	<p style="text-align: right;">Date : 05/07/2007</p> <p>The Current Status and Challenges of Collaboration in Library and Information Science (LIS) Education and Training in Africa</p> <p>Dennis N. Ocholla¹ (docholla@pan.uzulu.ac.za) Department of Library and Information Science, University of Zululand South Africa.</p>
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Abstract:

The paper discusses the current status and challenges of collaboration for library and information education and training in Africa. It is observed that library and information education and training in Africa is undergoing rapid change, with difficult challenges to overcome. Recognized the benefits of collaboration such as helping to speed up problem solving, enabling knowledge sharing through networks, and stimulating creativity. Noted that LIS schools can collaborate in research; student and staff exchange; organization of joint conferences, seminars and workshops; publication of books such collected works and textbooks; research and teaching visitations (e.g sabbatical, visiting lectureships, post doctoral fellowships); quality management in research, learning and teaching or accreditation; curriculum development; and many more. Observed that although there is a lot of gain that comes from collaboration, LIS Schools in Africa does not project strong collaboration links or associations among them. The paper raises fundamental challenges and opportunities of collaboration on LIS education and training in Africa by largely drawing examples from the author's experience and observation; conducting interviews with LIS schools leaders/chairs/deans; studying related institutional documents as well as African studies in the domain

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and thereby provides useful current information to inform LIS educators, researchers, students and other stakeholders on the status and challenges of collaboration in LIS education in the continent. The paper is current, well informed and passionately researched and written.

Library and Information Education in Africa

Africa consists of 53 independent countries whose political, economic, social and technological history is closely associated with Europe that colonized large parts of the continent over a long period of time. As is widely known, the colonialists who left socio-economic and political scars on the face of Africa were the British, French, the Portuguese and Spanish as well as people of Dutch origin (now Afrikaners) whose languages (21 are English speaking (Anglophone), 24 French speaking (Francophone), 5 Portuguese speaking (Lusophone), 7 Arabic speaking and 2 Spanish speaking) are widely spoken alongside other widely spoken national languages such as Amharic, Creole, Kiswahili and Somali. There are well over 50 LIS schools in Africa today. The largest numbers of LIS schools are located in South Africa (12), Nigeria (8) and Kenya (7). Most of the LIS schools are located in the Anglophone Africa and within Higher Education Institutions (HEIs) particularly the universities. Although Lusophone Africa, which includes Angola, Cape Verde, Guinea Bissau, Mozambique and Sao Tome E. Principe, has libraries, domestic LIS education programmes are unknown or less popularized. Angola and Mozambique are just beginning to stabilize after many years of civil war that, we assume, has contributed to poor infrastructure for library and information services. Despite major changes in LIS curriculum in Africa to embrace a multiple of information professions, and notwithstanding the small number of libraries in Africa, libraries still occupy a major market segment for which the products of LIS education are directed. There has been tremendous dependence on foreign governments (particularly Britain, France and the USA) as well as on philanthropists for the development of libraries and LIS education. This dependence seems to continue relatively more in countries without LIS education programmes and largely for postgraduate LIS education and training. Although public libraries are numerically greater in number than other types of libraries, the growing number of tertiary institutions, particularly universities that depend heavily on libraries, contributes to the growth of academic libraries that also demand highly qualified LIS staff with a multiplicity of LIS knowledge and skills for modern and competitive information services. The public and private sector also increasingly recognize the need of proper information services that in turn demand knowledgeable and skilled information providers. Unlike other African countries, South Africa has a longer history of LIS education dating from 1938. At the moment South Africa has 12 LIS schools located within Universities (see Ocholla and Bothma 2007)

Essentially (see Ocholla 2000, 2005 and Minishi-Majanja 2004, Ocholla and Bothma 2007), common trends are noted in the growth of LIS schools, review and revision of curricula, increased use of ICTs, decrease or increase of student numbers, amalgamation and re-orientation, relocation of the academic administration of LIS schools, expansion and closure.

Challenges of LIS Schools

The challenges and opportunities facing LIS Schools in Africa, more recently, are discussed by Ocholla (2000, 2001 and 2003), Minishi-Majanja (2003, 2004), Minishi-Majanja and Ocholla (2003), Kigongo-Bukenya (2003), and Ocholla and Minishi-Majanja (2004) and Ocholla and Bothma(2007). Among them are student numbers without which LIS schools cannot exist and thrive. Whereas students enrolling for library science has 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, Information Technology) has either increased or stabilized. 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 non-existent.

