

## Teaching and learning for development through collaborative curriculum design: a study of University of Botswana, Botswana and University of Calabar, Nigeria

**Eno Joseph Ottong**

Department of Library and Information Science, University of Calabar, Calabar, Nigeria.

&

**Ubong Joseph Ottong**

Department of Business Management, University of Calabar, Calabar, Nigeria.



Copyright © 2013 by **Eno Joseph Ottong and Ubong Joseph Ottong**. This work is made available under the terms of the Creative Commons Attribution 3.0 Unported License:

<http://creativecommons.org/licenses/by/3.0/>

### **Abstract :**

*The study examined the curriculum of library and information science (LIS) programmes in university of Calabar and university of Botswana. The study also set out to find areas of possible collaboration between the two universities in order to reposition the programmes for effective teaching and learning for development. The methodology was a descriptive, as well as, a prescriptive approach, this involved content analysis of the curriculum in relation to course titles, programme structure, compulsory courses and practicum/field experience in libraries. Findings from the study reveal that the curricula of the two LIS programmes have similar courses and structure and therefore quite compatible. The study concludes that this sets the stage for collaboration between the two institutions and recommends drafting a framework to properly streamline curriculum, obtain international perspectives on the extent to which local curricula or course work is consistent with evolving professional needs and finally develop ways to assess areas of specialization and competencies in each university.*

**Keywords:** Curriculum design; Curriculum content; Curriculum structure; Teaching and learning; Collaboration.

### **Introduction**

Library and Information Science (LIS) is an interdisciplinary and multidisciplinary field that applies the practices, perspectives and tools of management, information technology and education and other areas of libraries. LIS also involves collection, organization, preservation and dissemination of information resources and the political economy of information. The first American School for Library Science was founded by Melvil Dewey at Columbia University in 1887 (wikipedia). Library and Information Science includes Archival Science, Information Science; Publishing and Book Trade, Library Science and Digital Librarianship (Minuhi, Onyancha, Bosire 2009). Their Study also reveals that the changing patterns of social-economic interaction in society have made professionals to re-examine their premise and reorientation towards current trends and perspectives. The phrase library and information science is associated with schools of library and information science, which generally developed from professional training programmes to university institutions during the second half of 20<sup>th</sup> century, Chua and Yang (2008). Universities are established to help in teaching, learning and

research. The main objectives in designing the library and information science programme is to enable the recipients function in different types of libraries; provide professional education which result in a high level expertise, scholarship and commitment to leadership, equip the product of the programme with relevant theoretical knowledge, practical skills and techniques to develop and enhance their job performance, encourage the spirit of enquiry and creativity among the library and information professional. Benchmark Minimum Academic Standards for Undergraduate Programmes in Nigerian Universities (2007).

In order to achieve the desired goal for teaching and learning for development of future African Libraries, there is need to have good curriculum design in the Department of Library and Information Sciences in all African Universities. RedHat Lisco, [www.net/study-in-India](http://www.net/study-in-India) says curriculum design is an aspect of the education profession which focuses on developing curricula for students. It involves thinking about the students themselves and what aspect of curriculum would be most appropriate. It usually takes into account the expected learning outcomes, associated learning and teaching takes assessment in evaluation. Curriculum design may also face a considerable number of limitations which include issues like funding, access to textbooks, moral norms, integration, and subjects. It leads to production of core programme/module documents such as course description, validation documents, prospective entry and course handbook. The process involves consideration of resource allocation, marketing of the course, and learners final outcome and destinations as well as general learning and teaching approaches and requirements.

The core issue of this paper is the analysis of the curriculum of Library and Information Science programme, using the Library Schools in Africa as a case study. The main objective is to examine the curriculum design of LIS; contents of the two library schools in Africa in relations to: course titles; programme structure; compulsory courses; required courses; and practicum/field experience in Libraries. The study will also assess the curriculum for possible collaboration and repositioning it for effective teaching, learning and research. It will also determine areas of strengths and needs.

