

# THE SIGNIFICANCE OF E-LEARNING IN UGANDA: A LIBRARIAN'S VIEWPOINT

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## Abstract

*This paper examined the significance of E-learning in Uganda from a librarian's viewpoint. E-learning is a recent form of delivery of academic programmes, and many public and private institutions in Uganda ought to embrace it. It conveniently enables the delivery of academic teaching to a large group of learners, electronically, without using much physical resources. It therefore attracts learners from distant locations to actively participate in educative studies and obtain academic qualifications without spending much time, physically, at the institutions. Such academic arrangements require adequate information support systems, and the Library plays a big role in such an arrangement. The objectives of study were to: (i) to establish the extent to which public universities in Uganda have embraced E-learning as mode of delivery of teaching to their current scholars, (ii) to determine the perception of E-learning by Librarians at Public universities in Uganda, (iii) to find out the level of involvement of librarians in development and implementation of E-learning programmes. An online questionnaire was used to generate the responses from Librarians about their involvement in delivery of E-learning programmes at four Public universities in Uganda. The universities include; Makerere, Gulu, Kyambogo, and Busitema. Data was analyzed using Ms Excel. The research established that 53.3% of the Librarians were involved in development and implementation of E-learning. The major challenge was lack of training by librarians and the lecturers and limited initiative by the institutions and government to improve e-learning in the institutions. Majority proposed the need for training of lecturers, librarians and users/librarians and need to design policies and projects for e-learning.*

**Keywords:** E-learning; Librarian Involvement; library Advocacy

## 1. Introduction

The term E-learning is understood differently by many people who use it. Some people may use it to mean packaged content pieces while others may use it to refer to technical infrastructure (Rosenberg, 2001). According to Naidu (2006) E-learning is referred to as the intentional use of networked information and communications technology in teaching and learning. However, Rosenberg (2001) defines it as the use of internet or wireless technologies to deliver a broad array of training solutions.

E-Learners access the learning from a computers via the internet or an intranet, or through a hand held device like a mobile phone, tablet or iPad. The term E-learning has existed since 1999 (Epignosis LLC, 2014). Other words also began to spring up in search of an accurate description such as “online learning” and “virtual learning” ((Epignosis LLC, 2014; Naidu, 2006), “distributed learning”, “network and web- based learning” (Naidu, 2006).

### **1.1 Brief Background**

Most Ugandan Universities are starting to embrace E-learning amidst the many ICT challenges. However, the E-learning is expected not to improve the instances of bad teaching in the universities or academic units where it exists (Nakabugo, 2007). According to Basaza, Valcke, and Katahoire (2011) an education system is as good as its teachers. Therefore, the introduction of e-learning in Uganda is only expected to enhance the medium of teaching and its efficiency but not the quality. The growing interest in e-learning spans from a number of directions but most importantly from the increased number of long distance programmes and this is seen as a way of providing access to the university programmes, as well as tapping into the niche markets (Naidu, 2006). According to Nakabugo (2007), embracing e-learning in Uganda has been enhanced by opportunities provided through funding from projects like ELATE, U-Connect and School-Net. Some of the Ugandan universities and academic institutions are graced with very high student populations and this calls for sufficient teaching space as well as other academic requirements to effectively deliver quality education to all the masses. Nakabugo (2007) further observes that teachers in the different contexts develop strategies to cope with the large classes. Some of the strategies are institutional whereas others are popular to individuals. The strategies include; group work, team teaching, attracting children’s attention and school-based professional development.

## **2 Research Objectives**

The basis of this research is;

- To establish the level to which public universities in Uganda have embraced E-learning a mode of delivery of teaching to their current scholars.
- To determine the perception of E-learning by Librarians at Public Universities
- To find out the level of involvement of librarians in development and implementation of E-learning programmes.
- To find out the challenges that hinder e-learning in public universities
- To propose strategies of improving e-learning in Uganda.

## **3 Purpose**

The purpose of this study is to establish the level of involvement in the development and implementation of e-learning programmes in the public universities in Uganda. The results of this study are expected to inform policy decisions in Public university administrations with the importance of informational professionals, who are key persons in enhancing access to online information resources at universities, to the success of implementation of e-learning in the education system in Uganda.

