

Education of digital librarians: towards internationalisation of LIS curriculum

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Abstract

Changes in the environment – political, economic, social, educational and technological – have had an impact in many areas of LIS professionals work. As in many parts of the world, creating, storing and diffusing digital information occurs on a daily basis, and formally constructed digital libraries constitute an important component of this virtual information environment. Education of digital librarians has been offered in many countries with different approaches but similar issues. Amongst the various issues that have arisen and demanded consideration and investigation are the importance of a multidisciplinary dimension in the education of digital librarians; that a gradual convergence is being identified between Library Archives Museums (LAM) cultural institutions; the new modes of learning and teaching, with particular regard to new pedagogy and e-learning; and finally even a reconsideration of the new role of the information professional and new service models for their praxis. The work done by the IFLA Section Education and Training and other international projects are described in the presentation.

1 Introduction

The present major global educational discourses are about the knowledge economy and technology, lifelong learning, global mobility and neoliberalism. This international scenario has had an impact upon Library and Information Science (LIS) education, which must aim at greater competitiveness. This pushes LIS schools to adapting to the labour market, seeking to offer transnational courses in order to counterbalance the loss of students in the internal market. In this presentation we wish to present a different aspect of the internationalisation of courses: the point we intend to demonstrate is that the internationalisation of education can assume a role of fundamental support to reinforce and renew the LIS curriculum

How this can be achieved? We suggest that this objective can be attained in a period of changes by discussing together the problems of education for example by: trying to agree upon a body of quality criteria and indicators of the courses, giving an international dimension to the curriculum contents, favouring the recognition of qualifications and the mobility of students and professionals. The major institution contributing to such LIS international educational discourses and actions is the Education and Training Section (SET) of IFLA. Other international Associations are ALISE that has developed project Kaliper (2000), Euclid which has developed the European curriculum reflections project (2005), A-Liep that organises regular Conferences.

The results of IFLA SET in particular will be analysed together with those evidenced in professional literature, in order to trace a pattern of the current tendencies of change and highlight the indications that emerged for a curriculum for digital library.

2 IFLA Education and Training Section

The IFLA SET from its beginning has been a most active one not only within the IFLA system but also in its relationships with the organisations outside with similar concerns on their agendas - especially FID's Education and Training group (now closed), ICA SAE (International Council

Archive Section Education) and UNESCO.

The activities of SET can be classified in three groups:

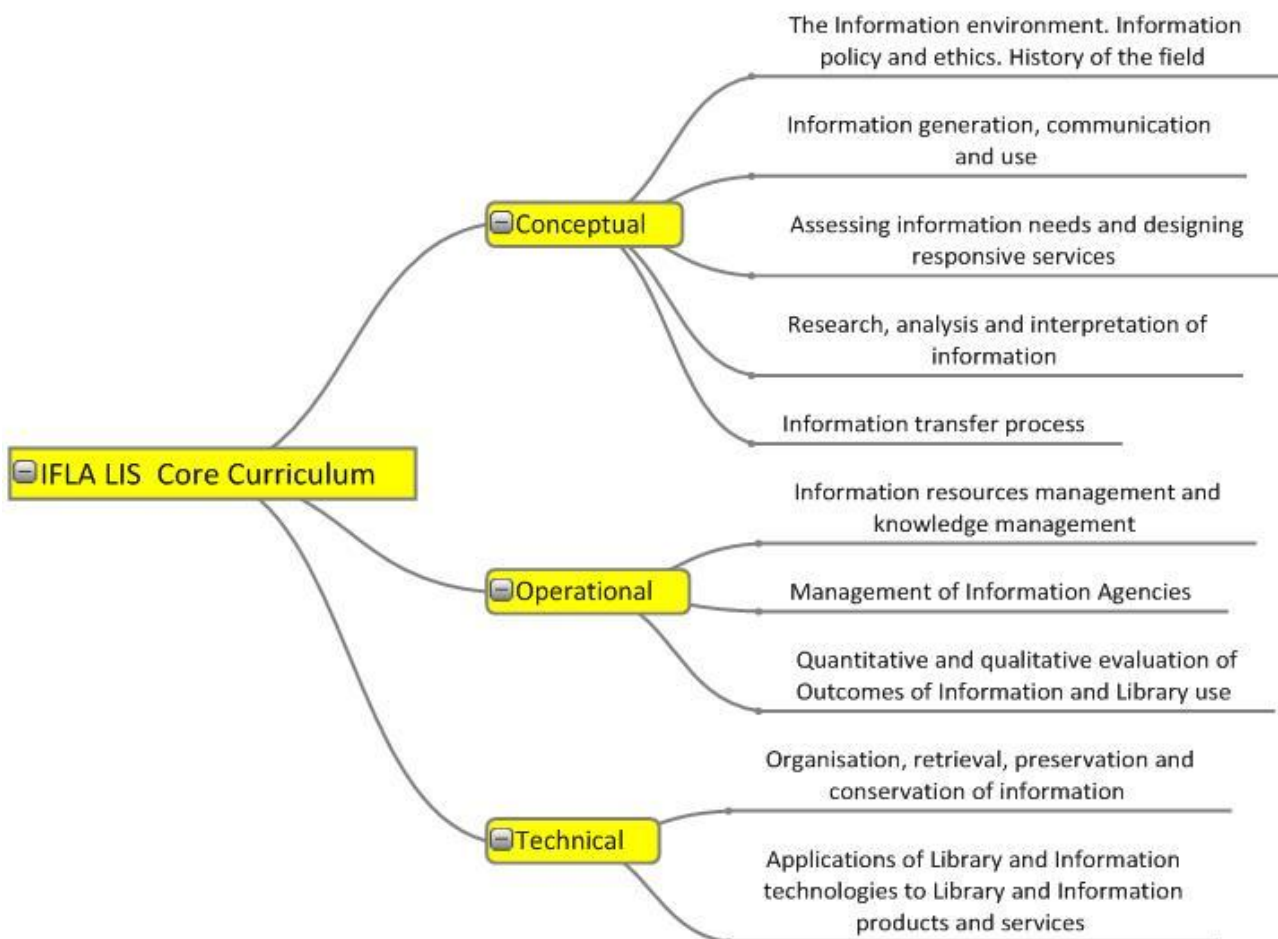
- curriculum and quality of the LIS courses;
- LIS professional qualifications and their recognition;
- a record of all programmes of professional education.

2.1 “Core” elements of the LIS curriculum

In a first phase, SET tried to work toward worldwide harmonization and integration of education for library and information science and archives. This activity had its most important moment in the International Colloquium “Harmonization of education and training programmes for library, information and archive professionals” at London in 1987 (Johnson et al 1988). Subsequently, the idea of a single curriculum was dropped and an attempt was made to agree upon Guidelines for Library and Information Science (LIS) programmes. The Guidelines, which are constantly updated, have the objective of giving an orientation to education programmes, though remaining on a general level. In this case the “core” is identified as that which characterises the profession, together with the minimum requisites regarding the quality of teaching.

The core elements of the curriculum proposed by IFLA are displayed here in a map (Fig. 1), where they have been organised in three groups relating to conceptual knowledge, professional working skills and technological and technical competencies.

Fig. 1 IFLA “core” elements of LIS curriculum



The conceptual reference model for curriculum is based on the prevalent model of information science and follows the information cycle. This cycle comprises the phases of the information transfer process, which, although with some differences in various authors, includes (Lancaster 1993):

- selection/creation of resources
- organisation, indexing, storage
- dissemination, use

In the Guidelines and Conferences that SET organises every year the importance of user studies has been emphasised: these subjects should always be considered in curriculum development. User studies in particular must be based on the ability to apply a research methodology.

The professional working skills that are required of professionals are described on a whole as the Management of Information Agencies. On the teaching of management of libraries and information centres, SET has drawn up the “Guidelines for the teaching of management” by M. Tees (Canada). Management is linked to the evaluation and constant monitoring of procedures and services, with the aim of guaranteeing the institutions' efficiency. Different approaches can be recognised in the focus of LIS programmes. The range of activities to foresee is very wide, and it goes from the management of a collection of different typology of resources to knowledge management. A more traditional culture is recognised in an archives approach to the collection; a diverse culture is evident in knowledge management, where there are different values, different features in which

reference context of the institution, economic approach and resources have a greater impact on services.