### **Literature Review**

The LIS curriculum is an instructional design that seeks to educate and engage students in critical and innovative thinking (Konrad, 2007). The LIS curriculum for teaching and learning should not only mirror what is being offered to train librarians and information professionals with knowledge and skills to become qualified personnel in the field, but also meet the challenges of the ever changing information society (Chu, 2006). The twenty-first century information professional must possess skills in selection, content management, knowledge management, organization of information, research services, developing and maintaining digital libraries, and bringing information resources to the desktop. People with the right skills are crucial to the success and competitiveness of contemporary information environments (Varalakshmi 2006). Library professionals must therefore be equipped with the relevant skills and expertise to be competent in a digital culture.

The education and training of LIS professionals has to be such that it empowers them to unleash their potential as they endeavour to offer relevant and efficient services within the current levels of technological sophistication (Minishi, Majanja, 2007). Curry, (2002) observed that library and information science have witnessed not only the increasing globalization of higher education but also that of the LIS work place including the consequent extension of competition beyond traditional, institutional, national and regional boundaries. According to Curry, this environment has made it important for LIS education and training to strive to improve their quality of programmes.

Efficient and effective library and information education programs and library and information services can be realized through collaborative partnership. Lillard and Wales (2003) recommended that academic librarians and LIS educators must work together to seek creative approaches to strengthening LIS education. Fostering a closer collaboration between library educators and academic librarians through a variety of activities can help ensure that library education meets the need of the profession. According to Al-Suqri (2010), without collaboration with others in their profession, LIS departments are unlikely to be able to keep up with these developments and deliver international standards in teaching, research and information services. A networked environment therefore, lends

itself to cooperation and the sharing of ideas and solutions to problems common to libraries no matter where they are located. (Kesselman & Weintraub, 2004).

IFLA Guidelines for Professional Library/Information Educational Programs 2012- incorporates the inclusion of material in LIS curriculum that reflects developments in the provision of library and information services in the 21st century. The guidelines principles include;

- Students should acquire a broad general education (topics from other disciplines) as a significant component of the total educational programme for the library/information professional.
- Programmes should refer to educational policy statements issued by government or professional associations that identify important knowledge and skill components.
- The programme should incorporate appropriate means to allow students, in a practical way, to appreciate the interplay between professional theories and their application in professional practice. Depending on the required learning outcomes it can also include applied project research and/or projects that involve authentic practical activities, undertaken in a placement environment.
- In order to assist practicing librarians and information specialists to maintain competence in a changing society and to keep educators aware of issues and trends in practice, the programme should either conduct suitable workshops and short courses for the benefit of practicing librarians and information specialists or partner with other agencies in doing so.
- A process of formal curriculum review should take place on a regular basis and the next review should take place on or before 2017. This review should be informed by input from employers, practitioners and professional associations, as well as students and faculty and will be overseen by the IFLA Standards Committee.

### **Setting and Methodology**

The study is a survey of existing curriculum contents in the Department of Library and Information Studies, University of Botswana, Botswana and the Department of Library and Information Science, University of Calabar, Calabar, both in Africa. The University of Botswana is said to be leading academic environment established in 1982. It has seven faculties with over 50 programmes; which include the Bachelor of Library and Information Studies, housed in the Department of Library and Information Studies, in the Faculty of Humanities.

The University of Calabar established in 1975, is among the leading research and teaching institutes of the world. It has eight faculties with over fifty programmes which include the Bachelor of Library and Information Science housed in the Department of Library and Information Science, in the Faculty of Education.

The study adopts both a descriptive, as well as, a prescriptive approach. The methodology also involves contents analysis of the curriculum in relations to course titles, programme structure, compulsory courses and practicum/field experience in libraries. The crucial element of the approach is the presentation of possible collaborative strategies that could invigorate LIS programme and reposition it for effective teaching, learning and research.

