OPTIMUM CURRICULUM FOR EFFECTIVE DIGITAL MANAGEMENT OF CULTURAL HERITAGE: THE UGANDA PERSPECTIVE

By

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INTRODUCTION

- Concern for cultural heritage not a new phenomenon in Uganda
- Cultural institutions preserve and pass on cultural heritage
- Several legal deposit provisions in Uganda - Supplemented by the Copyright and Neighboring Act, 2006
- Digitization of cultural heritage began at MakLib in the late nineties

Introduction contd..

- The Africana Section collects traditional cultures on tombs, shrines, etc
- Since 2007 WDL digitizing Uganda Cultural Heritage pooled with WDL partners in the world
- Difference between Makerere Digitized cultural heritage and that of the WDL (U) is accessibility by all

Objectives of the paper

- Uganda LIS curriculum - EASLIS 1963/4.
- Paper premised on the hypothesis : optimum curriculum (OP) is key to IPs effective digitization management
- Paper probes EASLIS curriculum capability to graduate IPs specialized in digitization
- Ma, O'Brien and Clegg (2006) concur: "DLE has assumed increasing importance"
- Sreenivasulu (2000) agrees: "best IPs to implement digitization, are those "combining librarianship and technology"

Methodology

- Case studies - EASLIS and UCU curricula
- Literature and comparative web metric analysis - of Case studies - offering specialized digitization programs
- E.g. Swedish School of Library and Information Science, the City, and Strathclyde Universities --Europe
- Hong Kong University - China; and Queensland University of Technology - Australia

Digitization contextualized

- Digitization - storage, in an electronic or digital medium
- Include digital books, digital scanned images, graphics, textual and numeric data, digitized films, audio-video clips, etc.

Williams (1995)

- A digital librarian maintains all, or a substantial part, of its collection in computer - proccesible form …

Digitization contextualized contd..

The component characteristics:

- Storage of information in digital form
- Direct access to information downloading or online/offline printing from a master file

Digitization contextualized contd..

Digital approach enables:

- Managing very large amounts of data
- Preserve unique collections
- Provide faster access to information
- Facilitate dealing with data from more than one location
- Enhance distributed learning environments
- Offer protection of information content

Digitization contextualized contd..

The 3 Skills and competencies for digitization

1. Internet, WWW competency
   - navigation, browsing, filtering
   - retrieving, accessing, digital document analysis
   - digital reference services, electronic information services
   - searching network databases in a number of digital sources and Web sites
   - creating home pages, content conversation, downloading techniques

Digitization contextualized contd..

- Web publishing, electronic publishing
- archiving digital documents, locating digital sources
- digital preservation and storage
- electronic messaging, connectivity skills
- Web authoring

2. Multimedia, digital technology and digital media processing competency
3. Digital information system, online optical information competency (Owen, 1999)

Need for Optimum Curriculum

Construes:

- Programme content
- Methodology to deliver content
- Evaluation and review of curriculum
- Educating/training digital managers

Digitization Curriculum/Education at the case studies

- Yongqing Ma, O'Briene Ann and Clegg Warwick (2008) reveal facts on Digital Education in UK, USA and Canada
- 28% of all universities with accredited programmes by CILIP in the UK
- 60% of library schools accredited by ALA in the USA and Canada - offer specific Digital Education
- Traditional programmes offer CORE or ELECTIVE modules.
- Table 1 portrays an international view of digital education coverage

Table 1. Programmes Load and Percentage Offered at Sampled Universities Offering Digital Education

UNIVERSITY	TYPE	TAUGHT CREDITS	DL CREDITS
City University	2 Cores	120	30 (25%)
Strathclyde University (UK)	4 Cores	120	60 (50%)
Nanyang Technological University (Singapore)	1 Elective	20	4 (20%)
Queens University of Technology (Australia)	2 Electives	144	24 (17%)
Hong Kong (China)	1 Elective	60	12 (20%)
Victoria University of Wellington (NZ)	1 Core +1 Elective	150	30 (20%)

Compiled by: Kigongo-Bukenya (2012)

