by National Endowment for Arts in the United States in 2008 reports that 46.7% of adult Americans did not read a book not required for

work or school during 2002. One of the questions posed in that research, which is fundamental, is whether more schooling enables civic literacy? We would ask, does more democracy and better literacy creates civic literacy?

Most African countries are still battling with democracy where its interpretation and understanding is not always “of the people, by the people and for the people”, as Franklin D. Roosevelt, then Governor of New York in 1930, wanted us to understand. Quite often, democracy is designed and applied only in limited circumstances where it suits the interests of politicians and their local and international allies (Ocholla, 2011). However, the increased level of literacy in Africa (Table 1) brings hope to civic literacy.

Table 1: Adult literacy rates and gross national income per capita in African and Eastern Mediterranean countries*

Country	Adult literacy rate, %	Gross national income per capita, \$	Country	Adult literacy rate, %	Gross national income per capita, \$
Africa					
Seychelles	91.8	15 940	Rwanda	64.9	1 320
Equatorial Guinea	87.0	7 580	Malawi	64.1	650
Namibia	85.0	7 910	Burundi	59.3	640
Mauritius	84.4	12 450	Ghana	57.9	2 370
South Africa	82.4	12 120	Togo	53.2	1 550
Lesotho	82.2	3 410	Mauritania	51.2	2 150
Botswana	81.2	10 250	Côte d'Ivoire	48.7	1 490
Swaziland	79.6	5 190	Central African Republic	48.6	1 140
Cape Verde	78.0	6 000	Ethiopia	45.2	1 000
Kenya	73.6	1 170	Senegal	39.3	1 770
Madagascar	70.7	880	Sierra Leone	35.1	780
Algeria	69.9	6 770	Benin	34.7	1 110
United Republic of Tanzania	69.4	950	Guinea	29.5	2 240
Zambia	68.0	2 150	Niger	28.7	800
Cameroon	67.9	2 210	Chad	25.7	1 470
Angola	67.4		Burkina Faso	21.8	1 220
Democratic Republic of the Congo	67.2	720	Mali	19.0	1 000
Uganda	66.8				
Eastern Mediterranean					
Kuwait	93.3	24 010	Tunisia	74.3	7 900
Jordan	89.9	5 280	Iraq	74.1	NA
Qatar	89.0	NA	Egypt	71.4	4 440
Bahrain	86.5	21 290	Sudan	60.9	2 000
Oman	81.4	14 680	Yemen	53.0	920
Syria	79.6	3 740	Morocco	52.3	4 360
Saudi Arabia	79.4	14 740	Pakistan	49.9	2 350
Iran	77.0	8 050	Afghanistan	28.1	NA

Note: NA = not available.

*Source: World Health Organization (*World Health Statistics 2007* and *The World Health Report, 2006 Edition*). Data are the most recently available data reported for adult literacy (2004) and gross national income (2005). Gross national income is reported in international dollars.

3. The role of stakeholders in enabling Open Access in civic literacy

3.1. Libraries

Libraries have a major role to play for enabling Open Access (Mutula, 2011; Emprints.org, n.d, Onyancha, 2007). Essentially, emprints (n.d) recommend: collaboration between stakeholders, including libraries, where the institutions' or universities' roles could be installing an OAI-compliant EPrint Archive; encouraging staff to deposit their scholarly work, both pre-prints and post-prints, on the departmental or institutional repositories; and training digital librarians who may assist as 'proxies' in self-archiving. Other initiatives (see also Mutula, 2011) suggest that libraries should provide access support, digitize print collections and develop collections for Open Access, provide enabling infrastructure, provide digital and Open Access literacy, develop institutional repositories, network with stakeholders, provide copyright and intellectual property literacy and provide leadership for OA. While libraries can initiate and provide leadership for OA, full cooperation and collaboration with relevant stakeholders is vital for Open Access success.

3.2. Institutions' or universities' roles

The major roles of institutions are installing an OAI-compliant EPrint Archive, encouraging staff to deposit their scholarly work, both pre-prints and post-prints on the departmental or institutional repositories, training digital librarians who may assist as 'proxies' in self-archiving, developing self-archiving/ Open Access policy (see Suber 2007).