## Result and Discussion

**Table 1:**  
Analysis of the 100 level programme structure of Library and Information Science Programme in Calabar and Botswana

Programme structure First semester	Calabar			Botswana		
	BLIS-Full Time – 8 semesters 100 level			BLIS –Full Time – 8 semesters Semester 1		
<b>Level 100 Core courses</b>	Course code	Course Title	Credit Unit	Course code	Course Title	Credit Units
	LIS 161	Introduction to Library and Information Science	2 units	LIS 100	Information Environment	3 units
	LIS 163	History Of Libraries And Information Centres	2 units	LIS 101	Introduction to Organising Information	3 units
	LIS 165	Administration and Management of Library and Information Centre Visit	2 units	LIST 103	Basic Reference Sources and Services	3 units
	LIS 167	Government publications	2 units	LIS 110	Administration and Management of Information Centres	3 units
	<ul style="list-style-type: none"> <li>• One elective in other academic discipline</li> <li>• 100 level course in any language: French; Spanish; German</li> </ul>		2 units	BIM 100	Introduction to Information Management	
<b>General Studies and Education Courses</b>						
	GSS 101	Use of English I	2 units	GEC 111	Communication and Study Skills	3 units
	GSS 111	Citizenship Education	2 units	GEC 121	Computing and Information Skills	3 units
	GSS 121	Philosophy and Logic	2 units	-	-	-
	EDU 101	History of Sociology of Education	2 units	-	-	-
<b>Second Semester</b>				<b>Semester 2</b>		
<b>Core courses</b>	LIS 160	Organization of knowledge 1	2 units	BIM 101	Introduction to Information Science	3 units
	LIS 161	Library and Society	2 units	LIS 114	Collection Development and Management	3 units
	LIS 164	Introduction to the Internet and electronic libraries	2 units	LIS 104	Introduction to the Internet and Web Design	3 units
<b>Optional Courses/Elective</b>						
	LIS 168	Repackaging of Information	2 units	LIS 106	Information Resources Management	3 units
	LIS 166	Multimedia	2 units	LIS 112	Introduction to Publishing and Book Trade	3 units
	<ul style="list-style-type: none"> <li>• One elective in other academic discipline</li> <li>• 100 level course in any language: French; Spanish; German</li> </ul>		2 units	-	-	-

Table 2  
Analysis of the 200 level programme structure of Library and Information Science Programme in  
Calabar and Botswana

Programme structure	Calabar			Botswana		
	BLIS-Full Time – 8 semesters 200 level			BLIS –Full Time – 8 semesters Semester 3		
First semester	Course code	Course Title	Credit Unit	Course code	Course Title	Credit Units
<b>General Courses, Education</b>						
	GSS 102	Use of English/Library	2 units	GEC 112	Communication and study skills	3 units
	GSS 131	History and Philosophy of Science	2 units	GEC 122	Computing and Information Skills. Fundamentals II	3 units
<b>Core courses</b>	LIS 261	Theory and Practice of Bibliography	2 units	LIS 202	IT Tools and Applications	3 units
	LIS 263	Organization of Knowledge II	2 unit	LIS 223	Digital Librarianship	3 units
	LIS 265	Repackaging of Information	2 units	LIS 206	Introduction to Infopreneurship	3 units
	GSS & Education Courses 10 credits for the two semester			GEC not exceeding 6 credits for the two semester (324)		
<b>Required Courses</b>			<b>Optional Courses</b>			
	LIS 267	Library and Information Services to the Rural Community	2 units	LIS 203	African Information Environment	3 units
	LIS 226	Legal Issue of Information Management	2 units	LIS 211	Information and Society	3 units
	LIS 269	Information Management System and Development	2 units	LIS 236	Legal Issues of Information	3 units
	-	-	-	BMS 200	Information Management and system development	3 units
<b>Second Semester</b>				<b>Semester 4</b>		
<b>Core courses</b>	LIS 260	Information Use and Literacy	2 units	LIS 200	Organizing Information	3 units
	LIS 262	Legal Issue of Information Management	2 units	LIS 208	Principles of Data Communication	3 units
	LIS 262	Serials Management	2 units	BIM 202	Introduction to Data Base and Information Retrieval	3 units
	LIS 264	Information Technologies		LIS 227	Introduction to Knowledge management	3 units
<b>Required Courses</b>			<b>Optional Courses</b>			
	LIS 266	Preservation and Conservation of Information Resources	2 units	LIS 212	Information Resources in Business	3 units
	LIS 268	Literature and Library Services to Children and Adolescents	2 units	LIS 230	Legal Issues of Information	3 units