#### **4 Statement of the problem**

The extent of adoption of ICT in the academic institutions of Uganda has greatly enhanced the quality of teaching and learning. There are many factors which lead to the success of e-learning programmes. These include; instructor characteristics, student characteristics, technology, and university support (Selim, 2007). The University support is not only limited to the technical assistance and troubleshooting but also includes library and information accessibility. Therefore, the technology platforms have the capacity to easily connect the instructors to the students, and the students and instructors to the information resource persons and the library. Despite the importance of the library, however, the universities' academic and administrative units do not engage the Librarians in development and implementation of e-learning programmes, and this renders the library irrelevant by not providing information resources in conformity to the set programmes. This is the problem this paper seeks to address.

#### **5 Justification**

With the introduction of ICT in the education sector in Uganda, most Public institutions have adopted the long distance education programmes to enable many scholars learn and teachers teach without physically being in the same location. All academic programmes (whether classroom or electronic-based) require information support, which is directly managed and availed by librarians. According to the E-Learning Conceptualization Cycle by Mayes (1995) in the development of e-learning programmes the primary stage involves e-tools like the online library and the digital repository to support the stage. It is therefore at the primary stage of the development of the e-learning programmes that the input from the Librarians is essentially, initially inevitable. It is for this reason that this study is necessary to establish the involvement of Librarians in the development and implementation of e-learning programmes in Public Universities in Uganda.

#### **6 Literature Review**

##### **6.1 Level of e-learning in public universities**

Learning in academic institutions focuses primarily on the transfer of knowledge rather than training, thereby focusing on areas with a global scope. E-learning using mobile devices has gained popularity with learners using such devices to access internet and other social media to learn from anywhere at any time which makes the process conducive and time-saving (Epignosis LLC, 2014). However, the implementation of e-learning programmes requires prior sensitization of the stakeholders to ascertain if the channels are agreeable and sustainable. It also requires skilled staff to be able successfully deliver as required. Awidi and Cooper (2015) highlight the need to focus on issues that will enhance the capacity of faculty members to engage in e-learning, the need to actively involve and explain clearly to faculty the university's plan for e-learning and what it hopes to achieve, the need for training and re-training of lecturers, and the need for a systems approach that involves a phase-to-phase approach to implementation.

## 6.2 Perception of e-learning by Librarians

Academic librarians perceive the benefits and challenges of adoption of e-learning, where it is perceived an opportunity for opening up new frontiers for professional development, as well as supporting knowledge generation and management. However, the librarians receive power supply, inadequate technical skills and limited bandwidth as major impediments (Stella & Hussaini, 2014) this study adopted a descriptive survey design, using questionnaire as instrument for data collection. The study population consists of five tertiary institutions \u2013 two universities, two polytechnics and one college of education, selected as sample using the purposive sampling technique. The study also conducted a literature review on studies done on benefits and challenges of e-learning for professional development. The literature review is built on resources from online and offline. Findings \u2013 Academic librarians in Lagos State were unanimous in their perception of benefits and challenges of adoption of e-learning for continuing professional development. The major benefits of e-learning were that e-learning opens up new frontiers for professional learning, supports knowledge generation and management and gives librarians an opportunity to broaden their knowledge. However, the major challenges to adopting e-learning for continuing professional development were inadequate power supply, inadequate knowledge of how to operate e-learning tools and limited bandwidth. Practical implications \u2013 This paper establishes that the role of academic librarians in the provision of information for learning and study in academic institutions places them in an advantageous position to engage in e-learning activities for professional development. It also extols the need for top library management to deploy all resources within their reach to develop technology-enhanced learning system. This should also be complemented with the development and implementation of e-learning curriculum in library schools in Nigeria to inculcate e-learning culture. Originality/value \u2013 The paper contributes to empirical research on e-learning for continuing professional development among librarians in Nigeria. Librarians who are interested in professional development will find this article useful.”, “author” : [ { “dropping-particle” : “”, “family” : “Stella”, “given” : “Ngozi Anasi”, “non-dropping-particle” : “”, “parse-names” : false, “suffix” : “” }, { “dropping-particle” : “”, “family” : “Hussaini”, “given” : “Ali”, “non-dropping-particle” : “”, “parse-names” : false, “suffix” : “” } ], “container-title” : “New Library World”, “id” : “ITEM-1”, “issue” : “7/8”, “issued” : { “date-parts” : [ [ “2014” ] ] }, “page” : “340-354”, “title” : “Academic librarians\u2019 perceptions of the benefits and challenges of adopting e-learning for continuing professional development in Lagos state, Nigeria”, “type” : “article-journal”, “volume” : “115” }, “uris” : [ “http://www.mendeley.com/documents/?uuiid=21c6b47d-477a-4e31-a603-72ec89aa32a5” ] }, “mendeley” : { “formattedCitation” : “(Stella & Hussaini, 2014. Whereas the involvement of the library in e-learning is very critical, the role of the library in enhancing the e-learning has a lot of issues that need to be addressed (Eke, 2010).