3.3. Authors

Authors publish to be read and are important for Open Access and civic literacy. Essentially, they should create knowledge, publish in OA publications, ensure that contractual agreements with publishers are in favour of OA, launch and support OA initiatives and publications, and deposit publications in Open Access spaces.

4. Challenges of Open Access and civic literacy

The challenges facing Open Access in Africa are numerous. Britz (2009) mentions infrastructure, telecommunication costs, censorship, language, illiteracy and ignorance or misconception as some of them and these challenges adversely affect civic literacy.

4.1. Electronic Publishing.

Electronic publishing is an activity and a process of publishing scholarly or research work, for this matter, in digital format, largely on the web by an individual or organization for private or public access and use. Digitization is quite important for Open Access. Many definitions of the concept of 'digitisation' exist (Mutula, 2009). It can be a "process of making a digital copy or recording of something that was originally analogue"(UTSeScholarship 2009), "the process of scanning records and archives to produce 'electronic photographs' or digital images"(The Archive-Skills consultancy , 2001), the "conversion of analogue information, in any form (text, photographs, voice, etc), to digital form with suitable electronic devices (such as a scanner or specialized computer chips) so that the information can be processed, stored, and transmitted through digital circuits, equipment, and networks"(Whatis?.com 2008). Generally, digitization refers to the transformation of print records or documents into digital or electronic form, largely for easy access and use in the web environment. Common among these definitions is the conversion of an existing analogue document to a digital document, by means of an electronic device. The process of digitization offers several benefits for an organisation, Open Access and civic literacy initiatives. Among them are: enhanced access, supporting preservation, enhancing the prestige of the institution by increasing its visibility and supports research and education, largely in networked digitized collections, as this creates a dynamic reading and scholarly environment allowing researchers and the public to discover, annotate, compare, refer, sample, illustrate and represent documents (Hughes 2004). Also, it demonstrates the richness and potential of existing collections (Digitisation Working Group n.d.). Digitization is a major library activity for enhancing Open Access.

4.2. Self- Archiving

Self-archiving, that involves the posting or publication of one's research output/documents in digital form, among other publications, on private (e.g. blogging, social media) and/ or public web space (e.g. institutional repositories, websites), is a major contributor to Open Access and civic literacy and increasingly popular for scholarly electronic publishing. Increasingly, the scientific/scholarly community and the civic society use self – archiving to enable the accessibility, harvestability, searchability, usability and visibility of their publication or research output by those with Internet access. However, it is encouraged that such digital documents be compliant to Open Access Initiative (OAI) Eprint². The self-archiving process, from a scholar activity point of view, is outlined in Figure 1.

² <http://www.eprints.org/openaccess/self-faq/> (Accessed 10 October 2009)