Table 3  
Analysis of the 300 level programme structure of Library and Information Science Programme in  
Calabar and Botswana

Programme structure	Calabar			Botswana		
	BLIS-Full Time – 8 semesters 200 level			BLIS –Full Time – 8 semesters Semester 5		
300 level First semester	Course code	Course Title	Credit Unit	Course code	Course Title	Credit Units
<b>General Courses, Education</b>						
	GSS 201	Entrepreneurship Education	2 units		General Education Courses Not exceeding six credits for both semester	3 units
	EDU 311	Fundamentals of Educational Administration in Nigeria	2 units			3 units
	EDU 371	Basic Statistics for Education/Library Science	2 units			
	EDU 343	Test and Measurement	2 units			
<b>Core courses</b>						
	LIS 361	Collection Development	2 unit	LIS 300	Online Information Retrieval	3 units
	LIS 303	School Libraries/Media Resource Centres	2 units	LIS 304	Understanding the User	3 units
	LIS 365	Reference and Information Services online Information Retrieval	2 units	LIS 303	Advanced IT Application	3 units
<b>Required Courses</b>			<b>Optional Courses</b>			
	LIS 369	Health Information System	2 units	LIS 309	School Librarianship	3 units
				LIS 303	Health Information System	3 units
<b>Second Semester</b>						
<b>General courses/Education</b>						
	GSS 302	Entrepreneurship in Education (Practical II)	2 units		General Education courses not exceeding six credits for both semester	
	EDU 342	Research Methods in Library & Information Science/Education				
	EIS 322	Information Use and Literacy				
<b>Core courses</b>						
	LIS 360	Principles of Cataloguing and Classification	2 units	LIS 305	Advanced Organization of Information	3 units
	LIS 362	Automation in Libraries	2 units	LIS 306	Professional Attachment	3 units
<b>Required Courses</b>			<b>Optional Courses</b>			
	LIS 362	National and Public Libraries	2 units	LIS 311	Business Information Systems	3 units
	LIS 366	Academic and Special Libraries	2 units	LIS 312	Legal Information System	3 units
	LIS 368	Gender and Information management	2 units	LIS 313	Gender and Information Management	3 units
	LIS 310	Business Information System	2 units	LIS 314	Agricultural Information System	3 units

Table 4  
Analysis of the 400 level programme structure of Library and Information Science Programme in Calabar and Botswana

Programme structure	Calabar			Botswana		
	BLIS-Full Time – 8 semesters 200 level			BLIS –Full Time – 8 semesters Semester 7		
400 level (First semester)	Course code	Course Title	Credit Unit	Course code	Course Title	Credit Units
<b>General Courses</b>						
-	-	-	-		General courses (4 credits)	
<b>(core courses)</b>						
	LIS 404	Research project	4 unit	LIS 404	Advanced Entrepreneurship	3 units
	LIS 461	Field Experience/Professionalism	4 units	LIS 406	Database Management Systems and Design	3 units
				LIS 418	Project work	3 units
<b>Required Courses</b>			<b>Optional Courses</b>			
	-	-	-	LIS 425	Global Information Systems	3 units
	-	-	-	LIS 426	Independent Study	
<b>Second Semester</b>						
<b>Core courses</b>				<b>Semester 8</b>		
	LIS 460	Entrepreneurship in Information Services	2 units	LIS 401	Organizing internet resources	3 units
	LIS 462	Indexing and Abstracting	2 units	LIS 402	Marketing of Information Resources	3 units
	LIS 466	Archives and Record Management	2 units	LIS 403	Knowledge Management	3 units
	LIS 468	Book Production publishing and Trade	2 units	BMI 402	Research in Information Management	3 units
	LIS 410	Issues and Themes in Librarianship	2 units		(In addition to the required courses student may take a minimum of 12 optional or elective courses)	
<b>Required Courses</b>			<b>Optional Courses</b>			
	LIS 407	Emerging Technologies	2 units	CSI 461	Computer communication Network Management	3 units
	LIS 405	Information Policies	2 units	LIS 407	Emerging Technologies	3 units
	LIS 421	Computer Communication and Network Management	2 units	LIS 412	Information Policies	3 units
	-	-	-	ENV 440	Geographical Information system	3 units

