Developing a LIS curriculum in collaboration with social media as a delivery and communication tool: a Bachelors degree curriculum model for inclusion of LIS professionals through lateral entry

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Abstract:

This paper presents a curriculum model embracing social media as a mediating and facilitating tool in offering Bachelors Honors in Library & Information Studies (BA Hons. in LIS) degree designed by the Open University of Sri Lanka (OUSL) library in collaboration with the Faculty of Humanities & Social Sciences. The programme is the first bachelor's degree in LIS offered in open and distance learning (ODL) mode in Sri Lanka by a state University, ensuring the inclusion of library professionals working in remote, distant and backward areas to obtain accredited LIS qualification to upgrade their qualifications with a degree. The programme consists of 30 courses (120 credits) and each course is meticulously designed with three major components in hybrid mode; Teaching & Learning(T & L), Assessment and industrial training. T & L component consists of Written Learning Materials, Self Learning Sessions, Demonstrations and PracticalSessions. Assessment part consists of both formative andsummative methods. In this programme incorporation of social media will ideally be used to keep the students active and connected with the faculty throughout the programme to ensure to retain them with the university till successful completion. The SLS hours within T&L component is the main section where social media (SM) is planned to be incorporated in a criteria where students comes into contact with the teacher and supplementary materials and demonstrations. By incorporating social media it is expected that the students to be more interactive with the teachers and expected to accomplish their learning targets

effectively and to minimize the dropouts of students due to less face to face components provided in ODL mode. The BA LIS programme is the 3rd professional degree offered by the OUSL.

Introduction

The traditional curriculum approach is a simple exercise where in many cases which consisted of a list of subjects as a syllabus and in certain cases which were prescribed by a central body that holds authority in curriculum development. Well accepted theories on learning taxonomies presented specify hierarchies of intellectual and cognitive skills developed by students in their learning process, such as Bloom's (1956), Biggs and Collis (1982), Anderson and Krathwohl (2001) etc. Designing curriculum is not a straight forward, simplified task but engrosses an exhaustive dedication of the designers, subject experts and syllabus makers and academic administrators to complete a curriculum to offer an educational programme.

Development of LIS curriculum hence, should embrace and accommodate the reflections of the information behaviour of the people of the modern knowledge society and professional, cultural and ethical perspectives in LIS landscape of a country. Aim of this paper is to presenta curriculum model to offer Bachelors Honors in Library & Information Studies (hereinafter referred as BA Hons.LIS) comprising of four years, (Four levels according to Sri Lanka Qualification Frame-SLQF (2015) starting from Level 3). The Open University of Sri Lanka (OUSL) libraryhas developed the programme in line with K-SAM pedagogical model (Four domains: Knowledge, Skills, Attitude and Mind Set(SLQF, 2015) of SLQF. The programme also embraces the OUSL norms; flexibility, equity, efficiency, openness, connectedness and inclusion in distance learning.

Using the flexibility of the learning mode of ODL, the degree programme has been planned with 2 exit levels;on completion of 2nd year (Level 4) -the students may exit with a Higher Diploma andsecond exit on completion of 4th year (Level 6) with BA Hons LIS degree. Thereforeprofessional librarians who already own 3 yearprofessional diploma qualificationcan enter as lateral entrants. The degree programme will be offered in collaboration with the Faculty of Humanities & Social Sciences and it is the first bachelor's degree in LIS offered in Open and Distance learning (ODL) mode in Sri Lankaby a national university and the 3rd professional degree offered by the OUSL.

Rationale and objectives

In Sri Lanka, at present,the only undergraduatedegree programme in Library and Information Science is offered by the University of Kelaniya which enrols students around 35-40 per year from any subject stream through the UGC and there is no entry opened for the outside applicants. Hence a visible gap exists in higher education sector in producing undergraduates qualified with honours degree in library and information science required by the LIS job market in Sri Lanka. The situation has created a dearth of qualified LIS professionals within the country which had affected drastically in strengthening the LIS profession.

The necessity had been felt seriously for years regarding the absence of an avenue opened for the employed librarians to obtain an honours degree qualification from a recognised educational institution. They particularly feel the necessity to upgrade their credentials to a degree level as and

when they sought higher positions in the LIS sector in Sri Lanka and when they target foreign employment. The higher education institutes, as societal institutions has a responsibility to accommodate these requirements into the curricula and deliver the courses ensuring the graduate profiles to be maintained in the expected modality.

