ACHIEVEMENT OF DIGITAL LITERACY IN A COUNTRY: THE ROLE OF AFRICAN PUBLIC LIBRARIES

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1. Introduction

The main justification of including digital literacy as a core business for public libraries comes from the fact that libraries have always had a major interest in the advancement of literacy as part of their mission statement. However with the onset of the information and knowledge revolution, and the crucial role currently played by the Internet, requires an expanded vision of literacy to ensure the building of an inclusive society free from the digital divide as we enter the digital age. Public libraries which have the important role of providing access to information in various formats - ranging from print to multi-media, digital to non-digitized formats, need to expand their role in the Internet driven information eco-system.

The term digital literacy is claimed to have been used been used for the first time by Gilster (1997) in his book *Digital Literacy*. Digital literacy was simply defined as literacy in the digital age. Since that time, many other definitions of this new form of literacy have been coined and are in use. Other writers such as Hagel (2012), on the other hand, have noted that digital literacy is a pluralistic term and refers to a variety of digital media to ensure adequate and correct information is accessed, synthesized and used. Hagel also cautions that since ICTs change very fast, digital literacy cannot be a static skill but rather it is a new form of literacy which must evolve constantly in keeping with the dynamic nature of ICTs.

A broad and comprehensive definition has also been offered by two writers Clark and Visser, which provides an apt summary of all the definitions provided above, and they write and we quote:

> *"digital literacy generally refers to a variety of skills associated with using ICT (information communication technologies)to find, evaluate, create and communicate information. It is the sum of the technical skills and cognitive skills people employ to use computers to retrieve information, interpret what they find and judge the quality of that information. It also includes the ability to communicate and collaborate using the Internet – through blogs, self-published documents and presentations and collaborative social networking platforms.." (Clark and Visser, 2011 p.38).*

Similarly a UNESCO policy document (UNESCO, 2011, p 1), recognized that digital literacy is an umbrella concept for important skills for the 21st Century. The policy document by UNESCO identifies the following set of skills:

- Use and production of digital media
- Information processing and retrieval
- Participation in social networks for creation and sharing of knowledge.

The policy identifies digital literacy as a "*gate skill*" because it is demanded by many employers when they first evaluate applicants. It means candidates are often rejected at the first hurdle if they lack the skill.

The provision of information literacy has been more advanced in both school libraries and academic libraries in comparison to public libraries (Institute of Museums and Library Services, 2009). The above statement is with reference to a developed country but it does give an accurate picture for developing countries as well. One of the implications of this lagging behind of public libraries will therefore be the amount of work that needs to be carried out to catch up will most likely be greater and more challenging.

2. Why is digital literacy important in Africa?

Several benefits of digital literacy have been identified in the literature. The main benefits come from closing the digital divide and getting most citizens of a country online to enjoy the benefits of modern information communication technologies. Most of the available statistics place sub-Saharan Africa at the bottom of the world when it comes to access to ICTs and digital literacy (World Bank, 2009).

Digital literacy has important benefits in education, health information and employment. Dean (2016), arguing for basic literacy and digital literacy states that:

> *"Benefits of connectivity [include] reducing poverty, hunger and inequality improving health and education – and achieving many of the UNs Sustainable Development Goals – depend on having an accessible affordable internet and citizens with the skills to use it…." (Dean, 2016 p.1-2)*

The writer also makes the point that the web is creating social and economic value, supporting entrepreneurialism, and driving innovation. However the digital divide needs to be closed for these benefits to be uniformly enjoyed in every country in Africa.

Others have linked digital literacy to employability particularly of young people. In this regard, Balch has concluded that "digital literacy is definitely a 21st Century skill. That means that, in order to be able to succeed in the modern world, you need to have those skills. .". (Balch, 2013 p.2) The author writes that the employment opportunities of young people increases many times through the acquisition of even the most basic of digital skills. The same writer notes that "the difference between job and no job, for example, can be as simple as learning how to fill in an online application and mailing it off. ."(Balch, 2013 p. 3).