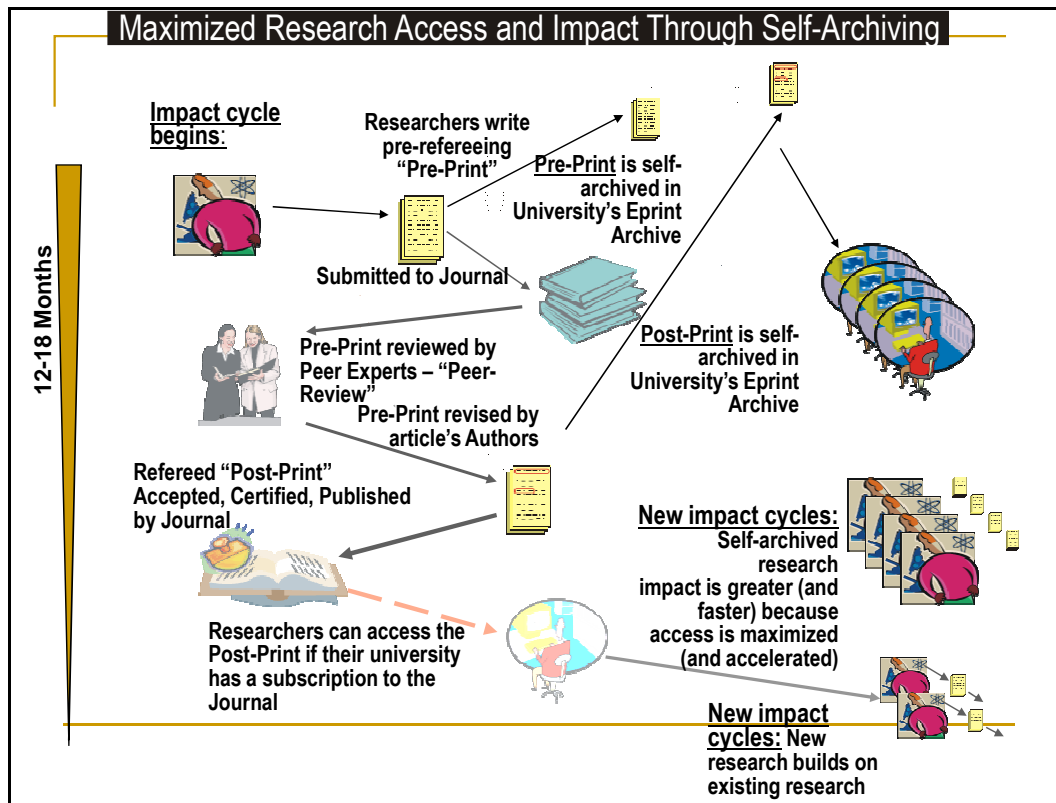


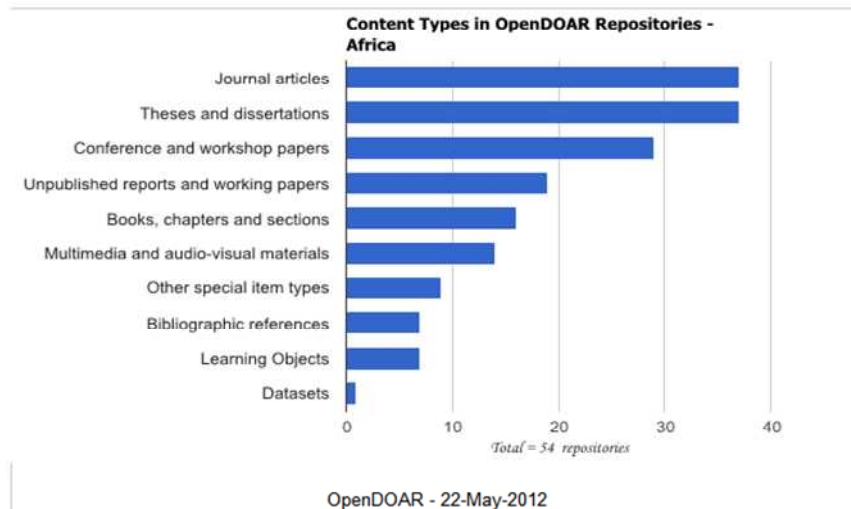
Fig 1. Maximized research access and impact (Source: Brody & Harnard, n.d.)

4.3. Institutional Repositories

Institutional repositories have become popular vehicles for self- archiving and Open Access and libraries increasingly play an important role in their development. Civic society also derive benefits from IRs as they are Open Access and their content is increasingly represented in popular search engines on the Internet or web, such as Google ,which are regularly visited and used by the civic society/community for their regular information needs. Such initiatives in the world have led to the rapid development of IRs as gate ways to Open Access, as represented in Figures 2 and 3.

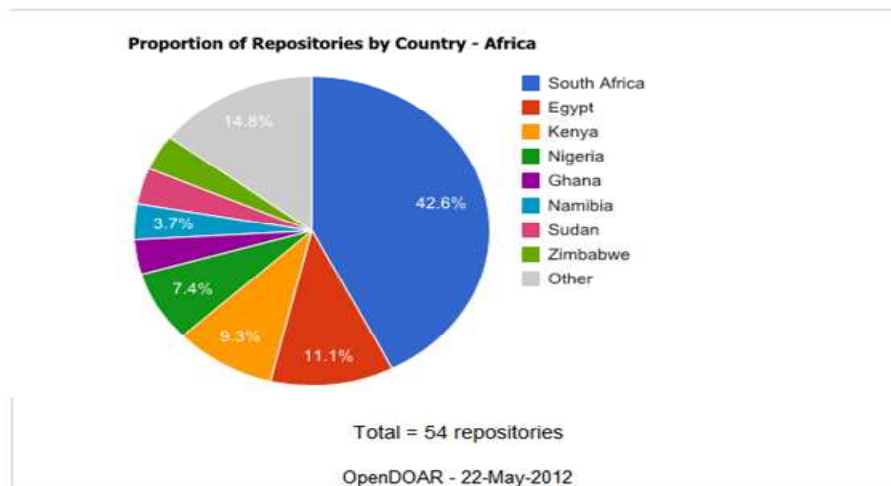
Figure 2: Content Types in OpenDOAR Repositories -Africa

Content Types in OpenDOAR Repositories - Africa



N.b. Most repositories hold several Content Types.