Second, career opportunities that does not show that libraries are the biggest employers of LIS graduates in Africa, increasingly, occur in the emerging LIS markets as reported by Ocholla (2000, 2005) and Snyman (2000) focusing on career opportunities in South Africa that noted, besides career opportunities in libraries (which was the largest employer of LIS graduates in South Africa) there were rapidly growing career opportunities in the non-library sector or the emerging market. The emerging market has forced most LIS schools to re-orient their curricula to the new market in order to survive.

Third, Funding of LIS schools. LIS schools are largely funded by the government through their affiliation institutions such as universities. Because of rapid technological changes in the information environment resource support is fundamental for 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 literate and highly skilled IT staff and well equipped computer laboratories. Unfortunately, funding of LIS schools does not meet these requirements in most LIS schools in Africa. Lack of funding for libraries that are supposed to be the main LIS market is disturbing. For example, Issak (2000) report, that is still real, seven years ago, that provided an account of trends, issues and problems of public librarianship in a significant part of Africa (ten Anglophone countries) echoed poor services, declining budgets, lack of resources, outdated materials, lack of planning, inadequate knowledge of the information needs of the users and poverty, and also blamed the western model(format, content, relevance/context, location) of public library system

on the poor performance of libraries. Several authors in this collected work, suggested provision of alternative services such as community information services, impact assessment of public library services, government commitment, improvement in the professional commitment of librarians and provision of resources to be essential areas of focus.

Fourth, technology infrastructures at LIS schools as reported by Ocholla(2003), Minishi-Majanja(2003, 2004), Minishi-Majanja and Ocholla(2003), Minishi-Majanja and Ocholla (2004) 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. There are, however, disparities in the nature and level of access and use at the institutional, national or regional levels. The disparities are caused largely by both economic (inadequate infrastructure and resources) and political reasons (willingness to invest on ICT). The common issues range from the need for ICT policies, resource support, students and staff access (e.g. in the laboratories and offices, internet access, use of ICT for teaching and learning), access to adequate computer hardware and software licenses to computer literacy.

Collaboration of LIS Schools

The concept collaboration has several meanings. For example, it is a “process where two or more individuals or organizations deal collectively with issues that they cannot solve individually” (Ecosystem Management Initiative, 2002). Among other useful definitions, it may also be viewed to be a “partnership, alliance or network, aimed at a mutually beneficial clearly defined outcome” (The Commonwealth of Australia (2004:1). There are several benefits that come with collaboration. Essentially collaboration is about sharing and exchanging knowledge and skills. Thus, it involves knowledge, skills and techniques sharing and transfer, enables visibility, and solves problems rapidly. The type of collaboration is defined by its nature and level. For example, individuals- inter-individual, groups- intra/inter-group, departments – intra or inter-departmental, institutions- intra/inter-institutional, sector- intra/inter-sectoral, countries –national/ international, regional – inter-regional. It can also be informal and formal. Barriers to collaboration arises from lack of time, costs (funding, locations, communication, dissemination of results, travel, administrative costs such research management- bureaucracy, cultures, financial systems, ethics, clash of values), geographical - distance, cultural and political- e.g policy, inclusivity and exclusivity, psychological – e.g willingness and attitude.

Fundamentally, collaboration and partnership could be forged among LIS institutions in a country and internationally or regionally in such areas as teaching, research, student and staff exchange, conferences and workshops, curriculum development, publications, research supervision

and examination and distance teaching/research. Experience has showed that collaboration process involves at least three stages. These are initiation, implementation/execution and evaluation. Cases where collaboration has been introduced among LIS schools in Africa have not been able to achieve the three stages because of a variety of reasons. Collaboration initiatives among LIS Schools in Africa that are known to me are battling to fulfill the three stages. A few cases for example from eastern and southern Africa are worth highlighting.