With this backdrop, the proposed degree programme has been structured for thecandidates who aspire entering into the LIS field and for the lateral entrants to obtain necessary education and practical knowledge in acquiring, organizing, preserving library materials and utilising the same for knowledge creation. Objectives of the programme designed are to;

- develop managerial and administrative competencies - to develop and upgrade skills that are necessary to establish and manage modern libraries
- provide technical knowledge and training- to build competencies on information systems, access systems, related software and emerging technologies etc.
- develop research skills - for service development, infrastructure and professional development
- upgrade the professional status of librarians by providing accredited qualifications with flexible entry/exit levels

Theoretical base for the curriculum design

The curriculum design process may answer what is the purpose of the educational programme, how will the programme be organised, what experiences will further these purposes, and how can we determine whether the purposes are being attained? (Tyler,1949; Kliebard, 1995; Schubert, 1986).Hence the design should enable learners, teachers and managers to fulfil their obligations in relation to a programme (Grant,2006) diverting from conventional curriculum design, Bloom (1956), Skinner (1968), Piaget(1970), Gagne (1970),Campbell, et.al.(1977).Bloom in 1956 introduced three domains of learning in his theory as psycho–motor, cognitive and affective. Bloom emphasize that these stages of learning can affect a person's skills, knowledge and understanding, and attitudes. The skills he enumerates are still valid for the present day curriculum design; knowledge, understanding,applicationand analysis(Bloom, 1956). Refinements to Bloom's model by Anderson and Krathwohl (2001) focused on cognitive processes, Biggs and Collis' (1982) SOLO taxonomyan Perry's (1981) work on cognitive progressionassert more complex and progressive ways of students thinking. Content analysis in a curriculum was also given higher importance by the educationists like Sheafor,(1985 and Clements, (2007).

According to the Theory of Transactional Distance (Moore, 1973) there are three components a curriculum should embrace in its design;(a) dialogue, (b) learner autonomy, and (c) structure(Moore,1973,1993).The flexibility of the educational objectives of the programme,describes the extent to which an education programme can accommodate or be responsive, to each learner's individual needs(IBE,UNESCO,2017; Schellekens,2004). Operational flexibility too matters very much with learner to achieve the educational goals (Schellekens,2004).According to Fujioka-Ito (2013) both individual and social learning processes affect learning outcomes. Cooke, Sweeny and Noble (2016)assert that transforming LIS culture to prioritize social justice values, epistemologies, and frameworks requires multivalent strategies where ODL approach is highly important in learning a practical subject area like LIS.

Designing the programme structure

In designing the curriculum few prior exercises had been conducted; a) a need analysis conducted by consulting experienced librarians in the LIS sector in the country b) acomparison made of the syllabi of the 3 year diploma programmes offered by the SLLA and other two universities c) analysed few foreign syllabi at undergraduate level. d) selected employers were consulted where LIS diplomats and graduates are employed. (Seneviratne et.al, 2016).The analysis of syllabi was highly necessary as the OUSLcurriculum design provides 'Lateral Entry' to the Level 5 of the degree course where former 2 levels were equated with the 3 year Diploma of 3 institutions.

The programme is designed for four years of studycomplying with the SLQF requirement of 120 credits. The 120 credits are distributed evenly (30credits) along the four years. The course structure is designed offering 30 modules including research component and one elective in Level 6. The abstraction of the credit components is given in the following statement.

$$TCR= L3_{CRn}+L4_{CRn} + L5_{CRn} +L6_{\{CRn+ CRn(ei)\}}$$

$$TCR =L3(30c)+L4(30c)+L5(30c)+L6 (27c+3ei) = 120Credits (120_{CR} = 6000 NLH)$$

In which,

- 120 credits = 6000 NLH and Total 6000 NLH was calculated taking the SLQF credit rating of 1 credit equals to 50 Notional learning Hours (NLH). Therefore, $120_{CR} * 50_h = 6000$ NLH.
- TCR + ….NLH = Notional Learning Hours*, c = Compulsory courses, CR = Credits,ei= one selected out of 3Elective Course, n = number

Note: Notional Learning hours consist of the total of Face to Face learning hours, Self learning hours, time dedicated for projects/assignments, continuous assessments and other teaching and learning tasks incorporated such as practical classes, demonstrations and Final examination. Table 1 indicates the syllabus structure of the degree programme with the credit rating and notional learning hours assigned.