3. The challenges and barriers to digital literacy in Africa

In a recent report the International Consultancy Agency, McKinsey, looked at barriers to Internet adoption throughout the world (McKinsey & Company, 2014). Among the barriers the report found that the world has 75% of the offline population are concentrated in 20 countries – many of the non-users have incomes below the national average, live in rural areas and are elderly, and female. Most of the 20 countries lagging behind in the digital revolution are found in sub Saharan Africa.

The report by McKinsey & Company (2014) also found that other barriers of internet adoption fall into four categories: incentives, low incomes and affordability, user capability and infrastructure.

- Incentives. The main barriers in this category include lack of awareness of the internet and its use to create value eg. Online banking, e-commerce and low information security. Also included is lack of cultural and social acceptance.
- Low income and affordability. The main barriers in this category include low incomes of individuals in the population suffering from the digital divide. This is partly the result of high costs of service providers in the context of low incomes of consumers, particularly those in rural areas of a country. This is particularly relevant to African countries where one may find many people living below the poverty line hence with very little disposable income to purchase digital information services.
- User capability. The key barriers includes lack of digital literacy and language literacy given that most of the digital devices use the dominant international languages as a preferred medium of communication rather than local languages.
- Infrastructure. The key barriers in this category include lack of mobile internet coverage and often lack of supporting infrastructure such as electricity, limited bandwidth, limited spectrum availability and inadequate national ICT strategy which fails to address issues of under resourced infrastructure development and monopolies.

An additional barrier identified by Dean (2016) is lack of local digital content creation in the local language(s) and including local applications and services. The local langue content would be enriched by including e-government services to increase citizen participation in e-government and introducing electronic ID system to curb problems of corruption in some countries. This could also include facilities for reporting faults e.g. for electricity and water and road companies so that faults can be promptly addressed.

Also encouraging companies to create websites and engage in e-commerce in order to tap the market and add value to what those companies are doing would create an ecosystem which encourages the growth of digital literacy in a country.

4. Role of public libraries in the SCECSAL region in provision of digital literacy

From the presentation given above we may conclude that there is need for digital literacy in all sections of society in the SCESCAL region as it is a key requirement to function optimally at all societal undertakings including work, education, government, civil engagement, and various social arenas. The fact however remains that in all the sub-region, digital literacy is at a low level and hence the role of the public library and other libraries to connect people and knowledge cannot be fully carried out given that most information now comes in the form of digital content rather than the traditional print format.

The gradual transformation of the information landscape from fixed formats eg. print to digital formats calls for technology training for users, where there are no other training facilities, to become a primary goal of libraries. Public Libraries in particular find themselves in a situation where they need to transform themselves into digital literacy training centres given the absence of such facilities at affordable prices in most parts of our countries.

Gerding (2011 p.43) had singled out four conditions which require to be met for public libraries to become digital literacy training centres, namely: i)create purposeful and comprehensive training plans ii)empower library training staff through professional development iii) cultivate partnerships and volunteer relationships iv) advocate and communicate the value of library technology training. The conditions identified by Gerding have a close resemblance to the objectives of an on-going project in Namibia and Tanzania being carried out with the support of the Finnish Library Association and Government of Finland, which are briefly highlighted below, namely:

- To create a sustainable model for ICT access through community / public libraries and ICT instructors training of library personnel in IT matters and information search in Namibia and Tanzania
- To build capacity of Namibia Library and Archive Services (TLSB) and Tanzania Library Services Board (TLSB) by training library personnel in ICT skills.
- To make the library personnel able to teach basic ICT skills and information search to individual customers as well as to members of various NGO´s (e.g. women, entrepreneurs, unemployed and out of school youth, new literates and those needing information on HIV/AIDS and other health issues) both in Namibia and Tanzania.
- To involve decision makers both in Namibia and Tanzania to raise their awareness of the role of libraries in supporting national development goals.