EASLIS curriculum commitment to Digitization

- EASLIS offers digitization courses in BLIS, BRAM and M.Sc. Inf. Sc. Tables 2-4
- Masters Level - six courses with a 3-4 credit range - a total of 18 credits.
- BLIS 3-4 credits per course - a total of 25 credits
  BRAM 4 credits per course - a total of 32 credit
- Digitization not taught in PhD courses - a glaring omission at a time online protocol

Details in Tables below

Table 2. Bachelor of Records and Archives Management

CODE	COURSE	LOAD
BRM III	Information Technology I	4
BRM 1206	Information Technology II	4
BRM 2215	Database management systems	4
BRM 2104	Desktop publishing and editing	4
BRM 3115	Analysis of records management systems	4
BRM 3214	Automation of records management systems	4
BRM 3121	Website development and internet technology	4
BRM 3203	Management and electronic records	4

Total Credits 32.

Compiled by: D. Luyombya (2012)

Table 3. Bachelor of Library and Information Science

CODE	COURSE	LOAD
BLS 1211	Information technology II	4
BLS 1213	Analysis of information systems	3
BLS 2208	Database management and information retrieval	4
BLS 3111	Publication design and production	3
BLS3122	Web document management	4
BLS 3125	Automation of library and information systems	4
BLS 3124	Multi media librarianship	3

Total 25 Credits

Compiled by: J.B Muwanguzi (2012)

Table 4. MSc.Inf.Sc

CODE	COURSE	LOAD
MSC 7107	Information technology for library and information services	3
MSC 7108	Information systems analysis	3
MSC 7205	Information systems development and applications	3
MSC 8106	Publishing management and editing	3
MSC 8107	Multimedia productions	3
MSC 8110	Social informatics	3

Total credits 18

Compiled by: J.B Muwanguzi (2012)

TABLE 5. DIGITIZATION COVERAGE BY BLIS PROGRAMME, UCU

Year 1 Semester 1

CODE	COURSE NAME	LOAD
BLIS 1022	Introduction to Information Technology	3
BLIS 1033	Introduction to Information Science	3
BLIS 1044	Information Literacy skills	3

Total Credits 9 out of 18

Year 1 Semester 2

CODE	COURSE NAME	CORE
BLIS 1066	Information Systems	3

Total Credits 3 out of 18

TABLE 5. DIGITIZATION COVERAGE BY BLIS PROGRAMME, UCU contd..

Year 2 Semester 1

CODE	COURSE NAME	CORE
BLIS 2011	Community and specialized Information Systems	3
BLIS 2044	Systems Analysis & Design	3
DTHB 2205	Understanding Ethics	3

Total Credits 9 out of 18

Year 2 Semesters 2

CODE	COURSE NAME	CORE
BLIS 2088	Web Based Resources	3
BLIS 2099	Database Management Systems I	3

Total Credits 6 out of 18

TABLE 5. DIGITIZATION COVERAGE BY BLIS PROGRAMME, UCU contd..

Year 3 Semester 1

CODE	COURSE NAME	CORE
BLIS 3022	Website Design	3
BLIS 3033	Documentation Work and Service	3
BLIS 3044	Database Management Systems II	3

Total Credits 9 out of 18

Recess Term

CODE	COURSE NAME	CORE
BLIS 2111	Practicum	6

Total Credits 6

TABLE 5. DIGITIZATION COVERAGE BY BLIS PROGRAMME, UCU contd..

Year 3 Semester 2

CODE	COURSE NAME	CORE
BLIS 3055	Legislation, Policy & Ethics in LIS	3
BLIS 3077	Indexing and Abstracting services	3
BLIS 3088	Multimedia Librarianship	3

Total Credits 9 out of 15

Compiled by: S. Kaddu (2012)

Summary

- Appendix 1, the lowest and highest courses devoted to DE are 20 by Nanyang Technological University (Singapore) and 150 credits by Victoria University Wellington (NZ).
- EASLIS figures mean - 18 credits lowest (M.Sc.Inf.Sc. program) and 32 credits highest (BRAM program)
- UCU boasts a maximum of 42 credits compared to EASLIS 32 maximum credits
- EASLIS (32 credits) and UCU (42 credits) coverage far inadequate compared to 150 credits by Victoria University of Wellington (NZ)

Summary contd..