## 6.3 Involvement of Librarians in development and implementation of E-learning programmes

According to Pujar and Kamat (2009) satellite, cable networks, etc. Though it is successful in spreading its wings on today’s higher education sector, it’s linkages with the libraries are still feeble. The academic and other types of libraries, especially from the developing countries such as India, are struggling to cater to the increasingly heterogeneous requirements of the e-learners and associated community. This paper presents the key role of LIS professionals in the e-learning paradigm. After a thorough analysis of the e-learning scenario, authors have realised that libraries and librarians have an important role to play possibly through the digital libraries-a

contemporary movement growing along-with the e-learning. The aspirations of e-learner community from the LIS professionals in this new era of e-learning are propagation of the movement itself, course content development, technical facilitation, technical trouble shooting, fuelling open-archives, improving user interfaces, identifying and training the usage of free and open source software tools to the user community to ensure maximum participation in teaching-learning process. The paper also discusses e-learning-library linkages and the innovations implemented in the top ranking oK-shore public libraries that the Indian LIS community can follow. It reveals an emanating strongly bonded model of e-learning-library linkage required for the sustainance and mutual growth of the duo. This will also lend a hand in emerging an open knowledge culture and ultimately beneficial for the evolving knowledge society.”, “author” : [ { “dropping-particle” : “”, “family” : “Pujar”, “given” : “S M”, “non-dropping-particle” : “”, “parse-names” : false, “suffix” : “” }, { “dropping-particle” : “”, “family” : “Kamat”, “given” : “R K”, “non-dropping-particle” : “”, “parse-names” : false, “suffix” : “” } ], “container-title” : “DESIDOC Journal of Library & Information Technology”, “id” : “ITEM-1”, “issue” : “1”, “issued” : { “date-parts” : [ [ “2009” ] ] }, “page” : “23-30”, “title” : “Libraries-a Key to Harness E-Learning: Issues and Perspective”, “type” : “article-journal”, “volume” : “29” }, “uris” : [ “http://www.mendeley.com/documents/?uuid=69eaf130-f2d3-444d-b5c6-0984cf0a6553” ] }, “mendeley” : { “formattedCitation” : “(Pujar & Kamat, 2009 and Sharifabadi (2006) librarians have an important role to play through the digital libraries, which is a contemporary movement along-with e-learning. Telephone and e-mail reference allow reference librarians to provide short and sometimes detailed reference assistance to e-learners (Sharifabadi, 2006). Strategic roles of the academic librarian in supporting e-learning include; development of learning and teaching strategy, decisions about the selection and purchase of VLEs, (Virtual Learning Environments), managing and advertising the V.L.E., such as configuring the system, provision of learning spaces for developments, programmes and tutors, setting up and establishing specific e- learning environments such as design of site, uploading of materials etc., training staff and students in the use of the VLE, as well as providing technical help and support, and e-tutoring, either in the form of co- tutoring on an academic program, or the library’s programmes (Abubaker, 2016).

#### **6.4 Strategies of improving E-Learning.**

Achievement of successful e-learning programme requires adequate government or institutional support through funding, adequate ICT infrastructure, good internet access, sufficient ICT skills amongst students, instructors and librarians, and reliable electricity power supply (Abubaker, 2016). According to Moyo and Cahoy (2006) for a successful use of the library online resources it is a primary need to assess the users’ needs. It was observed from a study by Awidi and Cooper (2015) that for successful implementation of e-learning requires proactive management including the faculty, rather than the central university administration. The same study identifies other key considerations like; evaluation of the performance state of the e-learning programmes, analysis of the implications of the gap between actual and desired performance, and developing of a checklist for an e-learning project management plan.

