*Review Article*

# Library and Information Science Education and Training in Uganda: Trends, Challenges, and the Way Forward

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In today's public and private sectors, corporate governance is a key focus, and management of libraries, records, archives, and information centers is an increasingly important preoccupation. This implies that the issue of LIS education should not be taken lightly. As the economy grows, the demand for information will propel the demand for LIS professionals because of the need to manage different kinds of documents. This paper, based on relevant literature review and the authors' experience as LIS practitioners and educators, aims at discussing this subject and highlights important issues to be addressed. The paper makes a brief exploration of LIS education in Uganda, identifies the challenges, and proposes strategies as the way forward. It recommends that as LIS education and training seeks a wider role in society, there is a need to prepare students for careers in a rapidly changing world. This requires multidisciplinary education, greater emphasis on core knowledge, and fully well-articulated graduate programmes to meet the requisite of LIS professionals.

## 1. Introduction

Mandela, once said:

> *"Education is the most powerful weapon which you can use to change the world."* (Mandela 1993)

Borrowing from Mandela, we submit that "With well executed education and training, LIS challenges will have little room by 2015 in Uganda." The choice of 2015 is based on the Millennium Development Goals' target. This paper based on literature review and experience of the authors as former LIS practitioners and now LIS educators makes a brief exploration of LIS education in Uganda, identifies some of the challenges facing LIS education in Uganda, and proposes strategies as the way forward.

*1.1. Contextual Background.* Libraries and information science education institutions in Africa started quite early as 1960 in the continent. By 1980s, there were five main LIS education institutions based in Ghana, Nigeria, Senegal, and Uganda [2]. Much as LIS education in Africa today no longer focuses on the training and education of librarians to work in libraries only, originally LIS schools' major focus in the education and training area was librarianship [2]. With the changing need of employers and the proliferation of related courses and programmes to librarianship, many changes have taken place in the field of librarianship. The names of LIS education programmes, LIS education awards and LIS education courses have all changed. These changes have been especially due to the reorientation of higher education in the world and the need to stay relevant in the global competitive world [3]. A quick look at Africa shows that in the past most departments were simply called Departments of Library Science/Library Studies or Librarianship. In the eighties many departments changed their names to Department of Library and Information Science/Studies. In the nineties, many of these departments again changed their names to Information Science/Studies [5, 24]. Through a combination with other (information-related) disciplines, some have incorporated this in their names as well, for example, the department of Information and Communication Studies at the University of Namibia [6]. At the University of Johannesburg, the Department's

name was changed to the Department of Information and Knowledge Management [2]. In Uganda, the East African School of Librarianship was changed to East African School of Library and Information Science (EASLIS). Since then, the changes have made significant impact on the LIS education, training, and awards.

Given the competition now in the field of LIS and the realization of the LIS profession to remain relevant, the global reorientation has not spared the content. The issue of what constitutes or should constitute the "core" in library and/or information science (LIS) education and training is one that is frequently debated in different circles by LIS professionals [7]. Drexel University [8] notes that education for LIS professionals should integrate both human and technical aspects of information systems and exhibit a strong client orientation in service delivery to the library and information users. As noted by Feather and Sturges [9], there is a clear manifestation for the need to balance between core skills of LIS and those which apply to specific work environments. What remains unanswered well is what the "core" courses are? Most LIS schools look at this differently although they tend to agree with Wilson [10] who proposed six fields that have to be factored in an LIS curriculum, and these include the following.

(i) Information content (the traditional function of library and information centres).

(ii) Information systems (human/systems interaction and organizational systems).

(iii) Information users and providers (information use and information seeking behaviour).

(iv) Information organizations (information producers, libraries, information centres, and their operations, etc.).

(v) Supplemental knowledge skills not included in any of the above (such as subject bases, e.g., philosophy, history, etc.).

(vi) Practicum (prescribed practical experience as a programme of study) [10].

On the other hand, Raju [7] argues that "while it is possible to identify certain knowledge and skill components as being appropriate for the core library and/or information science curriculum for a first-level LIS qualification, it is difficult to be precise about what exactly constitutes or should constitute the core in library and/or information science education and training. This core is continuously evolving, as the information environment to which LIS education and training programmes need to respond is also in a state of flux" [7].