Table I : Programme Structure – BA Hons. LIS

Course Code	Course / Module Titles	No. of Units	Credits assigned	Total NLH-SLQF	Total NLH
SLQF Level 3					
HSU3301	Libraries, Librarianship & Information Studies	3	3	150	147
HSU3302	Bibliographic Control: Concept and Practice	3	3	150	147
HSU3603	Fundamentals of Library Cataloguing	3	6	300	273
HSU3604	Fundamentals of Library Classification	5	6	300	300
HSU3305	Types and Management of Library Resources	4	3	150	147
HSU3306	Information Behavior& User Need Analysis	3	3	150	152
HSU3307	ICT Skills for Librarians	3	3	150	148
HSU3308	Digital Media & Web Technology	4	3	150	143
	Credit Total for Level 3	**28**	**30**	**1500**	**1457**
SLQF Level 4					
HSU4601	Info.Policy, Entrepreneurship& Access to Info.	3	6	300	147
HSU4602	Intermediate Library Cataloguing	3	6	300	296
HSU4603	Intermediate Library Classification	4	6	300	293

HSU4304	Library Management	3	3	150	147
HSU4305	User Education & Teaching Informn. Literacy	6	3	150	299
HSU4306	Introduction to Library Automation	5	3	150	148
HSU4307	Computer Programming & Database Mgt. Sys.	2	3	150	148
	Credit Total for Level 4	**26**	**30**	**1500**	**1478**
SLQF Level 5					
HSU5301	Information and Knowledge Society	5	3	150	147
HSU5602	Advanced Library Cataloguing	3	6	300	299
HSU5603	Advanced Library Classification	3	6	300	299
HSU5304	Indexing &Abstracting :theory & practice	3	3	150	145
HSU5305	Intellectual Property Law and Copyright	4	3	150	146
HSU5306	Types of Libraries and Information Services	3	3	150	144
HSU5607	Advanced Library Automation	3	6	300	293
	Credit Total for Level 5	**24**	**30**	**1500**	**1473**
SLQF Level 6					
HSU6301	Documentation Theory, Practice & Services	3	3	150	147
HSU6302	Knowledge Management in Library Operations	3	3	150	147
HSU6303	Service Marketing & Communication	5	3	150	149
HSU6504	Digital Libraries	4	5	250	277
HSU6305	Records Management	3	3	150	144
HSU6406	Research Methodology	6	4	200	185
HSU6607	Research Project	3	6	300	302
	Credit Total for Level 6 –without elective cours	**27**	**27**	**1350**	**1351**
Elective Courses*					
HSU6308	Preservation & Conservation of Lib. Resources	3	3	150	150
HSU6309	Library Buildings and Interior Planning	3	3	150	150
HSU6310	Library Disaster Management Planning	3	3	150	150
	Credit Total for Level 6 – with one elective course	**9**	**30**	**1500**	
Total number of credits and total NLH of the programme = $(L_{3c}+L_{4c}+L_{5c}+L_{6c+ei} = $ Tot. NLH)		105	**120**	**6000**	**5909**

NLH = Notional Learning Hours

*_Students are required to obtain 3 credits from among the elective courses to complete 30 Credits at Level 6_
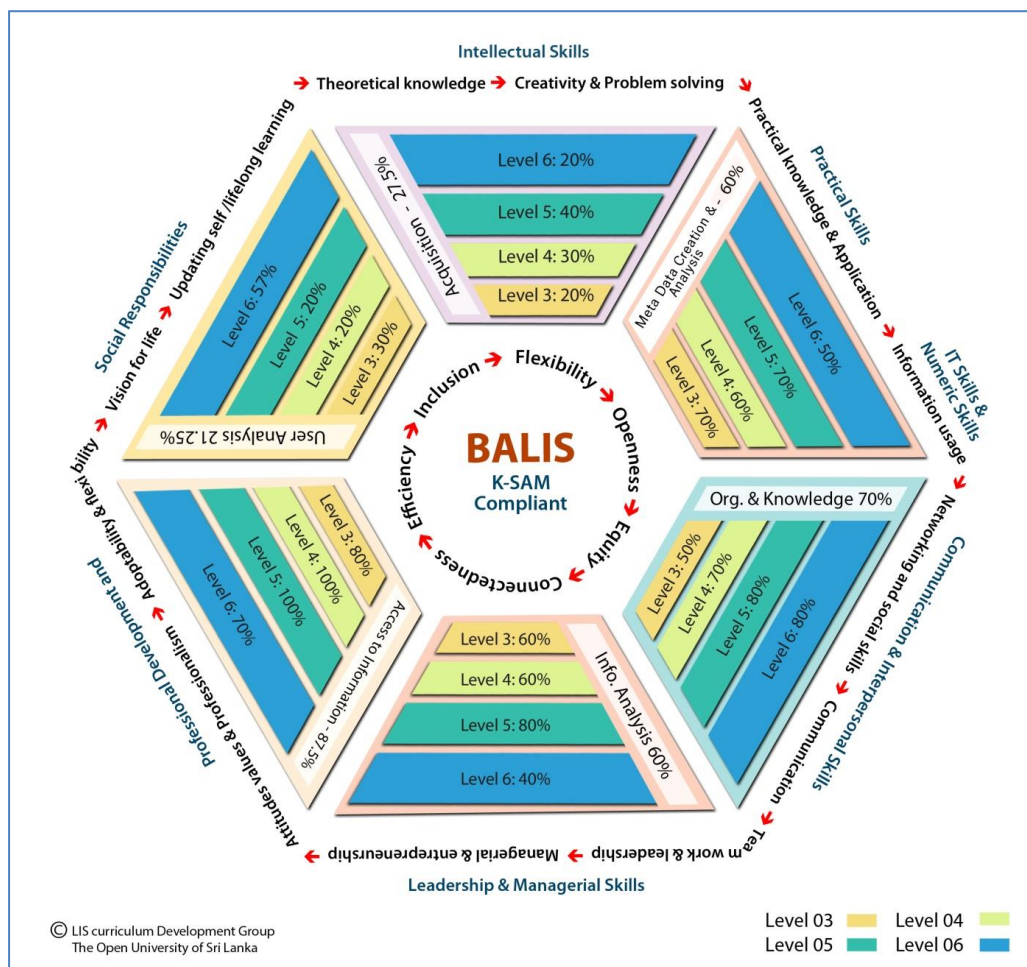
Designing the curriculum model of BA Hons. LIS