## Findings

### Core courses

Findings of the survey indicate that the programme is named in University of Calabar “Bachelor of Library and Information Science and in University of Botswana “Bachelor of Library and Information Studies”. In the two universities it is studied as a four years full time programme and spans eight semesters. Both universities use the course code “LIS”; in Calabar, (LIS: Library and information science) and in Botswana, (LIS: Library and Information Studies). Table 1 reveals that in the 100 level, university of Calabar and university of Botswana have similar LIS introductory courses as in the case of first semester LIS164 and LIS104 also second semester LIS164 and LIS104. In table 2; first semester LIS265 and LIS206, table 3; second semester LIS365 and LIS300, table 4; first semester LIS404 and LIS 418; among others are similar core courses in university of Calabar and University of Botswana designed to equip library professionals with the relevant skills to be competent in a digital culture. The choice of core courses is in line with Veralakshmi (2006) who says the twenty-first century information professional must possess skills in selection, content management, knowledge management, organization of information, research services, developing and maintaining digital libraries, and bringing information resources to the desktop.

#### Required /Optional courses

The survey of LIS curricula of the two universities reveals that while some courses are referred to as “required courses” in university of Calabar, in university of Botswana they are referred to “optional courses”. Tables 1-4 show that university of Calabar offers a total of 15 required courses while university of Botswana offers a total of 18 optional courses. According to Chu (2006) LIS curriculum should not only mirror what is being offered to train librarian and information professionals with knowledge and skills to become qualified personnel in the field, but also meet challenges of the ever changing information society. These additional courses to the LIS curricula is in line with the findings of Majanja (2007) that education and training of LIS professionals has to be such that it empowers them to unleash their potential as they endeavour to offer relevant and efficient services within the current levels of technological sophistication. Also according to Curry, (2002) the increasing globalization of higher education and the LIS work place has made it important for LIS education and training to strive to improve their quality of programmes to be able to produce graduates whose work place spans the whole world.

#### Practicum/Field experience in Libraries

The analysis of the curriculum of the LIS programmes in the two universities shows that in university of Calabar LIS461; field experience is offered in 400 level first semester while in university of Botswana LIS306; professional attachment is offered in 300 level second semester. These courses are in line with the principles of IFLA 2012 guidelines for Professional Library/Information Educational Programs which states that LIS programme should incorporate appropriate means to allow students, in a practical way, to appreciate the interplay between professional theories and their application in professional practice. Depending on the required learning outcomes it can also include applied project research and/or projects that involve authentic practical activities, undertaken in a placement environment.

#### General studies and Education courses

The study reveals from tables 1-4 that university of Calabar offers 13 general studies education courses while university of Botswana offers 8 courses. This is in line with the National universities commission benchmark for Nigerian universities that all programmes should offer general studies courses and also Botswana education standard for higher education. It also follows the principles of IFLA 2012 guidelines for Professional Library/Information Educational Programs which states that students should acquire a broad general education (topics from other disciplines) as a significant component of the total educational programme for the library/information professional.

#### Areas of collaboration

LIS practitioners should play an important role in curriculum planning and development. This is in line with Al-Suqri (2010), who said that without collaboration with others in their profession, LIS departments are unlikely to be able to keep up with developments and deliver international standards in teaching, research and information services. Also Lillard and Wales (2003) recommend that academic librarians and LIS educators must collaborate to seek creative approaches to strengthening LIS education and help ensure that library education meets the need of the profession. LIS education can collaborate through staff/student exchange, workshops and short courses to assist information professionals maintain competence in a changing society and to keep them aware of issues and trends in practice. According to (Kesselman & Weintraub, 2004) a networked environment lends itself to cooperation and the sharing of ideas and solutions to problems common to libraries no matter where they are located.