In view of the above arguments, it is, thus, prudent that Uganda looks at the development of human capacity broadly to manage information for democratic governance, transparency, accountability, and full observance of human rights, freedom of association, and political consciousness among others, so as to transform the society. This will be in line with Uganda's aspiration towards developing a society that recognizes information as a national resource.

In Uganda, LIS education started in 1963 at the East African School of Librarianship (EASL) now East African School of Library and Information Science (EASLIS) with a certificate in librarianship and eventually Diploma and Postgraduate Diploma in Librarianship. Although some institutions like Kyambogo University, Kabale University, Uganda Christian University-Mukono, Uganda Management Institute, Kabale University, and Busoga University have designed programmes for LIS education, it is the East African School of Library and Information Science (EASLIS), Makerere University that has been providing the LIS education at the bachelor level since 1989. Uganda Christian University, Mukono, and Lugazi University introduced BLIS in 2006 and 2007, respectively. Unfortunately, Lugazi University that had started BLIS programme has had its provisional license withdrawn by the Uganda National Council of Higher Education in 2010. However, quite a number of private universities are now planning to introduce BLIS or similar programmes. It is also worth, however, noting that LIS education in Uganda has expanded from the certificate to PhD in information science at EASLIS. For a long time, all LIS professionals (librarians, archivists, records managers, publishers, book sellers, documentalists, etc.) have been catered for in the following programmes.

(i) PhD in information science (EASLIS).

(ii) Master of science in information science (MSc. Inf. Sc) (EASLIS).

(iii) Postgraduate diploma in librarianship (PGDL)— (EASLIS).

(iv) Bachelor of library and information science (BLIS)— (EASLIS and Uganda Christian University, Mukono).

(v) Diploma in library and information studies (DLIS)— (EASLIS, Mukono, Kyambogo, IUIU).

(vi) Diploma in records and archives management (DRAM)—(EASLIS).

(vii) Certificate in library and information studies (EASLIS, etc.)—Now phased out.

A situational picture of LIS education and Training in Uganda can be summarized in Table 1.

In an effort to address the growing needs of records and archives management, the Department of Records and Archives Management, at EASLIS, Makerere University, designed a bachelors degree in records and archives management (BRAM), approved by the University Council in June 2008. Currently, EASLIS is designing a master of science in records and archives management. The Department of Information Science, EASLIS, is at the preliminary stages of designing a postgraduate programme in publishing studies. All these attempts are being made to strengthen the human resource capacities within the LIS profession. The LIS profession needs more professionals especially at graduate level to clearly articulate policy and decision making and to ably have discourse with policy echelons of power in government, institutions, and private sector.

TABLE 1

| Universities/LIS schools | LIS programmes | Number of students | Accreditation |
| --- | --- | --- | --- |
| Makerere University-EASLIS (public university) | (i) PhD in information science | 10 | Accredited |
| | (ii) MSc. in information science | 47 | Accredited |
| | (iii) Postgraduate diploma in librarianship (PGDL) | 0 (under revision) | Not yet |
| | (iv) Bachelor of library and information Science | 332 | Accredited |
| | (v) Bachelor of records and archives management (BRAM) | 205 | Accredited |
| | (vi) Diploma in records and archives management | 49 | Accredited |
| | (vii) Diploma in library and information studies | 58 | Accredited |
| Uganda Christian University, Mukono (private university) | Bachelor of library and information Science | 150 | Accredited |
| Ndejje University (private university) | Certificate in library and information studies | 20 | Accredited |
| Kyambogo University (public university) | Diploma in library and information studies | 50 | Accredited |
| Islamic University in Uganda, Mbale | Certificate in records and information management | 22 | Accredited |

*1.2. Articulation of LIS Schools and Academic Programmes.* It is increasingly recognized that the right to information is the door to the fulfillment of other rights. Without recognizing the right to information, it is impossible for citizens to enjoy their right to participate in political life and their right to self-determination, among others [11]. This makes LIS schools and their academic programmes paramount.