The conceptual framework agreed by the designers consists of following considerations;

- Course structure to match with K-SAM model decided in SLQ frame of the QAAC-UGCContents to match the market requirements of the country compiled according the market analysis conducted (Seneviratne,et.al. 2016)[1]

- Teaching, learning andresearch components ensuring sustainability of the Programme and Self learning components accommodating the ODL learner to self-develop skill level expected.

- The Assessment part consists of Continuous Assessment Tests(CA), Practical assignments/Laboratory projects, Take home assignments and Final examination.

- Use Social media for content delivery, communication,studentfeedback and for evaluation –accommodating student feedback is highly important in ODL system.

- Propagation of competencies and professional skills – The preliminary surveyidentifies four skill areas; profession related competencies; managerial and administrative competencies; ICT and other skills need to work with library technologies; marketing and communication skills; and competency in conducting LIS and related research.

- The Industrial attachments (compulsory) designed are training assignments in libraries and information centres to enhance and build their work related competencies and skills to reach the competency level required for a professional librarian

Fig. 1.0 : OUSL – LIS Curriculum Model.

Note: Subject representations are mutually inclusive hence the percentages indicate overlapping of subject areas across the curriculum.

Image in Figure 1.0 describes the OUSL-LIS Curriculum Model which indicates the main 6 broad subject areas that stem the other core courses and elective courses. The specialty of the model is that these 6 themes spread along all the 4 study levels. The six main themes are; 1.Acquisition 2.Metadata analysis 3.Organization of knowledge 4.Information analysis 5. Access to Information and 6. User analysis. Subject representation across the curriculum that has calculated as percentages upon the learning time dedicated for each component and are indicated horizontally in each subject pyramid.

It should be specifically noted that the subject representations are 'mutually inclusive' of each other as main 6 themes represent in almost all the courses designed, hence the percentages indicate overlapping of subject areas across the curriculum.The main themes are presented in vertical columns in each pyramid. K-SAM attributes in this model are scattered across the curriculum hence, the Attributes areplaced as a 'circular run' around the model. The middle circle that runs around BALIS -K-SAM core indicates the OUSL teaching and learning norms; *Openness, Equity, Flexibility, Connectedness, Efficiency and Inclusion.*

There are altogether 30 courses and 105 course units (See Table I) that a student needs to be completed in the programme when entered at first entry level (L3), where the lateral entrants have to complete 15 courses and 51 course units including the elective. The theory and practice of library and information science to provide the students with necessary knowledge has been planned carefully across the degree programme. In the model K-SAM attributes; *Knowledge* domain represent in all courses 100%, *Skills development* 54.7%, 45.55% addresses *Attitudes, Values and Professionalism* and *Mindset paradigm addresses* 22.02%.

