

## LIS Education at University of Botswana: Evolution, Opportunities and Challenges

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### ABSTRACT

In Africa, the first Library and Information Science (LIS) education programs started in South Africa in 1938 as the “Department of Librarianship” at the University of Pretoria and today LIS education is considered a sophisticated programme like any other academic programs in all African countries. This paper discusses the major changes, opportunities and challenges at the DLIS. LIS education in Botswana boasts an admirable history of roughly 37 years, during which the Department of Library and Information Studies has made a significant contribution in human resource training, research and service. Today, DLIS offers both Bachelors and Masters Degree programmes in Library and information studies, Information systems, and Archives and Records management and it also offers M.Phil and PhD programmes. To equip future information professionals with the right skills and competencies for the current job market and to prepare them for the emerging global society, DLIS keeps reviewing its teaching curricula to introduce new programmes. Some of the development includes winter programme; Bachelor of Information Systems (BIS 210) programme for the curricula harmonisation; and forthcoming ‘Bachelor of Information and Knowledge Management’ (BIKM) programme. This paper is based on in-depth and latest literature review mainly from developing countries and the authors’ experience as LIS practitioners and educators at DLIS.

**Keywords:** LIS education, Botswana, curriculum development, review and development; developing countries, challenges, opportunities

### 1. INTRODUCTION

LIS curriculum and education is continuously evolving to keep abreast with the changes in information profession and meet emerging needs and expectations of the job market. Today, the biggest challenge of LIS education and training is how to make and sustain LIS education relevant and effective. Curriculum review and content is core to adopt and adapt evolving changes, hence, library schools world-wide including Africa continuously keep reviewing and are designing their programs. ‘The emancipation of the user is a direct offshoot of both echnology and globalisation. New technologies not only increasingly provide information to the user whenever and wherever they are, but also mploy more user-friendly formats such as sound, video and images (as opposed to text which has to be deciphered’<sup>1</sup>. Therefore, in most LIS schools, ‘LIS education has been reconceptualised and re-positioned to supply graduates with the appropriate attributes to develop and maintain high quality professional practice in the rapidly changing 21<sup>st</sup> century’<sup>2</sup>. Information Technology (IT) has conspicuously influenced and changed LIS curriculum. The impacts of IT on LIS education reflect on revising and establishment of new curricula, introduction of new LIS courses in new ways to organise the LIS education, (e.g., iSchools vs. L-Schools)<sup>3</sup>. New information technology competencies and skills required for LIS professionals have critical impact on LIS education system and hence, there is increase in technological programs, such as database design, web

design, digital libraries, database development, system analysis, computer programming, and networking and server management. Diversity and innovation is the key to 21<sup>st</sup> century LIS education and information profession at large. ‘Tumuhairwe’ has appropriately embarked, diversity in LIS education that is sufficient to prepare LIS students to be ready to design and deliver inclusive services to diverse populations in the information age is a very key issue in LIS curriculum.

LIS education in African library and information science (LIS) schools is part of the global LIS education system and any changes, trends and challenges in the global LIS program also influence LIS education in Africa. Over the past two decades, there has been increased scholarly interest among LIS educators in African LIS schools.

As correctly highlighted by an African scholar ‘It is imperative that the type and quality of LIS education graduates should both reflect and be a reflection of the types of services provided in libraries and other information centres’<sup>1</sup>. This paper discusses the status of LIS education in Botswana, at the University of Botswana. The department is known as Department of Library & Information Studies (DLIS) under the Faculty of Humanities.

Like other LIS schools, DLIS has always reviewed and revised its LIS courses to fit into the need information environment and job market. The paper is organised into main four parts. The first section provides background of

DLIS. The second section reviews the salient literature on LIS education including; a brief history of LIS Education in general, an overview of LIS Education in Africa and current global trends and challenges in LIS education. The third section describes the major curricula changes at the DLU over the years and the final section presents the major opportunities and challenges in delivering LIS education at DLIS.