Articulation of LIS schools may be viewed in at least five ways. The nature and type of qualifications that programmes offered (e.g., bachelor or master's degree), the duration and credits requirements for a qualification (e.g., three or four years), the academic level of the qualifications (e.g., undergraduate or graduate), the mode of instruction (contact or distance), and the orientation of the LIS school (e.g., vocational or general education) [2]. Notably, university-based LIS schools in Uganda offer more general or theoretical education and also largely offer paraprofessional programmes, degree and postgraduate degree qualifications lasting for two years for diploma and master and to three years for bachelor and PhD. The mode of instruction is mainly contact with no distance education although some universities are planning to start distance education programmes in LIS. There is now a well-pronounced field attachment programmes in most of the LIS programmes in Uganda. Recently, there has been a lot of enthusiasm from both public and private sectors in Uganda to take up LIS students for field attachment. This is encouraging since it leads to better understanding and creates opportunities for employments upon completion. But it is also noted that these organizations do demand the acquisition of knowledge in areas like publishing (both print and electronic), records management, multimedia, information technology, knowledge management, and so forth, an issue LIS educators should take on seriously when designing or revising LIS curricula.

*1.3. Conceptual Analysis of Education and Training: Which Is Which for LIS Education?* Allover the world, educators sometimes face the criticism that their graduates go to the workplaces unable to perform right away. For example, Anderson [12] observes that graduates may not know how to use particular systems that have been implemented by the organisation. Nevertheless, Ikoja-Odongo [13] asserts that interest is growing at national and international level on the role of, for example, indigenous knowledge in participatory development. But information scientists are paying more attention to the conceptual understanding of indigenous knowledge than the practical aspects of building knowledge base for it. Anderson [12] argues that this type of criticism results from confusion of the purposes of education and training. Training leading to such specifically situated knowledge and skills is the responsibility of the employing organisation. All organisations have particular procedures tailored to their particular environment. No professional education qualification can substitute for the comprehensive induction programmes that are the responsibility of the employer [12]. After realizing this loophole, nevertheless, EASLIS in consultation with employers has designed a number of tailor-made short courses to enable LIS graduates and paraprofessionals (graduates with diplomas and certificates in LIS) to perform at work places. Some of the trainings so far conducted are summarized in Table 2.

All these and many others to follow are aimed at helping graduates and nongraduates to perfect at work places. A notable recent development geared to training per se before students graduate from LIS education institutions, for example, EASLIS and the Department of Library and Information Studies; UCU is the internship programme. It lasts two months during the 2nd year of the programme. Supervision is jointly carried out by the host supervisors usually LIS professionals at the hosting institutions, and professors and lecturers—the faculty supervisors from LIS schools/departments.

Every change or newly implemented system, however small or large, needs some kind of training programme

Table 2

| Short courses | Why the short course? | When it was conducted? | Target participants |
|---|---|---|---|
| Modern office management | Impart skills in customer care, modern office management practices, and the changing needs of office and library users | In July 2004 and 2005 | Secretaries, records clerks, library assistants, office messengers, and front desk officers |
| Records and information management | To impart skills in records and information handling techniques | July 2008 | Records managers, librarians, archivists, library assistants, office administrator, secretaries, and so forth |
| Records and office management | To impart skills in records and information handling techniques | July 2009 | Records managers, librarians, archivists, library assistants, office administrator, secretaries, office clerks, and so forth |
| Advanced records and information management | To build up on the skills learnt in the previous short trainings in records and information management | August 2010 | Records managers, librarians, Office administrators, archivists, office managers, and so forth |
| Management of libraries and information centers | To impart skills in the management of libraries | July 2008 | Librarians and library assistants |
| Databases management | To impart skills in the management of libraries | January 2010 | Librarians, secretaries, and records managers |
| Communication skills and minute writing | To impart skills in minute writing and office communication | July 2007 | Librarians, records officers, office managers, and so forth |
| Electronic records management | Specially designed to train African Union Staff in Electronic Records management skills | February 2011 | Records managers |

to ensure proper uptake and best use of the new system and facilities it provides. Without well-designed appropriate training, few people, if anyone, will know how to use the systems properly to the full benefit of the organization [12]. The best employing organisations also accept responsibility to nurture employees' professional development and provide an environment that encourages lifelong learning. But this also means that educational institutions should not leave these aspects of training to employers alone because education and training are ideally intertwined. In our view, LIS educators should get in touch with employers in respect of continuous lifelong learning/training for LIS profession. In part, this will help LIS education curriculum designers to focus on the relevant needs of the employers by providing relevant education.