First, in 2004, through the initiative of the then Director of East African School of Libraries and Information Science, a workshop of Library and Information Schools Network of Eastern, Central and Southern Africa (LISNET-ECSA) was convened in Kampala Uganda with the aim of forging cooperation/collaboration among LIS Schools in the region. Participants were drawn from LIS experts and Head/Deans of LIS Schools from Uganda, Tanzania, Ghana, Kenya, Botswana, Namibia, USA, Zimbabwe, South Africa and the UK. The Objectives of the Workshop(LISNET-ECSA 2004:5) were to: establish a network of LIS Schools and Departments in the East, Central and Southern Africa(ECS) region; assess training needs of LIS educators; assess the existing LIS Schools/Departments curricula; determine required changes and incorporate them into LIS Schools/Departments curricula; assess the IT requirements for LIS Schools/departments to provide e-learning; assess possibilities of staff and student exchange programmes; consider joint research and publication; workout modalities for establishing a database/web page for LIS Schools and Departments in the ECS; elect a steering committee and hold discussions on matters affecting LIS education in the region. This grandiose plan did go to the implementation stage where the objectives could be achieved. The elected interim committee who were to steer the initiative forward did not produce any results and the initiative stalled.

Second, another example whose dimension is slightly different comes from South Africa. Library and Information Association of South Africa (LIASA) has an interest group named Research Education and Training Interest Group (RETIG) among 10 others that I heard the privy to chair for two years (2004-2006). Among the aims and objectives of RETIG is to foster collaboration of LIS Schools in South Africa. Through an initiative of the then RETIG Chair, a meeting (Indaba) of LIS Schools in the South Africa was convened at the University of South Africa in February 2005. The agenda of the first meeting focused on LIS standards, Job market of LIS graduates, statutory status of the LIS profession, duration of LIS education and training /programmes, LIS curriculum, government subsidy for LIS education and on collaboration and partnership. On collaboration, it was resolved that: LIS schools participate in LIS continuing education and professional development(CEPD) and in the Centre for Information Career Development(CICD) of LIASA continuing education initiatives, LIS Schools meet twice a year during LIASA conference and six months after the conference to discuss matters affecting LIS education and

training in the country, a discussion platform/closed listserv for LIS Schools hosted by University of Pretoria be set up to open up communication gateway among LIS schools and kick –start collaboration. This initiative moved to implementation stage. For example the Indaba was held in November 2005 at the University of KwaZulu Natal, in March 2006 at the University of Western Cape and the annual LIASA conference under RETIG umbrella, in September 2005 and 2006. The Indaba has made it possible for LIS schools to meet, share knowledge and experiences and tackle some practical issues of mutual benefit. Although the LIS Schools Indaba has not been convened in 2007, which is not a good sign, it has been possible to monitor the progress of this collaboration through reports during the meetings. In essence even before and during this initiative , collaboration of LIS schools has been loose, informal – based on who knows who better, and focusing largely on examination of each others undergraduate and postgraduate students examination papers and research projects; attendance, participation and organization of conferences and workshops as well as review of conference papers; participation as reviewers of research publications such as in those published in mainstream LIS research journals in the continent where expertise of LIS faculty is always required.

A third example, of collaboration among LIS schools is based on research collaboration. Two examples can be drawn from here. The first example focuses on LIS research in Africa where research publication of LIS researchers appearing in Thompson Scientific(formerly ISI) Science Citation Index and Social Science Citation Index from 1986- 2006 were analyzed(see Tables, 1,2& 3)

Table 1: Author collaboration

a_author	b_author	No. of papers
BRITZ J	LOR PJ	5
BASTA AH	EL-SAIED H	3
ABDOU MM	BASTA AH	2
ABDOU MM	EL-SAIED H	2
ADENIRAN OR	ADIGUN TA	2
ADENIRAN OR	OKOH MI	2
ADIGUN TA	OKOH MI	2
AGBOOLA AA	OYEBISI TO	2
AINA LO	MABAWONKU IM	2
ALEMNA AA	ANTWI IK	2
ATLAM ES	MORITA K	2
BORNMAN H	VONSOLMS SH	2
CHANG MM	NIEUWENHUYSEN P	2
CHANG MM	STEELE C	2
CHOWDHURY S	CHOWDHURY GG	2
CLOETE LM	CRONJE JC	2
DE JAGER K	NASSIMBENI M	2