## 2. ABOUT DEPARTMENT OF LIBRARY AND INFORMATION STUDIES (DLIS)

The Department of Library and Information Studies (DLIS) was set up in 1979, initially to train para professional staff and bring them up to diploma level. Since its inception, the Department has made outstanding contribution to the education and training of Library and Information personnel in Botswana and the Southern, Central, West and East African regions. It is an internationally recognised centre of excellence within Africa for library and information education and training. It has made a unique contribution through research, publication and service to the development of the discipline throughout the continent. A suite of professional library and information studies programs reflecting the various needs and demands of Africa's library and information market has been developed. The Department has recognised and continues to perceive information as a key resource in development.

*DLIS Vision & Mission:* The vision of DLIS is to 'become a leading center of academic excellence in Africa in the education and training of information and knowledge management professionals'. The mission of the department is to 'provide quality education and training that is driven by state-of-the-art information and communications technology, research and publications'. To accomplish this, the Department is dedicated to:

- (a) The enhancement of its already high standards in teaching, learning, research, publishing, service and scholarship in information management and training and to achieve high level of excellence in the general disciplines of information management systems and business.
- (b) The provision of its expertise towards the current and future development needs of Botswana while at the same time recognising its regional setting and reputation and the constituency it has developed and the need to extend this constituency throughout the rest of the continent.
- (c) Providing an innovative response to the needs and demands of the information community and business that it serves by providing a practical and appropriate answer to the challenges that are being posed by globalisation and the increasingly sophisticated requirements of an environment largely impacted by information and the technology supporting it.
- (d) The pursuit of truth, in particular, defending and

promoting the ideal of access to information as a basic human right.

- (e) Maintaining and enhancing the Department's unique and distinctive character as a centre of excellence with a regional constituency, an innovative portfolio of professional programs, a strong commitment to research, teaching, publishing and learning, and an enviable international reputation through the extensive professional outreach achieved by its high caliber staff<sup>4</sup>.

## 3. LITERATURE REVIEW

This section reviews the relevant literature on LIS education.

### 3.1 History of LIS Education in General

Initially library education began as technical education acquired on the job. Waseem<sup>5</sup> categorised the historical background of LIS education into three periods: (i) Alexandrian Period (Compilation of bibliography and the making of library catalogues and encouragement of scholars to use the library and to draw books out of it); (ii). Medieval and Early Modern Period (Training of librarians; Cataloguing; Repairing; Binding and Loaning); and, (iii). The Early 19<sup>th</sup> Century (According to Mary Plummer, Director of Pratt Institute Library School in Germany, there were three methods of learning library science in 1901. These were: a) evolving a system of his own from his inner consciousness; b). Two or three weeks training and observation to some large city library and, c). Learning of certain jobs (e.g. cataloguing) of library by tuition. After long struggle of Dewey, the formal library education was started in America in 1887 as a subject and gradually it started in USA, Europe, Asia, East Asia, Africa and Australia. Systematic library training in the United States was started by Melvil Dewey in 1883, who became chief librarian at Columbia College and he received approval from ALA for a formal training program. In 1887, the 'School of Library Economy' was established as a 3-month course with 2-years actual experience (compulsory) in various kinds of library work and again 3-months course taken in review.

In 1886, LIS education began in Europe with the University of Gottingen, Germany the first university in the world that started Library science course at the university level followed by Italy and Sweden and established library schools around the time Dewey started his school at Columbia. In 1919, the London University started the first full time diploma course in Librarianship and Archives. British models were exported to Australia and New Zealand at the beginning of 20<sup>th</sup> century. LIS programs are accredited by Chartered Association of Library and Information Professionals (CILIP) and 'Certificate' qualification is also introduced. In India the first formal university course was initiated in 1995 by Asa Don Dickinson (American librarian) at Punjab University, Lahore. This was the first formal program

in Asia and the second in the world after Columbia University.