## 2. Challenges of LIS Education and Training in Uganda

The challenges of LIS education and training include how to make LIS education relevant and effective. It is no secret that the circumstances affecting LIS education and training in Uganda have changed drastically even in the last decade. There are several factors in this change. As Smith [14] argues, one is technological development in the field of information creation and dissemination, which includes the increasing use of computers, microforms, word processing equipment, and the use of lasers and a wide range of developments in the field of communications, including satellites. This technological change has continued to pose a challenge to LIS field.

In Uganda, the challenges facing LIS education and training are many. Some of these include the following.

(i) *Lack of Adequate Education and Training Schools.* Many of the pioneer librarians who worked in the Sub-Saharan Universities' libraries were trained by the Library Association in UK [15]. In the early 1960s, most African countries, Uganda inclusively, established Schools of Library and Information Science in their universities. However, most of these schools are still inadequate in terms of standard and quality to meet the high intake due to the high demand for higher education. For instance, it is only Makerere University that has master of science in information science and PhD in information science in Uganda. With the privatization of education in Uganda, many universities have been established. There are currently 5 public Universities, 24 private universities, and 2-degree awarding public nonuniversity institutions in Uganda [16]. The Uganda National Council for Higher Education, UNCHE, (the National University and other tertiary institution accrediting body in Uganda) requires all these universities to have graduate and postgraduate librarians. EASLIS, Makerere University alone cannot meet the demand for the librarians with graduate qualification. To make matters worse, there is nobody who has so far graduated with a PhD in information science from Makerere University since the programme was launched in 2004 to help fill the human resources gap. This is partly attributed

to the fact that the pioneer students are both busy working people and time to dedicate to the programme has been a problem; another problem has been the lack of funding for both the academics part of the programme and the research component.

(ii) *Lack of Adequate LIS Educators*. It is universally recognized that in our knowledge- and technology-driven global village, each country's economic and social well-being depends on its ability to harness its human resources through a dynamic and innovative educational system that thrives on, and propels, technological development. This required link between educational and technological development is particularly critical at the higher levels of the educational system, and especially, university education [17]. Unfortunately there are inadequate educators especially at postgraduate level and especially in the fields of records and archives studies, publishing tudies, and IT-related courses. Most of the educators/trainers in Uganda did much of library science, information systems, and information science at postgraduate level because the LIS profession has been very slow in addressing the special aspect of records and archives studies and publishing education and training. Currently there is only one person with PhD in archives management in Uganda and is a lecturer at EASLIS, Makerere University.

(iii) *Lack of Appreciation by Policy Makers, the Role Libraries, Records, and Archives Play in the Development of a Country*. In the increasingly knowledge-based economy, information has emerged as the "fourth resource" after land, labour, and capital since it constitutes the very foundations of almost every sector of the society [18]. Unfortunately, the importance of LIS management is little appreciated among administrators and bureaucrats in Uganda. As argued by Okello-Obura [19], sound records and information management facilitate fast decision making and transparency in government operations. Given that well-recognized importance and the benefits of good records management, a cross-section of Ugandans were very disappointed by the action of the Government of Uganda (Ministry of Education and Sports) to scrap the bachelor of library and information science (BLIS) and diploma of records and archives management (DRAM) of Makerere University from the list of courses under government sponsorship [19]. BLIS and DRAM are the only courses in public universities that train human resources for national and international library and records management. It was not until a lot of concerns were raised even through writing in print media [19] that the government reinstated these programmes among the lists of government-sponsored programmes in Makerere University, Uganda. The scraping of these programmes from the list of programmes supported by the government of Uganda through scholarships provision was an indication of little appreciation of the role libraries, records, and archives play in national development.

(iv) *Lack of Mentorship Strategies for Young or Junior Authors*. There is a problem of young scholars working together with senior scholars in the publishing industry. Many young scholars are reluctant to work with senior scholars, and nobody knows what exactly the problem is. Could it be that because the young scholars are engaged in too much teaching to do research in order to earn extra money since at Makerere University, staff members who teach more than 10 hours per week are paid for the extra hours taught? This kind of scenario discourages joint publication and affects production of indigenous scholarly works that are very important for LIS education. We strongly suggest that this could be further investigated.