ELOFF JHP	VONSOLMS SH	2
GELDENHUYS G	HUMAN L	2
IKOJA-ODONGO R	OCHOLLA DN	2
JACOBS D	INGWERSEN P	2
LUMANDE E	MBAAKANYI DM	2
LUMANDE E	UBOGU FN	2
MBAAKANYI DM	UBOGU FN	2
NIEUWENHUYSEN P	STEELE C	2
OCHOLLA DN	ONYANCHA OB	2
OLEN S	POTGIETER D	2
REMENYI D	WILLIAMS B	2
ROSSOUW SF	STEYNBERG S	2
SNYMAN MMM	VAN RENSBURG MJ	2
VAN BRAKEL PA	MUTULA SM	2
VAN BRAKEL PA	CHISENGA J	2
VONSOLMS R	VONSOLMS SH	2

The Table provides co-authorships of two or more papers, thus excluding one-paper collaborations which were the majority (i.e. 689). The highest number of co-authored papers was between Britz J and Lor P (5) followed by Basta AH and El-Saied H who jointly authored 3 papers. The rest of the top ranking partnerships produced two papers each as illustrated in Table 1.

Table 2: Institutional collaboration

a_institute	b_institute	Expr1002
TSHWANE UNIV TECHNOL	UNIV PRETORIA	4
UNIV PRETORIA	UNIV WISCONSIN	4
MAKERERE UNIV	UNIV ZULULAND	3
ROYAL SCH LIB & INFORMAT SCI	UNIV PRETORIA	3
AUSTRALIAN NATL UNIV	FREE UNIV BRUSSELS	2
AUSTRALIAN NATL UNIV	HONG KONG UNIV SCI & TECHNOL	2
AUSTRALIAN NATL UNIV	RAND AFRIKAANS UNIV	2
FREE UNIV BRUSSELS	HONG KONG UNIV SCI & TECHNOL	2

FREE UNIV BRUSSELS	RAND AFRIKAANS UNIV	2
HONG KONG UNIV SCI & TECHNOL	RAND AFRIKAANS UNIV	2
INDIANA UNIV	REGENSTRIEF INST INC	2
LAGOS STATE UNIV	OBAFEMI AWOLOWO UNIV	2
LOUGHBOROUGH UNIV TECHNOL	UNIV NAMIBIA	2
TANTA UNIV	UNIV TOKUSHIMA	2
TECHNIKON SA INFORMAT TECHNOL	UNIV PRETORIA	2
TSHWANE UNIV TECHNOL	UNIV WISCONSIN	2

Institutional collaboration was minimal with the Tswane University of Technology (TUT) co-producing 4 papers with the University of Pretoria (UP). The latter also co-published a similar number of papers with the University of Wisconsin. Partnerships between the University of Zululand Makerere University yielded 3 papers while joint efforts between the Royal School of Library and Information Science and the UP produced 3 papers. The rest of the collaborations yielded two papers each. There were a total of 257 institutional collaborations with the majority (241) producing only one paper each.