The first department of Library Science was established at the University of Delhi in 1946, which offered a postgraduate diploma in 1947 and a MLS in 1951. Thus, the first library education course of Melvil Dewey is the foundation to modern library education<sup>6</sup> and now formal LIS programme are established all over the world.

### 3.2 Overview of LIS Education in Africa

Librarianship in Africa owes its origin to colonialism, when reading and writing were introduced among the indigenous people. LIS education in Africa started in 1938 in South Africa with the establishment of the Department of Librarianship at the University of Pretoria. UNESCO played a leading role in the establishment of LIS education programmes in Africa and in particular, Anglophone Sub-Saharan Africa. When the pressure emanated from public libraries, UNESCO was convinced that illiteracy in sub-Saharan Africa could only be eradicated with support of libraries<sup>6</sup>. Since the origin of LIS education in Africa, the continent has witnessed a paradigm shift in LIS education from traditional to a fast-paced digital environment.

The major changes include the growth of LIS Schools, review and revision of curricula, diversification of the courses offered by LIS schools such as, courses on multimedia, information technology, knowledge management, information system, rise and fall of student numbers, re-orientation of LIS programmes, expansion and closure of some LIS schools. New LIS schools are established in Malawi, Mozambique & Zimbabwe (Ocholla & Bothma<sup>7</sup>, Okello-Obura & Kigongo-Bukenya<sup>8</sup>, Winner, Otiike, Jain & Jorosi). For example, in Kenya, over the past five years, Kenyatta University has seen student numbers triple from 15,000 to around 45,000, Burnett<sup>9</sup>. In Malawi, the only LIS School was established in 2003 in the Faculty of Information Science and Communications at Mzuzu University (MZUNI) with the first diploma and undergraduate degree students' enrolment in 2003 and 2005 respectively (Winner, 2015). Change of department names has become a norm in LIS Schools. For example, at Jimma University and Haramaya University in Ethiopia the nomenclature has changed from Information Studies to become Information Science<sup>10</sup>; at the University of Johannesburg, the department's name was changed to the Department of Information and Knowledge Management and, LIS department at the University of Namibia changed its name the Department of Information and Communication Studies.

Today, all African countries offer formal LIS programmes at both graduate and post-graduate levels. For instance, LIS schools in South Africa offer three levels of undergraduate programmes (certificates, diplomas and bachelor's degrees) and four levels of postgraduate programmes (diploma, honours degree, Masters degree and Doctoral degree) (Minishi-Majanja<sup>1</sup>). Kenya has

perhaps the highest number of LIS schools in the region including: i) Kenya Polytechnic University College; ii) Egerton University; iii) Kisii University College; iv) Laikipia University College; vi) Kenyatta University; vii) Moi University and among private universities, Kenya has: i) Inorero University; ii) Kenya Methodist University and iii) Mount Kenya University (Otiike<sup>6</sup>). With this brief overview, it would be now interesting to appreciate some recent global trends in LIS education around the world.

### 3.3 Current Global Trends in LIS Education

Today there is a complete paradigm shift in information profession. The major impetuses behind change are: rapid advancement in IT, evolution in education system and ever changing user needs and diversity of users. Though, the ever-changing information technologies are the fundamental drive to all these changes. Due to globalisation of education ('Borderless' and 'cross-border education' and e-learning and digital hegemony & integration of ICTs, LIS education is changing world-wide. According to Smith<sup>11</sup> from the iSchool at Illinois University, 21st century LIS education is striving to increase diversity of students and faculty and prepare students for new roles and new institutional contexts. The major trends in contemporary LIS education are:

- (a) LIS education is more ICT-oriented: Application of new information technologies to produce a librarian<sup>5</sup> is vital and due to ICT, there is substantial evolution in 21<sup>st</sup> century LIS programme. There are more courses on computers and ICTs and ICT has become major part of LIS programmes. Libraries are demanding for graduates who are IT compliant in line with the concept of libraries without walls (Abubakar<sup>12</sup>, Otiike<sup>6</sup>, Kumar<sup>13</sup>, Waseem<sup>5</sup>). Modern LIS education requires infrastructure such as; media labs, IT labs, and information products experimental Labs. LIS education can no more be run by chalk and talk method. In smart class rooms having interactive board and connectivity with the intranet, faculty can select electronic content to help the students in just-in-time learning (Singh & Malhan<sup>14</sup>). Many of the non-IT courses also have IT-related content. For instance, traditional librarianship courses such as library management, cataloging, or reference<sup>3</sup>. This brings another challenge of balancing between traditional and contemporary LIS education as new changes take time to integrate in the system. Nevertheless, the ongoing advances in ICTs and emergence of new state-of-the-art knowledge management tools pose challenges not only to library and information professionals and LIS educators, but also to the LIS profession as a whole (Singh & Malhan<sup>14</sup>). Thus, it is now a common practice to find LIS Schools aspiring to infuse ICT related courses in their curriculum which is expected to give them new lease of life in the training of their students in the 21<sup>st</sup> century<sup>12</sup>.

- (b) LIS education focuses on the demands of the job market<sup>5</sup>.
- (c) Most traditional names of library schools have been changed<sup>5</sup> and others are in the process of change.
- (d) There is profession shifting from multi-disciplinary to inter-disciplinary.<sup>15</sup>
- (e) Introduction of new and revised courses: New topics within existing courses are being introduced (e.g., virtual reference in reference, RDA in cataloging, e-resources in collection development); Data curation specialisation; Digital preservation; Museum informatics; Special collections certificate; Community engagement; Community informatics certificate; Media literacy and youth; Youth services certificate.<sup>11,15</sup>
- (f) Use of computer cataloguing, database and information technology in Syllabus: With the use of computers and technology new courses such as cataloguing and classification are thought in new ways.<sup>13</sup>
- (g) There is increased introduction of formal research in LIS education.<sup>13</sup>
- (h) Change in Management Science studies with library security: Recent trends in management studies include the use of laws and knowledge regarding the storage of information and its application. Hence, librarians are taught new techniques of library information security such as, magnetic security systems, CCTV and RFID.<sup>13</sup>
- (i) There is increased trend of distance education to provide training and education opportunities to more librarians.<sup>6,13</sup> Online education no longer limits degree seekers to site-based programs.<sup>11</sup>
- (j) There is continuous education and training through seminars and conferences to make librarians acquainted with new trends in the profession, library associations and universities organise conferences and seminars for LIS professionals.<sup>13</sup>
- (k) Increased emphasis on multi-media: The print media is no longer a centre of attraction.<sup>6</sup>
- (l) Knowledge management: Knowledge management has become the core course in most LIS schools.<sup>6</sup>
- (m) Increased accreditation of LIS programs and iSchools.<sup>11,16</sup>
- (n) New methods of teaching and learning: LIS schools are using learning management systems like Blackboard or Moodle allow instructors to plan asynchronous activities (e.g., discussion forums) even in face-to-face courses. Collaborative teaching: students Group projects; Service learning; Research projects; Collaborative teaching; students exchange; Web-based Information Science Education consortium (WISE).<sup>11</sup>
- (o) New roles of LIS professionals in LIS education: Today LIS professionals assume new roles as students'

mentors, supervisors (for research projects, practicum and internship), guest lecture, teaching a course, contribute to the LIS literature through research and publications, and collaborates on research with colleagues and student.<sup>11</sup>

### 3.4 Challenges in LIS Education

Basically due to the advancement of technologies, paradigm shift in the library and information world and changing education systems, contemporary LIS education/ programme world-wide is confronted with numerous challenges. LIS educators and information professionals have to persistently learn, incessantly upgrade their competencies and skills to quickly step into new roles created by the service gaps in the growing knowledge intensive society.<sup>14</sup> Literature reveals the major challenges as follows:

- (a) Relationship between theory and practice.<sup>15,5</sup>
- (b) Match to the labour market and societal needs.<sup>15</sup>
- (c) Rapid advancement of ICTs'.<sup>15,5</sup>
- (d) New types collaboration and partnerships between various academic institutions.<sup>15</sup>
- (e) Lack of independence, outdated curricula: financial independence and permission to develop or modify curriculums.<sup>5,17-19</sup>
- (f) Lack of professional accreditation body<sup>15,5</sup> and lack of accreditation system: Accreditation is important, which is a mechanism for quality control. A qualified department is more likely to absorb (talented) students. Currently, LIS education often puts mere emphasis on education and not able to conduct proper research.<sup>8,5, 18</sup>
- (g) Lack of appreciation of continued LIS education, hence locating LIS departments in Faculties of Fine Arts and Humanities.<sup>18,5</sup>
- (h) Inadequate Number of Faculty Members.<sup>8,19,5</sup>
- (i) Lack of diversity in LIS programs and degrees and not keeping abreast of the rapidly changing digital environment.<sup>18,9,5</sup>
- (j) Outdated Syllabi and not taking advantage of advanced technologies.<sup>12,18,5</sup>
- (k) Inadequate information resources for learning; for example, lack of text books in national languages.<sup>17,18,5</sup>
- (l) Lack of appreciation of the role libraries in country development by policy makers/Government.<sup>12,8</sup>
- (m) Inadequate infrastructure and facilities: poor human, financial, building and technological infrastructure.<sup>12, 8,17,18,19,5</sup>
- (n) Lack of standardisation of LIS programmes.<sup>8</sup>
- (o) Over-enrollment and large classes: Often library schools in Africa are over populated with students that available facilities are stretched, which also

creates the problems of classroom control.<sup>17</sup>

- (p) Inadequate staff and expertise: Some library schools do not have the full complement of teaching staff, while others lack expertise among teaching staff. There is a serious need for technical support staff with high level expertise in the maintenance aspects of ICTs. Because of poor maintenance and insufficient skills to diagnose system problems and swaps parts, there are many out of commission machines which could easily be re-activated and used.<sup>12,17,18,14</sup>
- (q) Unreliable power supply: The strength of local infrastructure such as power supply has implication for library and information science education. Most LIS courses are ICT oriented and ICTs are electricity driven. Irregular public power supply means that ICT facilities cannot be used for instruction whenever there is power failure.<sup>17</sup>
- (r) Non-challant attitude of the Library Associations<sup>12</sup>
- (s) Poor Governmental support to LIS schools.<sup>12</sup>

Thus, the challenge for the LIS schools is 'to revamp their facilities and course curricula to transform into institutions that educate and train professionals who are competent enough to create a stir in the market, a demand for their skills, societal hunt for their talents, and who can substantially contribute to management of knowledge resources, dissemination of information and create a often sought after brand name for their service and niche for themselves' (Malhan<sup>20</sup>). However, the curriculum is the best barometer to reflect the changes and challenges we face today (Virkus<sup>15</sup>). Having discussed the recent trends and challenges in LIS education, this paper now focuses on DLIS ongoing changes and curriculum review and development and introduction of new programmes.

#### 4. MAJOR CHANGES AT DLIS AND NEW PROGRAMMES

DLIS introduced a bachelor's degree, as well as a postgraduate diploma in library and information studies in 1986. During 1991-1997 (NPD7) the Department set to diversify its programmes in response to emerging opportunities and new markets.

This diversification embraced information technology, and management information systems as driving forces in all its training programmes. New programmes such as School library studies and Archives and records management were introduced representing niche growth areas for the Department at the time. With the launching of training programmes in school librarianship, teachers from Botswana colleges of education were trained as teacher librarians graduating with certificate and diploma qualifications respectively.