(v) *Standardization of LIS Programmes*. Worldwide, extensive effort has gone into the creation and implementation of international standards for information management. This implies that even at national levels LIS education programs should be standardized. The main professional body in Uganda for professional librarians, documentalists, archivists, records managers, and conservators is the Uganda Library and Information Association (ULIA). According to the constitution of ULIA, ULIA is expected to monitor the standards of LIS education in Uganda. Unfortunately, this is not happening. Sometimes LIS programmes are launched without ULIA's official input. This is destructive, and we challenge ULIA on this. Although the accreditation of all academic programmes in Uganda is the responsibility of Uganda National Council of Higher Education, the involvement of professional association like ULIA in the development of LIS programmes is important. As argued by Rankin [20], the professional bodies have a strong tradition of supporting LIS training and education, and this needs to be tapped to improve LIS education in Uganda.

(vi) *Technology Infrastructures at LIS Schools*. Tsakonas and Papatheodorou [21] note that digital libraries, e-journal platforms, portals, e-prints, and other web-based information systems provide services supporting users to perform intense work tasks that require complex interaction activities. An important challenge is for individual LIS managers and the profession collectively to adapt to technological changes by acquiring sufficient knowledge to be able to use computers. There is now a preponderance of computers in all areas of life, including in the conduct of transactions of all kinds, meaning more and more records and information are being created and maintained digitally. As argued by Ocholla [22], LIS schools are largely funded by the government through their affiliate institutions, such as universities. Because of rapid technological changes in the information environment, resource support has become fundamental in the growth and sustainability of LIS schools. Increasingly, LIS education and training is becoming highly dependent on modern computer hardware and software, efficient internet access and connectivity, computer literacy and highly skilled IT staff, and well-equipped computer laboratories [22]. The challenge of adapting to technological change provides the opportunity to handle information more effectively in every respect: creation, storage, retrieval, and dissemination. Recent reports [5, 23, 24], focusing on information and communication technologies in LIS education in Africa,

recognized increasing investment on ICT for LIS education in the region for teaching and learning, research, and for academic management and decision making. But in Uganda, there is still a lot to be done to match the increasing enrolments. Technology infrastructure in LIS schools in Uganda is poor with limited computers, lack of good maintenance, and slow internet access.

(vii) *Information Literacy*. The Association of College and Research Libraries [25] defines information literacy to be "a set of abilities requiring individuals to recognize 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." Unfortunately, the majority of the students who go for LIS education in Uganda are information illiterate. This is because of the inherent poor reading culture deeply rooted in the poor school library system and services in the country. Currently, there is no national school library policy in Uganda, and school libraries in Uganda have been neglected for a very long time. As a result, libraries are often lacking completely in many schools or are considered to be of an inadequate standard in the schools that do have them [26, 27]. Nevertheless, there have been efforts to improve on the situation. One of them is the School Library Development Project enacted by the National Library of Uganda (NLU) and the East African Book Development Association where books are selected and purchased annually and distributed among 36 primary schools in 12 districts every year [28]. The NLU also monitors and evaluates the use of these books through regular visits [29]. The primary and secondary schools in Uganda, especially the private ones, are also a problem. Due to the competition to excel in final examinations, many pupils/students are mostly taught how to pass exams but not how to look for information!

(viii) *Changing Enrolment*. LIS schools cannot exist without students just like businesses cannot exist or thrive without customers [2]. Whereas students enrolling for library science have been declined in most LIS schools in Africa, the number of students enrolling for LIS with diversified qualification programmes with either broader information orientation or specialized information qualification programmes (such as records management, publishing, multimedia, knowledge management, and information technology) has either increased or stabilized [2]. Although there is a perception that the decline of enrolment for librarianship qualification is caused by limited job opportunities in libraries as the expansion of libraries in Africa is very minimal or in some cases nonexistent, we tend to agree and somehow also disagree. It is true that after independence, in 1962, the library sector in Uganda developed due to support from foreign donors. Unfortunately, the progress that was achieved during the 1960s was reversed in the 1970s as a result of Idi Amin's terror regime.