All the digital literacy initiatives could serve as role models for the SCECSAL region public library services. However in Latin America there is another developing country which has achieved great success with digital literacy programmes offered through its public library services as part of a national digital strategy of the State of Chile. The broad purpose of the programme is to promote broader and deeper inclusion of the communities served by public libraries by creating spaces that provide increased opportunities for social participation and delivering free internet and ICTs training in Chile (Roman and Alexis 2005). The Chile programme was funded by Bill and Melinda Gates Foundation and the government of Chile. It has worn many international and local awards (http://www.biblioredes.cl/english/7106).

The experience gained from all the above digital literacy training programmes strongly indicate the importance of having clearly formulated and written down plans in the four areas specified above and elaborated below.

4.1. Formulating training plans

The plans should be based on the public library mission and focus on the needs of users, preceded by a needs assessment and then clearly formulated digital literacy training learning objectives. The content should also be clearly stated and broken down into topics which reflect the training needs. This could include all the common elements such as word processing, email, internet surfing and may have advanced topics such as excel. Other digital gadgets used for accessing information may also be given their own slot in the topics in the curricula.

4. 2. Capacitating library staff:

The empowering of library staff is essential if the training programmes are to be properly carried out. It is essential to prepare library staff to play this new role effectively. In the evaluation of the NLAS/TLSB and Finnish project, one of the weak areas during external evaluation was the low level of preparedness of ICT trainers particularly in the case of Tanzania while the Namibian trainers were seen to be adequately trained. In both cases a recommendation was made to include adult learning and training of trainers instructional methods as part of preparing the trainers (Mchombu et al 2015). There are several websites which provide guidelines on how trainers in digital literacy could be prepared which can provide useful information which however need to be adapted to local needs.

Below we offer some helpful websites adapted from Gerding (2011 p.48).

- WebJunction www.webjunction.org/technology-training
- TechSoup for Libraries http:techsoupforlibraries.org/blog/fabulous-free-public-technology-training-materials
- Community Technology Network www.ctnbayarea.org/resources
- Infopeople-California State Libraries www.infopeople.org
- Custom Guide www.customguide.com

Another helpful source is an organisation called IREX which has been active in Namibia and several other developing countries in the digital literacy field to promote digital inclusion. Their projects can be viewed at the following website: http://beyondaccess.net/projects/

IREX has also developed some training modules for the training of trainers which could be useful for SCECSAL public libraries to adapt after asking their permission. IREX has also an excellent video clip on public libraries offering digital literacy and access to information for development (https://www.irex.org/beyond-access)

4.3 Looking for partners and volunteers

Certainly in the case of the SCECSAL region it is important to think ahead as to which organisations might be interested to partner with public libraries in offering digital literacy training so as to stretch the available resources to the maximum.

This may include businesses which have an interest in widening digital literacy eg. Banks, ISP providers, Cell phone providers, universities and colleges offering computer science which require students to have practical attachment. Most companies are required by law to have social responsibility funds which could tapped into before they given them all to sports clubs and other social groups in society. One or the most important partners internationally has been the Bill & Melinda Gates foundation which supports ICT development in libraries all over the world.

4.4 Marketing the digital literacy programmes:

It is important that such programmes on digital literacy are widely publicized and marketed to attract people and also potential funders in future. It is through such marketing that decision

makers and the general public can be made aware of the digital revolution but also the changing role of public libraries in their own country to raise the profile and perceived value of public libraries.

5. Conclusion

The information revolution engulfing the World has marginalised large sections of people in the SECSAL region because they lack digital literacy. The traditional role of libraries to link people and information needs to be expanded to incorporate digital information. However such transformation is not going to happen to the majority of people in the SCECSAL region because of lack of digital literacy skills. It is argued in this paper that public libraries should take this new role and transform themselves into digital literacy training centres in order to address the digital divide marginalising large sections of the population in respective countries. Examples from several countries are cited to provide the way forward in the transformation of public libraries into this new role as digital literacy training centres.

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