#### **7.0 Methodology**

A questionnaire was administered to University Librarians who worked in the public universities. The researchers went further to take the Universities one after the other to access their websites and identify e-learning programmes.

## 7.1 Population

The population of the study consisted of Librarians from public universities i.e. Makerere University, Busitema University, Gulu University, and Kyambogo University. The sample comprised of 15 librarians, 6 from Makerere University, 3 from Gulu University, 3 from Busitema University and 3 from Kyambogo University.

## 8 Data Analysis and Discussion

The analysis of data presented here was based on information provided by respondent of the questionnaires administered by the researchers. In all, the link to the questionnaire was emailed to 24 librarians and responses were received from 15. The analysis is therefore based on the 15 questionnaire responses received.

### 8.1 Analysis of Demographic Data

The distribution of the respondents by their personal data is shown in this section. Data were analyzed using simple percentage. The data in Table 1 is used to show the gender of respondents.

Gender	Frequency	Percent (%)
Female	5	33.3
Male	10	66.7
<b>Total</b>	<b>15</b>	<b>100</b>

Table 1: Distribution of the Respondents by Gender

From Table 1, it could be seen that majority 10 (67.7%) of the respondents are males while females are 5(33.3%). This means that more male librarians in the public university libraries responded to the survey than the female.

The data in Table 2 is used to show the ages of respondents

Age (Years)	Frequency	Percent (%)
21-30	2	13
31-40	10	67
41-50	3	20
50 and above	0	0
<b>Total</b>	<b>15</b>	<b>100</b>

Table 2: Distribution of the Respondents by Age

Table 1 shows that majority of the respondents that is 10 of them (67%) fall within the age bracket of 31-40 years while age bracket 21-30 and 41-50 ranked lowest with 13% and 20% respectively. It can be inferred, therefore that, most librarians in the public academic institutions are relatively youthful.

Highest Level of Education	Frequency	Percent (%)
PhD	0	0
Masters Degree	11	73
Bachelors Degree	4	27
<b>Total</b>	<b>15</b>	<b>100</b>

Table 3: Education Attainment

It could be seen from Table 3, that majority of the respondents (73%) have a Masters qualification, Also 4 respondents (27%) were Bachelor's Degree holders, none of the respondents held a PhD qualification. it is quite interesting to know from the data analyzed that majority of the librarians in university libraries have attained a Masters Degree.

Institution	Frequency	Percent (%)
Busitema University	3	20
Gulu University	3	20
Kyambogo University	3	20
Makerere University	6	40
<b>Total</b>	<b>15</b>	<b>100</b>

Table 4: Respondents' Institution

It could be seen from Table 4, that majority of the respondents, 6 (40%) were from Makerere University and the rest of the universities have 3 (20%) respondents each. This is attributed to that fact that MUK is the oldest university with one of the largest library and e-learning programmes.

The data in Figure 1 below is used to show level of e-learning in Ugandan public universities.



Figure 1: Level of E-Learning in Ugandan Public Universities

As indicated in Figure 1 majority of the respondents 60% indicated that they were aware of e-learning programmes in their universities. While 40% of the respondents were not aware of the e-learning programmes.

Table 5: Level of E-Learning Programmes

Level of e-learning	Frequency	Percent (%)
Graduate	6	66.7
Undergraduate	2	22.2
Diploma	1	11.1
Not Sure	0	0
<b>Total</b>	<b>9</b>	<b>100</b>

Table 5: Level of E-Learning Programmes

Table 5 above, indicates shows the 60% who responded that they have e-learning programmes in their institutions. Six (66.7%) of the respondents have e-learning programme at Graduate Level, 22.2% at undergraduate and 11.1% at diploma level. The engagement at Graduate level is attributed to the level of technology and learning as compared to the lower levels.

## 8.2 Relevancy of E-learning to the University Education

When asked whether e-learning was relevant to the University education, all the 15 (100%) respondents agreed that e-learning is very relevant. Below are the comments as summarized.