In 1994 a Master's degree in library and information studies was introduced to replace the postgraduate diploma. The introduction of the Masters' programme was brought about by the need to produce information professionals

who could fit in the labour market that was increasingly becoming technology driven. In 1995, the department introduced certificate/diploma in archives and Records management and a certificate in School librarianship. A PhD program was introduced in 1999 followed by an Information systems degree program in 2002 as well as a Masters degree in Archives and records management.

Thus, DLIS as the main provider of LIS education has undergone major change. Between 1979 and 1985, DLIS offered only three programmes: Certificate in Library Studies, Diploma in Library Studies and Post-graduate Diploma in Library Studies. However, since the 1990s', a total of ten programmes have been offered.

#### 4.1 The BIS 210 Programme

DLIS began offering the Bachelor of Information Systems (Information Management) degree in 2002. This degree is part of the University's Bachelor of Information Systems (BIS) degree which is offered conjointly with two other departments-the Department of Computer Science (BIS-Computer Information Systems) and the Department of Accounting and Finance (BIS-Business Information Systems). At its outset, the (BIS) was seen as a business major, focusing on producing graduates who are able to harness information technology to create systems that address challenges and opportunities in the internal and external business environment.

The role of an information system in an organisation is to collect data, process the data, and disseminate information to various stakeholders within and outside the organisation in order to allow a seamless flow of information through all the firm's functional areas such as finance, accounting, marketing, production and operations, and human resource management. Because most companies use business information systems in some aspect of their business, and need to continually update their technologies and systems to keep pace with the fast developments and advancements in the information technology (IT) sector periodic reviews of the programme are necessary.

To this end, in 2009, a 9-member BIS Technical Task Team was convened by the three faculties of Science, Business and Humanities on the advice of APRPC to harmonise the BIS programmes to ensure that any duplicate content is eliminated (Proposal for the BIS Degree, 2002).<sup>21</sup> The Committee produced a report documenting critical concerns regarding the BIS programme in the University of Botswana's (henceforth, the university) context and a recommended common core outlining mandatory courses that all BIS students need to take. As a result of curricula revision, the Department of Computer Science revised its stream and presented the revised curriculum at the APRPC meeting held on January 12, 2010. Likewise, the Department of Accounting and Finance followed suit and its Programme was approved in 2014, while the BIS (Information Management) for DLIS is awaiting final approval from APRPC.

#### 4.2 The Winter Programme

The winter programme is the Certificate in Library and Information Studies (CLIS) and the Certificate in Archives and Records Management (CARM) was introduced in 2010 in response to a request by the Botswana National Library Services (BNLS) to offer a 1-year Certificate Split Programme in Library & Information Studies (CLIS) to its staff who hold a COSC qualification with several years of working experience. The approval for the programme was swift because it is a programme which has been offered in the past. The programme structure is based on the CLIS curriculum that was shelved four years ago. The programme runs for two semesters (24 weeks) during two winter breaks from May-August. On successful completion of the programme, the candidates are awarded a certificate in library and information or Certificate in Archives and Records Management studies according to the University of Botswana regulations (DLIS Annual Report, 2010).<sup>22</sup>

The objective of the CLIS is to build capacity in managing library and information services especially in special, branch, and school libraries; and village reading rooms while that of CARM is to confer upon graduates the essential skills to effectively manage records centres/registries. Although the Winter Programme started as a response to stake-holder demand, the programme now forms part of the Department's strategy to address the University of Botswana's Strategic Plan Priority Area whose objective is to increase participation rates; i.e., availing more access opportunities for LIS Education (DLIS Annual Report, 2013).