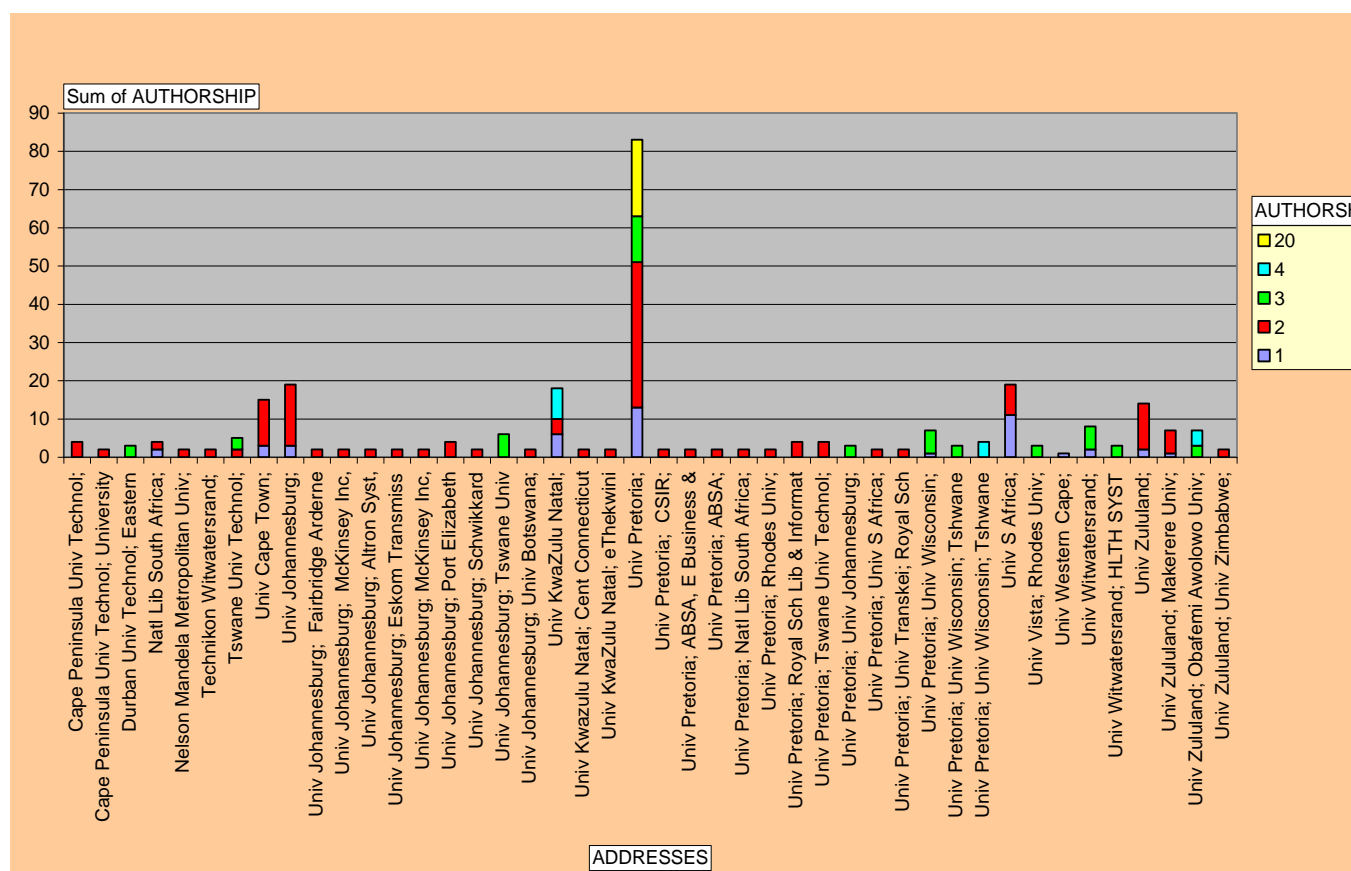
Table 3: Single vs. multiple-author papers

No. of authors per paper	No. of records	Total no. of authors
1	721	721
2	168	336
3	46	138
4	23	92
5	5	25
6	4	24
7	4	28
8	2	16
9	1	9
10	1	10
TOTAL	975	

Table 3 above shows that there were 721 single-author papers which were authored by a total of 721 authors while two-author papers totaled 168 with 336 authors participating in their production. One hundred thirty eight authors participated in the production of 46 three-author papers while four-author papers numbered 23, which were produced by a total of 92 authors. The Table reveals that there were a total of 254 multiple-author papers which accounted for 26.1% of the total number of papers while single-author papers which totaled 721 accounted for 73.9%. There was one paper each that was authored by 9 and 10 authors respectively.

The South African case study is based on a recent study on LIS research in South Africa (Ocholla and Ocholla 2007). Based on the analysis of LIS research output through publication LIS journals indexed by Web of Science(SCI,SSCI and AHCI) from 1993-2006 focusing on the nature of LIS research collaboration, whether collaborative publication was internal, external, external but within South Africa, or external but with foreign countries, it turned out that of the 100 co-authored articles in this study, 55 (55%) were internal (i.e. published by colleagues from the same institution), and 45 (45%) were external (published with colleagues from other institutions). External co-authorship with South African Institutions came to 23 of 45 (51.2%), external but with non-South African institutions totaled 20 of 45 (44.4%), while external but involving both South African and foreign institutions produced 2 of 45 (4.4%). Figure 1 demonstrates the nature and type of research collaboration through single or multiple publications. Evidently, there is limited external (45 %) collaboration within and outside the country. Even collaboration between institutions within the country is just slightly more than half (55%) of all collaborations.