- The world is advanced now; tradition ways of learning are inadequate for sufficient learning and it makes it easier to administer course work and facilitates research.
- E-Learning removes the barrier of location and time. Someone doesn't have to be at university to attend a class or hand in an assignment because one is able to access all teaching and information materials any time anywhere; in addition reduces on the faculty burden.
- It reduces high costs of tuition involved, transport for face to face interactions with lecturers therefore convenient and cost effective.
- It's easy especially for people who cannot be physically present in the lecture halls
- E-learning presents favorable study opportunities to working class learners who wish to upgrade without necessarily leaving their jobs for the whole semester time.
- E-learning is very important today following the increasing trend of non-traditional learners who wish to access learning resources virtually and the technological changes in accessing current information.

When asked whether they are involved in the development and implementation of e-learning programmes, 8 (53.3%) of the librarians indicated that they are involved whereas the 7 (46.7%) are not involved. All the respondents, however, showed interest in being involved in the e-learning development and implementation process.



Challenge	No. of Responses
Financial Resources	3
Unreliable Internet/Poor Internet Connectivity	4
Inadequate Infrastructure for e-learning platforms	3
Lack of e-learning skills among lecturers and Librarians	6
Lack of ICT personnel	2
Lack of interest and failure to understand the importance of e-learning outcomes in some universities	3
Staff and students are still lacking in technological skills to fully embrace the innovation	4
Lack of trained and limited number of trainers plus limited initiatives from institutions and government	8

Table 6: Challenges faced

It is observed that lack of e-learning skills among the faculty and the librarians is a big concern and is likely to greatly affect the e-learning programmes establishment in public universities.

## 9. Strategies/ Recommendations

The Respondents were asked to provide strategies to improve use of e-learning in Universities and table 7 below shows a summary of strategies proposed.

Strategy	No. of Respondents
Top management buy-in	3
Government Involvement	2
Involvement of Lecturers and Librarians at selection of teaching and learning materials	2
Increased funding to procure ICTs facilities	3
Design policy, projects for e-learning as well as proposals for external funding	8
Improve ICT infrastructure in institutions considering most public institutions charge ICT fees.	3
Training of lecturers, Librarians and user education on e-learning	12

Table 7: Strategies

Three of the Libraries indicated that there is need to get top management buy-in after benchmarking other institutions with strong e-learning systems. Two indicated that since these universities are government owned, there is need to involve government in its establishment of e-learning in the institutions. Two of the respondents indicated that lecturers and librarians in selection of teaching and learning materials should be involved. Since e-learning involves finances, 3 of the respondents proposed increased funding to procure ICT facilities for e-learning before looking for external funding which may take long to come forth. Eight of the respondents proposed design of a project to sensitize university staff, staff development and student support for use of modern technology, create awareness about e-learning, establish e-learning policy, encourage users opt for e-learning, writing proposals and seek support from development partners to finance the purchase of expensive IT equipment. There is a need to embrace use of ICT in all University sectors so scholars can easily meet all university requirements such as registration online. Three of the respondents proposed the need to improve on the ICT infrastructure within institutions considering that most public universities charge ICT fees. These should be used to better the ICT Infrastructure in these institutions. Training is another issue proposed with 12 respondents indicating that lecturers and librarians need to be trained on skills of planning and implementing e-learning. Train people to handle the e-learning sessions and carry out user education on e-learning. Three of the respondents indicated that there is need to increase bandwidth and create hotspots for users on all the buildings.

## 10 Summary and Conclusion

In summary, the research noted that majority of the respondents were males (66.7%) in the age group of 31-40 years (67%) with a Graduate qualification as the highest level of education attained (73%). And majority of the respondents were from Makerere University Library (40%). The research also found out 60% of the Librarians were aware of the e-learning programmes in their institutions with e-learning programmes at Graduate level as the highest (66.7%) and 100% of the Librarians also indicated that indeed e-learning is relevant to the University Education today, considering the technological era. It was, however, noted that 53.3% of the Librarians were involved in development and implementation of the e-learning programmes. Hence, one of the major challenges the research identified is that lack of training and limited initiatives from institutions and government, this results to lack of e-learning skills among librarians and lecturers hence hinder its progress in these institutions. Therefore, majority of the Librarians proposed training of lecturers, librarians and users/students on e-learning platforms as well as design policies and projects for e-learning.

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