#### 4.3 The BIKM Programme

This is a proposed 4-year bachelor of information and knowledge management (BIKM) that will be offered as, a single major (BIKM professional), combined major (BA, IKM) and major-minor (BA, IKM) from August 2017. The BIKM degree single major will be offered in three streams namely: BIKM (Knowledge Management) BIKM (Archives & Records Management) BIKM (Library & Information Studies). The BIKM single major will have a common core during the first and second years of study. However, candidates will be required to specialise in any one of the streams in the third and fourth years (BIKM Report, 2009).<sup>23</sup>

The proposed BIKM degree is motivated by a number of factors including: labour market needs in Botswana, international trends in the education and training of information professionals, the shrinking job opportunities for the traditional library and information professionals, government of Botswana national priorities (i.e., HRDC Strategy for developing critical skills for the economy including information and knowledge managers needed in transforming Botswana into an information society in vision 2016), the University of Botswana strategic priorities and declining enrolments in the current LIS programmes (Learning and Teaching Policy, 2008).<sup>24</sup>

Several tracer studies since late 1990s and external review of LIS programmes have revealed demonstrable need to revamp and harmonise the academic programmes to take advantage of the expanding information and knowledge management job opportunities in all sectors of the Botswana economy. A recent online pilot survey of the labour market in Botswana has showed significant support for the BKM programme and the availability of jobs for graduates of this programme.

Besides, consultation with stakeholders in the Botswana labour market, the DLIS advisory boards and cognate departments in UB have shown clear need for the BIKM programme. The design of BIKM programme has benefited from the input of international experts from leading universities in the region and internationally.

Moreover, international trends in LIS education & training show deliberate move by library schools in universities the world over to offer information and knowledge management curricula as opposed to traditional library programmes. Best practices in this regard are drawn from the SADC region, West Africa, Europe, North America, Asia and Latin America. The World Bank emphasises leveraging knowledge resources to take advantage of the evolving knowledge-based economy.

#### 4.4 Programme Review at DLIS

Library schools world-wide are continuously challenged to institute periodic programme reviews. As it has already been mentioned earlier, this is due in part to rapid: rapid technological changes, and crisis in higher education (e.g., diminishing budgets, rapidly escalating student populations, changes in pedagogy, etc). A programme review can be defined as a periodic evaluation of a programme to: determine the continuity, validity and relevance of programmes and its intended learning outcomes. Guided by the above logic, an external review of DLIS was undertaken by two prominent professors from University of Northumbria (United Kingdom) and University of Kwazulu Natal (South Africa) between 18-22 August, 2014. While the report commended staff for their dedication to the programmes and their commitment to students the bulk of the report is a catalogue of recommendations:

- (a) BIKM programme needs to be taken through the programme approval process and its content reviewed to ensure its currency and relevance
- (b) A plan for succession and career progression should be developed and implemented
- (c) Staff need to have a teaching qualification or receive staff development in the area
- (d) Staff skills in relation to research need to be developed through mentoring by senior staff members
- (e) A formal policy on staff mentoring to develop teaching and research needs to be developed and implemented

- (f) The quality of students needs to be improved by reviewing entry requirement/ continuing with certificate and diploma courses
- (g) Cap student numbers to avoid over enrolment
- (h) Revise the MPhil/PhD process to speed up student progress
- (i) Develop clear guidelines for Masters and PhD supervision
- (j) Improve Masters retention and throughput rate by ensuring completion of dissertations in a timely manner
- (k) Improve Masters, MPhil and PhD student support and feedback
- (l) Revise supervision model to one supervisor for Masters and two for PhD
- (m) Establish a forum for Masters students to assist and provide support during the research process
- (n) Provide space and seminar programme for PhD students
- (o) Review staff availability for students to protect time for research , teaching and learning
- (p) Timely feedback should be provided for Masters and PhD students
- (q) Implement a more efficient and effective registration process by devolving signing off to tutors
- (r) Clarify the role and responsibilities of graduate school regarding PhD student training
- (s) Implement a transparent process for allocating supervisors
- (t) Develop and implement a transparent workload framework within the department
- (u) Make necessary computing facilities for technical courses and avail technical staff
- (v) Implement a formal policy of staff mentoring
- (w) Explore support from ORD in developing DLIS research
- (x) Improve mentoring of students in research skills. (External Review of Programmes, 2014).<sup>25</sup>

As the follow-up to some of the above recommendations, DLIS is putting its all efforts to expedite the introduction of BIKM programme.