The collapse of the economy in Uganda during the 1970s together with the ending of book donations from abroad hit the libraries hard. It was not until the 1990s when the financial situation improved in Uganda that libraries once again were able to serve the public and its communities [30]. Now with the privatization of education, many universities are being established, and this implies the need for more librarians. What is needed is for LIS educators and professionals to refocus the curricula to address the changing pattern in LIS profession. As Kavulya [31] notes, there are a number of factors that emphasize the need to redefine the role of library and information science (LIS) professionals and design curricula that effectively responds to societal needs. Such curricula should be based on job market information and the need for competencies that lead to the development of the field. Rigidity need to be avoided. LIS education needs to incorporate broader information-related disciplines in order to enter the emerging markets or markets that never employed LIS graduates before.

(ix) *Challenge of the "Fourth Role" of LIS Schools: Financial Management*. Traditionally, the roles of the LIS schools have been teaching, research, and community service. Recently, because of the changes that have taken place in higher education including budget cuts by governments [31], many private programmes have come up and brought what we term in our library school as "the fourth role" called financial management [3]. LIS schools managers in Uganda, today, tend to spend a lot of time in ensuring that books of accounts balance better than planning for the development of LIS education [3]. This, in our view, has been "quite a challenge" or a burden to LIS leaders at Makerere University. However, with faculties and schools forming colleges in Makerere University with effect from 13th February 2011 where financial responsibilities are removed from Deans, LIS school heads will now concentrate more on LIS curricula and professional development. This is a good move since the burden of financial management has now been removed from heads of the LIS School in Makerere University. As a former director and current director/dean of East African School of Library and Information Science, Makerere University, Uganda, we authoritatively put that financial management had become a "fourth role" in the LIS School in Makerere University.

(x) *Continuing Education for LIS School Members*. LIS School members have to move out of their traditional comfort zones and ensure that they keep up-to-date with developments to ensure quality teaching and research. Since training courses are not always readily available, and those that are available tend to be very expensive, it very often implies that LIS members have to take responsibility for their own education and training and actually educate and train themselves through a policy of life-long learning. But this creates a lot of stress and uncertainty and, in the case of less dedicated faculty members, may lead to teaching that is not of an acceptable standard or quality [2, 32].

## 3. The Way Forward

In the increasingly knowledge-based economy, information is considered a vital resource in economic, social, and political life and skills for information handling in all sectors

are more than ever in great demand [33]. In response to this, library and information science education and training in Africa and Uganda in particular is undergoing rapid change though with difficult challenges to overcome. The above-identified challenges need to be handled head on. Some of the issues that need to be addressed include the following.

(i) *Creation of Both Local and International Partnerships.* To address the problem of inadequate educators in the LIS field, there is need to create good local and international partnerships that can promote teaching, research, and innovations in the field of LIS. Essentially, collaboration is about sharing and exchanging knowledge and skills. Thus, it involves knowledge, skills, and techniques' sharing and transfer and enables visibility, and by using collective effort it may solve problems faster. To echo what Ocholla [22] has pointed out, fundamentally, collaboration and partnerships could be forged amongst LIS institutions in a country and internationally or regionally in areas such as teaching, research, student and staff exchange, conferences and workshops, curriculum development, publications, research supervision and examination and distance teaching, learning, and research.

(ii) *Careful Curriculum Design and Involvement of Stakeholders.* As noted by Ocholla [22, 34], opportunities for collaboration exist in the development of partnerships with industry/employers in curriculum development, teaching, research, publication, and experiential learning. Anderson's [12] advice that curriculum designers and teachers of professional education courses can do a great deal to help make new professionals become independent life-long learners is vital. Assessments can be designed not only to test mastery of course content, but also to develop new skills needed to write and present the assignments. Learning resources can be provided in such a way that students further develop their own information-seeking skills. This implies that the research component should be emphasized in the curriculum.

(iii) *Involvement of Practitioners in the Design of Short Courses.* Both education and training are essential to ensure optimum performance by practitioners, but the concept of education that is held by the profession needs extension beyond an entry-level qualification to embrace a culture of life-long learning including higher education and research. As argued by Anderson [12] and Shepherd [35, 36], the development of professional training, which will equip records managers to perform effectively in the context of technological changes and promotion of relevant standards and procedures, should be emphasized. LIS education institutions should involve practitioners in not only the design of the educational curriculum but also in the design of the curriculum for short courses.