- The way forward: a proposal
  - Though other Uganda institutions outside the LIS profession teach digitization - School of Information Technology (SIT), College of Computing and Information Sciences,(CoCIS)
  - Paper emphasis curriculum in LIS Education institutions - EASLIS and BLIS, (UCU).
  - Uganda LIS Education Institutions could opt for one of the alternatives below
  - Specialized Digital Education Programme - e.g. by the Masters Programme on Digital Libraries - School of Library and Information Sciences (SSLIS), Sweden

Summary contd..

Table 5. Library and Information Science and Digital Libraries, Swedish School of Library and Information Science (SSLIS)

Course	Credits
Users and information activities in digital environments	
Technology of Digital Libraries 1	
Information Retrieval for Digital Libraries 1	
Technology of Digital Libraries 2	
Information Retrieval for Digital Libraries 2	
Digital Library Management	
Digitizing cultural heritage material	
Digital library research methods	
Master's thesis	
Master's thesis continued	

Summary contd..

2. Offer core/elective offerings under the M.Sc.Inf.Sc. Programme (EASLIS) as proposed below

Table 6. Proposed curriculum content

NO	CORE TOPIC	RELATED TOPICS
1	Overview	Concept of philosophy of digitization Curriculum content and management, design, implementation and review
2	Collection Development	Digitization; Doc. & E-Publishing-mark-up
3	Digital Objects	Text resources; Multimedia; File documents transformation

Summary contd..

Table 6 contd..

NO	CORE TOPIC	RELATED TOPICS
4	Information/knowledge Organization	Metadata, harvesting, cataloguing; Ontology, classification, categorization; Vocabulary control; Bibliographic, bibliometrics, web-biographic
5	Architecture	Interoperability; Sustainability; Interface design, usability assessment; Search engines & IR; Identifiers, handles; Info summarization, visualization; Recommender system; Applications; Web-publishing; Security

Summary contd..

Table 6 contd..

NO	CORE TOPIC	RELATED TOPICS
6	Space	Storage; Repositories archives
7	Services	Info. Needs, relevance, evaluation; Search strategy, info seeking behavior, reference services; Routing, community, filtering; Sharing, networking, Interfacing
8	Archiving, preservation, integrity	

Summary contd..

Table 6 contd..

NO	CORE TOPIC	RELATED TOPICS
9	Project Management	DL development for specific domain; DL project examples; DL evaluation; Legal issues; Cost, economic issues; Social issues; Future FLs
10	DLE & Research	
11	Legal issues	International Conventions; International related Laws; National Laws; Open Access, etc

Summary contd..

Table 6 contd..

NO	CORE TOPIC	RELATED TOPICS
12	Ethical issues	Privacy/confidentiality; Copyright violation; Freedom of Access

Adapted by: IMN Kigongo-Bukenya (2012)

Summary contd..

3. **Short Courses**
   - Short courses as CE courses - curriculum should consider theory and practice of digitization with special reference to cultural heritage.

CONCLUSION

- DE as a constituent of LIS Education curriculum has taken firm grips internationally
- Case studies in general and the Swedish School of Library and Information Science (SSLIS)
- Digitization could be offered by ICTs Education Institutions in any country in Eastern Africa Region
- Paper agrees with the Sreenivasulu (2000) view - " the best IPs to implement digitization, are those "combining librarianship and technology".
- Consequently, EASLIS and UCU and other LIS Education institutions in the Eastern Africa region and beyond

CONCLUSION contd..

- Should adopt this philosophy to ensure effective digitization of our cultural heritage.
- No need to re-invent the wheel.
- We need to adopt, adapt, enhance and contextualize to our local needs the Digital education curricula experiences documented in this paper

THANK YOU COLLEAGUES FOR YOUR ATTENTION