#### 4.4. Opportunities for DLIS

DLIS as a department has several opportunities to equip future information professionals with the right skills and competencies for the current job market and to prepare them for the emerging global society and contribute to knowledge economy and national development. The major opportunities comprise of:

- (1) Good technology platforms (e.g. Blackboard, ASAS, etc.) and well resource library facilities

- (2) Facility to attend conferences thereby forging international linkages
- (3) Networking during international conferences
- (4) Distance BALIS programme provides an opportunity for employees to come up with tailor made programme structures
- (5) Implementation of the BIKM programme may attract more students to DLIS
- (6) Running of short courses tailor-made to industry needs
- (7) Consultancy services as a way of sharing knowledge with the community
- (8) Opportunities to launch tailor-made short courses for the industry.

#### 4.6. DLIS Challenges

Despite the number of opportunities listed above, DLIS also faces various challenges, which thwart its efforts from to fully realise its goals and mandates. Among the salient challenges are:

- (a) Changing tertiary education funding models/ patterns
- (b) Competition from new market entrants and existing institutions offering similar programmes
- (c) Major challenges with immigration issues thereby impacting on inability to attract foreign scholars and negatively impacting on existing staff
- (d) Lack of incentives to retain highly qualified staff
- (e) Competition for students from regional universities especially from South Africa
- (f) Heavy teaching loads and as a results staff-student ratio is too high
- (g) Inadequate facilities, such as lack of specialist teaching resources (e.g. software for archives); inadequate supply of consumables
- (h) Poor maintenance of teaching space (classrooms and/or examination rooms
- (i) Slow approval of programmes e.g. the planned BIKM programme has taken forever to get approval with the APRC
- (j) Unattractive name of the department (not aligned to the programmes offered)
- (k) Slow and tedious admission process by the University of Botswana
- (l) Resistance of staff to fully apply technology in teaching and learning
- (m) Lack of bench-marking or accreditation with international programmes
- (n) DLIS programmes are not accredited by national library association because the association is itself weak and a part-time body

- (o) Non appreciation of the importance of LIS by government and other employers resulting in jobless graduates or small domestic market for LIS.

Thus, DLIS is confronted with similar challenges as other LIS education schools. Regardless of several challenges, DLIS has to constantly strive to fit into the new global LIS curriculum and address the job market need in Botswana.

Curriculum reform drive occasioned by desire to incorporate ICTs changes in the information landscape, e.g., global transformation of departments such as the Department of Information Studies at Sheffield or Department of Information and Library Studies - Clear intention to show prominence on Information rather than library.

## 5. CONCLUSIONS

In spite of the several challenges listed above, the Department of Library and Information Studies (DLIS), Botswana has made a significant progress. It started with a certificate/diploma courses and reached to PhD level. DLIS curriculum evolved to meet new challenges and expectations. Today DLIS is one of the best known departments in its field in Africa and is also well-known outside the continent. It offers a range of full-time and part-time programmes in the field of Information Studies from certificate level to MPhil/PhD, which is complemented by the research, publishing and community service activities of its staff. However, DLIS has still a long way to go to fit into new global LIS education system/environment, such as i-Schools and Web-Based Information Science Education. Here, it is worthwhile to reiterate that the environment, in which DLIS inhabits, is full of challenges. The Department needs to build on its existing reputation to take it forward by enhancing quality teaching and ensuring its continued relevance. To this end, DLIS should urgently consider the recommendations made in the external review report with a view to fast-track the introduction of the planned BIKM programme and strengthen extant curricula to address the requirements for digital society. Further, DLIS vigorously explore opportunities for international collaboration or cross country partners.

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