(iv) *Uganda Library and Information Association (ULIA) Needs to Aggressively Advocate among Both Private and Public Policy Makers in Uganda the Values of Good LIS Management.* The association should adopt a higher public profile approach and persuade managers in the public and private sectors, and the general public, of the benefits of good library, records, and archives management. A proactive approach is vital in this regard. Further to that, ULIA needs to make a refocus on its activities to bring the few records and archives managers in the country on board. Records and archives management activities like workshops and seminars should be urgently created by ULIA.

(v) *Graduate Training in the Field of Records and Archives Management.* As argued by Okello-Obura [37], Shepherd [36], and Anderson [12], both education and training are essential to ensure optimum performance by practitioners, but the concept of education that is held by the profession needs extension beyond an entry-level qualification to embrace a culture of life-long learning including higher education and research. LIS schools need to lobby and develop graduate curriculum for records and archives management. This will help educate the human resources necessary for policy formulation in the field of LIS.

(vi) *Information Literacy.* As a course should be made compulsory for all students irrespective of their disciplines, this will go a long way in increasing the knowledge level of the learners regarding the use of information resources.

(vii) *Mentoring of Young Authors.* Young authors or scholars need to be mentored by experienced authors or professors. Mentoring should be to do with encouragement to publish quality articles. An experienced author could think of an area publishable and encourage a junior author to write about or when a junior author brings an area of interest, the experienced author should encourage and guide the junior author. To make this possible, there should be seminars and workshops to this effect. We are happy that INASP has seen this gap and is supporting some library associations like Uganda Library and Information Association to bring experienced authors and junior authors together through workshops to discuss authorship. This will help increase the pool of reading materials for LIS education and training.

(viii) *Strengthening and Full Integration of ICTs in LIS Education and Training Curricula.* Worldwide, there has been rapid adoption of electronic data processing in LIS practice and, therefore, giving students IT will give them not only a competitive edge in the labour market but will also make them competent in the work situation [31]. ICTs are now becoming life blood of businesses. In addition to the need for the study of information management, information resources, information access, and research, we agree with Kavulya's argument [31] that LIS practice now includes hardware and software techniques; website development and administration; digitization process; electronic information; internet use and evaluation; information storage and retrieval. So, courses such as database design and management; information systems; web authoring and electronic publishing; electronic records management are now crucial and should be dovetailed in LIS curricula. In relation to this, the quality of teaching staff should also be improved through focused short trainings. The success

of any teaching programme depends on the quality of the teaching staff, and therefore there is a need for careful selection of academic staff to ensure that only those with the right academic and professional qualifications, research and publication record, and experience are allowed to teach. Staff that are inadequate in core support areas in the curricula especially ICTs should be sent for training when necessary.

In conclusion, as LIS education and training seeks a wider role in society, the need to prepare students for careers in a rapidly changing world requires multidisciplinary education, greater emphasis on core knowledge, and fully and well-articulated graduate programmes combining structured course sequences with practical experience and sophisticated research projects tuned as well towards addressing national, social, political, and economic problems. LIS educators and practitioners should design and execute programmes which address the recruitment of emerging majorities and developing more diverse leaders for the profession.
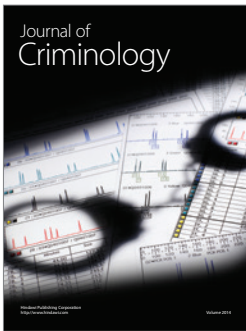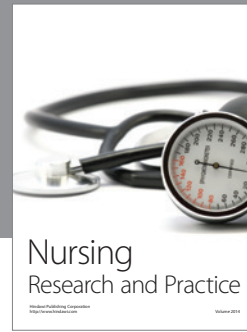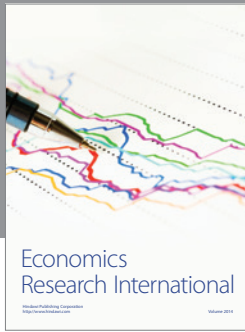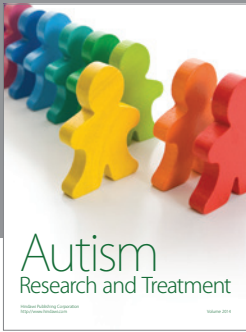
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