Figure One: Nature of Collaboration through Publication in Web of Science 1993-2006



Some views from LIS Schools respondents

Kenya: *“It is true that collaboration among LIS schools is weak and in particular LIS schools in Africa. The School of information Sciences at Moi University is currently collaborating with School of informatics at Indiana University, Meniapolis. The nature of collaboration is research with the theme Health Informatics. The Dean and members of the School has visited us to discuss the areas of collaboration. This will in future include staff and student exchange. However, within Kenya, there are three universities offering LIS (Moil, Kenyatta and Egerton) but apart from External examination hardly any collaboration exists”*(Kiplanga’t 2007 June 17th).

Opportunities

Opportunities for collaboration exist in the development of partnership with industry/employers in curriculum development, teaching, research, publication and experiential learning. Opportunities also exist in staff development both formal and informal, creation of consortia of LIS schools, distance learning (e.g. at UNISA), multidisciplinary approach to LIS education and training that enables the extension of knowledge frontiers made possible by the location of most LIS schools in HEIs, market orientation of programmes, uniqueness of programmes and avoidance of harmful competition, accreditation standards, location of programmes - largely within established universities, internet presence for web visibility and networking and knowledge sharing. As we mentioned in a recent paper (Ocholla and Bothma 2007) opportunities for (relevant) research also exist. Research and development form the backbone of any profession and also of any teaching programme. There are many opportunities for relevant research in information-related fields in Africa. Obviously scholars from Africa can make significant contributions to the mainstream topics in, for example, information retrieval (IR), IR systems design and development, information and knowledge management and many other topics. However, Africa presents unique opportunities for research that may not necessarily be available in the developed world, or where the issues may differ between the developed and developing world, and between developing countries. A few random examples will suffice: indigenous knowledge and indigenous knowledge systems (as explained above), information for development, the use of ICTs in the developing world, information ethics and legal aspects of information in an African context, dissemination of information in rural areas / health contexts (especially regarding the AIDS pandemic), literacy and information literacy training in a developing world, information flow between the developed and the developing world, etc. All these topics are highly relevant for the developing world, but may radically influence the developed world as well in terms of its perceptions of the developing world.

Opportunities also exist in offering continuing education for LIS workers / professionals. Although not necessarily fresh information, some of the initiatives made on continuing education so far covering Africa were reported by Ocholla (2000:43-44) and Kaniki (1997) on South Africa. There are also fresh initiatives being made in South Africa through LIASA - CEPD-ICDC alluded to earlier (see <http://www.liasa.or.za/partnership/cicd.php>) “to access, offer and recommend a suitable spread of relevant programs thereby ensuring the trainee has access to a variety of courses that will enhance and upgrade skills pertinent to their personal and professional development”.

Conclusion

This paper has brought to the fore several fundamental issues:

- A comprehensive and inclusive coverage of LIS education and training in Africa that includes developments and issues in Francophone, Lucophone, Arabic and Spanish speaking countries is essential. This invites a collaborative publication involving LIS educators from all these areas. This is an opportunity to be pursued in our next paper.
- Most of LIS schools are based in the Anglophone Africa and located within universities
- The common trends of LIS education alluded to earlier(e.g increase in the numbers of LIS schools, curricula review, more use of ICTs, problems with decreasing student numbers for librarianship, re-orientation and re-location) are shared by most LIS schools in Africa
- The major challenges facing LIS education and training (in addition to the issues already mentioned) include the regulation of student numbers, knowledge and diversification of LIS job markets, funding of LIS schools and the development of technology infrastructures both in quantity and quality, allowing efficient access and development of continuing education and short courses to provide new knowledge, skills and attitudes to LIS workers.
- Opportunities for collaboration that exist requires initiatives, involvement and leadership
- Collaboration of LIS schools in the region is weak and largely informal. The formally constituted collaborative initiatives hardly take off the ground or go beyond initiation stage. Those existing are battling for survival because of lack of commitment and leadership.
- Research collaboration is weak as well. There is hardly any research collaboration among LIS schools in Africa. The number of research collaboration between LIS schools in Africa and those outside Africa seem be developing faster than internal (African) collaboration.

Organizing LIS schools workshops and pre or post conferences during national, regional and international conferences is an excellent idea for unraveling a large part our collaboration plight.

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