Proportion of Repositories by Country - Africa



This chart is based on the number of repositories in each Country. However, some organisations have two or more repositories - over 20 in some cases - and this arguably skews the results.

Figure 3: Proportion of Repositories by Country(OpenDOAR 2012)

Unfortunately, according to data obtained from the Directory of Open Access Repositories (DOAR, <http://www.opendoar.org/countrylist.php>) and Registry

of Open Access Repositories (ROAR, <http://roar.eprints.org/>), as reported by Ocholla(2011), the development of Institutional Repositories (IRs) in Africa is weak. By May 2012, only 16 of the 54 African countries have established 54 IRs, which accounts for approximately 2.5 % of the world's total. South Africa has the largest number of IRs (23; 42.6%) in Africa. Institutional repositories have become popular vehicles for self-archiving and e-scholarship. The involvement of HEIs libraries in this activity is fundamental because of their strong academic role.

4.4. Poor infrastructure and resources

Open Access thrives when it is supported by infrastructure such as telecommunications, computer hardware and software and connectivity- e.g. speedy bandwidth. The costs of acquiring and maintaining telecommunications equipment, personnel, space, information content, and connectivity is quite challenging, more so for the developing countries where such inputs are in rare supply. Important resources worth noting as well are funding and expertise, which is mostly common for the development, maintenance and education of OA and IR stakeholders and what Christian calls "inadequate and epileptic electricity supply to power ICT facilities in academic institutions", which is typical in some countries in Africa(Christian, 2008:3) .

4.5.Censorship

Censorship, which was once largely associated with non-democratic countries, is currently becoming a global menace, even within democratic countries. Increasingly, in the name of national security and terrorism, more and more admired democracies and developed countries are involved with censorship of the internet, the media, and mobile technology.

4.6. Language

There is not a universal language for all the people of the world or for those living in a region or country, particularly in African countries and other developing regions . For example, there are over 3000 languages spoken in Africa and the dominant languages are still the languages of the colonists whose languages are: 21 English speaking (Anglophone), 24 French speaking (Francophone), 5 Portuguese speaking (Lucophone), 7 Arabic speaking and 2 Spanish speaking . These languages are widely spoken either as national or official languages alongside other widely spoken languages, such as Kiswahili in Eastern Africa. There are limited Open Access non- oral information sources written in African languages as a whole and more particularly on the

web. Access to the written word of all types of languages requires adequate literacy and education in the language of the document. This is still problematic in Africa which makes Open Access and civic literacy less effective to the majority of the population who largely resort to radio broadcasts.

4.7. Legal issues

Intellectual property, copyright and licensing. Legal issues affect information producers, information providers and information users in different ways. However, Open Access can thrive if the fundamentals expressed in the Budapest Open Access Initiative and those made by IFLA and in the Glasgow Declaration, among others, are supported and binding to all stakeholders within the principles of UNDHR .

4.8. Stakeholder's awareness

Stakeholders include information producers, administrators, information providers and information users. Stakeholders may resist change if they are not involved in OA and familiar with its requirements and challenges. It is important that they are familiar with OA, through education and training at- for example- workshops, on issues and benefits of Open Access and civic literacy. Illiteracy and alliteracy are barriers to Open Access and civic literacy in many ways, as alluded to earlier. There is also sheer ignorance and misconceptions that are largely products of illiteracy and alliteracy. Lack of knowledge, skills and attitude to access and use of Open Access facilities leads to ignorance that affects civic literacy.