#### **Conclusion**

This survey examines the undergraduate LIS curricula of university of Calabar and university of Botswana in relation to core courses, required/optional courses, practicum/field experience, general studies/education courses and areas of collaboration. The findings reveal that the curricula of the two universities are compatible because course content and structure are similar for the four levels of study, also both curricula follow IFLA 2012 guidelines for Professional Library/Information

Educational Programs. In Africa these universities would equip new generation of librarians and information professionals with 21st century professional skills. The study concludes that the curricula of the two library schools are quite compatible and this sets the stage for collaborations between the two institutions. Collaboration between the two LIS schools will help strengthen their ability to increase the quality of teaching and learning. The study recommends drafting a framework to properly streamline the curricula of the two universities, obtain international perspectives on the extent to which local curricula or course work is consistent with evolving professional needs, produce ideas to be used for developing the framework for short courses, staff/student exchange and workshops and finally develop ways to assess areas of specializations and competencies in each university.

## References

- Al-Suqri, M. N. (2010). Collaboration in library and information science education in the Gulf Co-operation Council (GCC): current status, challenges and future trends. *Emporia State Research Studies*, 46(2), 48-53.
- Benchmark Minimum Academic Standards for Undergraduate Programmes in Nigerian Universities (2007). Nigerian universities commission, Abuja.
- Chua, A. & Yang, C.C. (2008). The shift towards multi-disciplinarity in information science, *Journal of the American Society for Information Science and Technology*, 59(13), 2156–2170.
- Chu, H (2006). Curricula of LIS programme in the USA: A content analysis. In: Singh, K.D., & Chaudhry, A.S. (Eds.) *Proceedings of the Asia-Pacific Conference on Library and Information Science Education and Practice 2006 (A "LIEP 2006)*, Singapore, 3-6 April 2006 (pp. 328-337). Singapore: School of Communication Information, Nanyang Technological University.
- Curry, A. (2002). Canadian library and information science education trends and issues. *Education for Information*, 18 (4); 325–337.
- Department of library and information studies 2012 academic year handbook. Faculty of Humanities, University of Botswana.
- Department of library and information science 2012 academic year handbook. Faculty of Education, University of Calabar.
- Government of Botswana (1996) *Long Term Vision: Towards Prosperity for All*. Government of Botswana
- IFLA Guidelines for Professional Library/Information Educational Programs 2012
- Kesselman, M.A. & Weintraub, I. (Eds.). (2004). *Global librarianship*. New York: Marcel Dekker.
- Konrad, A. (2007). *On inquiry: Human concept formation and construction of meaning through library and information science intermediation* (Unpublished doctoral dissertation). University of California, Berkeley. Retrieved from <http://escholarship.org/uc/item/1s76b6hp>
- Lillard, L.L. & Wales, B.A. (2003). Strengthening the profession: educator and practitioner Collaboration. *The Journal of Academic Librarianship*, 29(5), 316-319.
- Mangla, P.B (1980). Contents and courses at the postgraduate level. *Journal of Library and Information Science* 5(2). p.102

Minishi Majanja, M.K (2007). Integration of ICTs in library and information science education in Sub-Saharan Africa. World Library and Information Congress: 73rd IFLA General Conference and Council. 19 –23 August, 2007: Durban, South Africa. Available: <http://www.ifla.org/IV/ifla73/index.htm>

RedHat, Lisco, [www.net/study-in-India](http://www.net/study-in-India)

Varalakshmi, R.S.R. (2006). Educating 21st century LIS professionals : The needs and expectations: A survey of Indian LIS professionals and alumni. In Khoo, C.,

Wikipedia, the free encyclopedia. <http://www.wikipedia.org>