Adapting the curriculum for librarians to the technological qualifications required of professionals has been a problem which SET has dealt with again and again in its Conferences, publications and activities, which can be found on IFLA SET website. In recent years technology has been applied to the entire information cycle in a constantly increasing way, comprising digital resources, the organisation procedures for these resources, extending to include the access services and intermediation with users. Thus there is a close combination of technologies and professional skills, for example as emphasized by information retrieval and indexing of information resources. The education necessary for providing students with the proper skills and the right balance between a technical and a professional background, has been analysed by SET in specific studies. One good example relates to the awareness of the use of information technology as described in an article by Lazinger and Harbo (International Approaches to Preparing Professionals and Paraprofessionals for Digital Library Service: IFLA's Section on Education and Training in NORDINFO Publication 48, 2002). An other study is by Weech, Terry, and Niels Pors. "Guidelines: Education for Digital Librarianship," December 30, 2006

For comparing different education programmes, as well as for aiming at the continuous improvement of LIS university education, transparency and quality criteria of courses in common is necessary. The minimum quality requisites are an integral part of the Guidelines. The quality systems being used by the diverse countries have been analysed by Tammaro (2006), who pointed out that these depend largely upon the national Government context. Guidelines include indications in the development and dissemination of teaching and learning methods and teaching materials.

In addition IFLA SET has attempted to complete and update a record of institutions which offer LIS education. "International Guide to Library and Information Science Education" was agreed upon for publication which occurred in 1985 when it was published as IFLA Publications no. 32. The World Guide to Library, Archives and Information Science Education, edited by J. Riss Fang, Robert Stueart and Kulthida Tuamsuk was published in 1995 as no. 72/73 in the IFLA series. The third edition of the World Guide to Library, Archive and Information Science Education by Axel Schniederjürgen (ed.) has been published as no. 128-29 in the IFLA series.

2.2 Profile of the librarian

From the beginning IFLA SET established that university education was necessary for access to the profession. and that the Diploma should be a guarantee of professional competence. This initial level of professional qualification can be followed by a postgraduate Master's degree level and a subsequent Doctor's degree level. The curriculum delineated in the Guidelines described above refer in particular to the Master's level, which is considered the professional level.

The level of professional qualification is linked to the roles and functions of different responsibility in society. The role of the professional in the "so called" Society of Information has been indicated as an active role which does not limit itself to the traditional one of simple intermediary in the communication of information, with an extension to all information professionals, including librarians, archivists, record managers, curators and so on. Further studies and research are necessary to understand the extent of this change which interrupts a continuity that until now existed between library education and the library profession, as will be described in the next section.

An emerging issue in the international debate is innovation in pedagogy. The essential argument is that teachers can improve the learning of their students if they seek to enrich the wider student experience and create opportunities for and reward higher order learning activities. This task

requires us to make a clear distinction between theory and praxis, while at the same time strengthening the notion that praxis must be informed by theory in order for professional work to be undertaken effectively: there must be an understanding of why the work is being done at all.

3 Trends of LIS education

A first impact of this extension from LIS education to information professionals is evident in the accreditation systems of courses: which professional association must be involved? This problem introduces the second part of this presentation: the tendencies and different solutions adopted to manage the change and innovation of the profession. This part of the presentation is based not only on the work of IFLA but especially upon the debate of numerous international conferences, on the research studies of professional Associations such as ALISE, EUCLID, A-LIEP, and on professional literature. As in many parts of the world, creating, storing and diffusing digital information occurs on a daily basis, and digital libraries constitute an important component of this virtual information environment. Various issues have arisen and demanded consideration and investigation.

3.1 Interdisciplinarity

In the digital environment the interdisciplinarity and multidisciplinary of the digital librarianship is seen as positive and desirable.