Conclusions and Agenda

We note that civic literacy is increasingly reliant on Open Access to information on the web and more and more people use search engines, such as Google, to access information that can instantly respond to their information needs. But access to information does not come without a cost that requires adequate preparation. The common issues for the agenda of civic literacy through Open Access are numerous. Among the Open Access agenda issues would be: the development and achievement of literacy through sound education, the promotion of information literacy and new literacy's for life- long learning, the promotion of information literacy for the ethical use of information, provision of Open Access library and information services, including those accessed through the internet, the development of Open Access institutional repositories in government, business, libraries and

academic institutions, the promotion and support of self- archiving initiatives and activities, the promotion of Open Access and civic literacy- that includes education and training of OA stake holders- and the digitization of information content for Open Access. We believe that the United Nations Declaration of Human Rights (UNDHR) right based declaration and Open Access initiatives, some of which are highlighted by Suber (2003), provide a strong foundation on which to build civic literacy.

References

Association of College and Research Libraries, 2000. Information Literacy and competency standards for higher education. Chicago:ALA

Berlin Declaration on Open Access to Scientific Knowledge in Sciences and

Humanities.2003. Open Access at the Max Planck Society.

<http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung/>(

Accessed July 10, 2012)

Bowdoin, N. Taylor .2011. Open Access, African Scholarly Publishing, and

Cultural Rights: An Exploratory Usage and Accessibility Study.

Library Philosophy and practice.

<http://unllib.unl.edu/LPP/poppeliers.htm>

<http://unllib.unl.edu/LPP/poppeliers.htm> Accessed 25, July, 2012

Britz, Johannes.2009. Open access: challenges and barriers to African scholars.

Inkanyiso. *Journal of Humanities and Social Sciences*, Vol.1N.1:22-26

Budapest Open Access Initiative (BOAI) (2002). *Budapest Open Access Initiative*.

<http://www.soros.org/openaccess/read.shtml>(Accessed 12 July 2012)

Christian, G. E. (2008). Open access initiative and the developing world.

African Journal of Library, Archives & Information Science, 18(1), 1-11.

Civic Literacy. N.D. <http://www.libertynet.org/edcivic/civclit.html>.

(Accessed 25 July 2012)

Digitisation Working Group (n.d.) Edinburgh University Library: Report

<http://www.lib.ed.ac.uk/about/policy/digitintro.pdf>. (Accessed 6 April 2010)

Enlightened Citizenship.2011. <http://www.americancivilliteracy.org>
(Accessed 20 July 2012)

Hughes, L.M. 2004. Digitising collections: strategic issues for the information manager. London: Facet Publishing.

International Federation of Library Associations and Institutions . 2003. IFLA Statement on Open Access to Scholarly Literature and Research Documentation
<http://archive.ifla.org/V/cdoc/open-access04.html>(Accessed 15 July 2012)

Mutula, Stephen. 2011. Research challenges and opportunities in a digital dispensation:an African perspective. In, Ocholla D.N. and Britz J.(Eds), *Research issues in Information Studies in a changing local and global environment. Some African perspectives*. LAP LAMBERT Academic Publishing GmbH& Co. KG Saarbrücken:13-28

Mutula, Stephen.2009., Challenges of doing research in sub-Saharan African universities: digital scholarship opportunities. Inkanyiso. The Journal of Humanities and Social Sciences, Vol.1(1), 1-11

Ocholla, Dennis N.2011. An Overview of Issues, Challenges and Opportunities of Scholarly Publishing in Information Studies in Africa. *African Journal of Libraries, Archives and Information Science*, Vol.21, No.1, 1-16

Onyancha, O. Bosire, 2007. LIS research in Africa: how much is it worth?A citation analysis of the literature, 1986-2006. *South African Journal of Libraries and Information Science*, Vol.73(2), 95-108

Suber, Peter.2007. What you can do to promote open access.<http://www.earlham.edu/~peters/fos/do.htm#librarians>(Accessed 14 May 2012)

The Archive –skills consultancy. 2001.Digitisation.

<http://www.archive-skills.com/infobytes/digitisation.pdf>. (Accessed 6 April 2010)

The Rise of Reading. 2008.

<http://www.nea.gov/research/readingonrise.pdf>.(Accessed 13 July 2012)

UNESCO,2004. The Plurality of Literacy and its implications for Policies and Programs. UNESCO *Education Sector Position Paper*: 13. 2004.

<http://unesdoc.unesco.org/images/0013/001362/136246e.pdf>.(Accessed 25 July 2012)

Whatis?.com (2008) Digitization.

http://whatis.techtarget.com/definition/0,,sid9_gci896692,00.html.(Accessed 6 April 2010)