Incorporation of Social Media

The T&L component is the main section where social media (SM) is planned to be incorporated in a criterion where students comes into contact with compulsory, supplementary materials and demonstrations. There are more than 5.5million Facebook (FB) users in Sri Lanka in 2017 (http://seven_mediagroup.co/social-media-landscape-2017-sri-lanka/) according to Social Media Landscape Survey of Sri Lankain 2017. According to the Statistics of Department of Census and Statistics of Sri Lanka there are more than 56.9% of population use smart phones (Department of Census and Statistics, 2017) and the usage of common applications such as FB, Twitter, Instgram, Viber, IMO,WhatsUp,YouTube, Instgram etc. and other social media and mobile applications are growing inan accelerating speed. Thus the present usage behaviour of social media has created a platform with a great potential to be used as a platform as a delivery and communication tool for teaching and learning purposes and to keep the leaner on the learning path.

Maintaining the connectivity of the remote LIS learner is important for the teachers and academic mediators to be connected with student for assignment related and course related instructions, deliver notifications, mentoring and counselling purposes. The students will be able to access to course guidelines, assessment instructions through FB while interacting with the teaching staff on issues relating to the Programme through Viber group created by the teacher. FB also will be used as a discussion and knowledge sharing platform with peers and teachers. Since the lateral entrants are mainly working librarians smart mobile devices are being comfortably used by them and it is expected use the potential to keep the student connectivity live.

Unlike in the conventional mode of learning Face to Face component of the distance learning is proportionately less and self learning components and the number of continuous assessments are substantially high in proportion in ODL mode . In the present curriculum design the total self learning hours calculated is 2852, out of that 30% will be dedicated for social media based learning.In Level 5 course on HSU5603-Advanced Classification,the SLS component dedicated is 120 self learning hours and out of 120, 10% (12 hours) is dedicated for SM based Group Learning, 20% (24 hours) for SM directed 'Personal Learning' and 70% (84 hrs) for other self learning methodologies.In Advanced Library Automation module 20% self directed learning component will be used by the students for trouble shooting and to get assistance from the teacher and peers. The demonstrations and replaying of instructions will be conducted through social

media groups, video sharing sites (Eg: Youtube) etc. Therewill be more envisaged uses of SM for self and group learning in the curriculum than explained here.

The group learning is encouraged in the programme dedicating 10% of SM for all 30 courses that will make an impact over the connectivity within learning groups. The incorporation of SM focuses the effective learning and expected to accomplish their learning targets and the university expects to minimize the dropouts of students due to less face to face components provided in ODL mode.

Delivery mechanism of courses with SM

Incorporating social media to the curriculum is not difficult in the designing stage, however when it comes to the implementation stage some practical issues may arise. When using SM the course directors and respective teachers should be trained for i) the techniques and methods of using SM in a constructive way to communicate with the learner, ii) for communication and mentoring skills to respond the learner to encourage the learning activities and iii) to evaluate the student feedback in an effective manner to sustain the learner and the programme. In addition to that working students especially lateral entrants may be coming online after the working hours. The course managers, teachers and tutors should be prepared to cater to this behaviour of adult learners. The question in this case is whether the teachers are prepared to entertain the said behaviour. The course manager should control the behaviour by giving the students comfortable time slots to interact with individual teacher.

In the event of using the SM as a communication medium a trained and dedicated office assistant/research assistant may be used to be connected online during specified time slots. For the purpose dedicated mobile connection will be highly useful. At the OUSL there is a dedicated mobile connectivity (MOBITEL, owned by Sri Lanka Telecom Plc.) to be used as a communication tool which is highly in use at the faculty of Natural Sciences and Faculty of Engineering Technology. It is however important that the course managers to be vigilant about the utilization of SM by both parties: teachers and learners to make the initiative effective.

Impact over the graduate profile

Outcomes of the programme are expected to achieve at two exit levels; Higher Diploma level and Degree level. According to the SLQF Qualification Descriptors following outcomes will be derived by the persons those who successfully complete the required number of credits at the said two exit levels. It is expected that the students who exit at two levels would own 'graduate profiles' with following competency levels. Apart from the knowledge related goals expected students at Diploma exit level and graduate level will be competent of using set of competencies and skills such as; An effective communicator driven with a professional target and will be an efficient administrator who runs a library or an information centre with confidence in modern technologies.

Summary and Discussion

Curriculum for the BA hons. in LIS has been designed to address a national need that exists in library and information science sphere in the country. Especially the librarians who work in distant, remote areas will be accommodated in the present programme through distance mode. Incorporation of social media in study process will ideally be used to keep the students active and connected to retain them with the university till successful completion of the programme.The

university also envisages that the OUSL-LIS Curriculum model is suitable to offer the degree in foreign countries through especially in South Asian and countries where LIS education is not strong enough to provide accredited qualification in LIS.

Acknowledgments

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