The first requirements of interdisciplinarity pertains to Computer science knowledge. The knowledge of technologies is not limited to the simple skill of using software, but encompasses different proficiency levels. A problem to be faced concerns the technological background of the digital librarian as well as the difficult equilibrium between information science education and library science education. Saracevic (Saracevic , Dalbello 2001) has defined the two backgrounds as Venus (librarian approach) and Mars (information science approach). We might ask ourselves: Must a IT expert be responsible for the digital library? Or rather must there be a librarian with sufficient skills in information science?

Professional literature emphasizes a professional profile with both backgrounds, but to what consequences would this lead? A lowering of the professional level of the digital librarian, who becomes a good technician to whom the correct functioning of the information systems can be entrusted? Or else a high level professional with leadership capacity as well as sufficient knowledge of technologies to be used and the opportunities that these can give for bettering existing services and creating new services?

What we wish to point out is that we must not only limit the strengthening of LIS courses in the technological aspect. Together with a greater technological knowledge, the new professionals need greater conceptual knowledge. There is a convergence also with Library, Archives, Museums professionals. In many educational institutions LIS and Archival programs with different traditions exist within the same schools, e.g. Archives, Library and Digital curation. How does this affect the dialogue between professionals? IFLA SET and ICA SAE found in the last IFLA Conference in Gotheburg (2010) that it was difficult to find information on how the question of professional identity was taught within the courses and programs and also how educators cooperate and/or relate to professional organisations or other bodies which represent the profession.

Interdisciplinarity has been extended to other disciplines, with the consequence of the infusion of multidisciplinary perspectives into LIS curricula, eg from sociological, economic, legal, cognitive and other disciplinar theories. There is another aspect of this multidisciplinary. We can in fact say that in all disciplines one has to know how the information is structured and organised. And so, we can speak of an interchange, as information science can be spread in all subjects. This tendency

reaches its peak by dropping the L-word and introducing the I-word in the i-Schools movement: the transferability of library skills to other situations and information problems.

3.2 Specialisation

As already briefly emphasized, LIS curricula are addressing broad-based information environments and information problems not only the library. But this leads to the need to evidence that which, on the theoretic and general level, unites many diverse specializations. This is the development of a distinct core: the central conceptual domain covers cognitive and social aspects of how information and information systems are created, organized, managed, disseminated, filtered, routed, retrieved, accessed, used, and evaluated. We can affirm that LIS curricula incorporate perspectives from other disciplines, but a distinct core has taken shape that is predominantly user-centered.

The most prevalent answer that is evident in LIS education programmes can be pointed out regarding the continuous addition of new specialized courses. The introduction of new courses to focus on information problems such as licensing and legal issues, ethics, the creation and marketing of information products, the organization and management of digital information. Also digital library courses can be evidenced in this phenomenon of fragmentation of LIS curricula.

LIS schools are providing multiple courses within specific subject areas (eg health informatics, law librarianship) or are offering flexible programming so that students have choices within the core or can tailor their programs according to their own specific interests.

This tendency especially seems to answer the demands of the labour market and competitiveness in the context of different education offers. We observe the renaming or retooling of traditional LIS courses, too, such as cataloguing, classification and reference, or redesignating them as electives instead of core. Yet this tendency does not seem anchored to a rethinking of the discipline.

4. Internationalisation and cooperation

How can internationalisation help to strengthen LIS curriculum? There is a need for LIS curricula rich in international and global content and there is a need for collaborative structures around the world (building LIS university communities).

There are different approaches to the internationalisation of the LIS curriculum. Often internationalisation efforts are related to cooperative efforts which bring an international dimension to the LIS curriculum, sharing a common understanding and triggering the debate about the present challenges, using Conferences and International Library Association, such as IFLA. The aim is that of situating the LIS curriculum studies globally and understanding of curriculum both as an international (global) phenomenon and as a local, situated practice.

An other approach to international education is to pursue the purpose of creating networks for the expansion and distribution of LIS programmes, also using distance education. Emerging forms of instruction include inter-university partnerships where students from one institution may take courses for credit at another LIS school, or through collaboration with universities in other countries.

This trend in Europe can be evidenced as a form of “Internationalization at Home” and is based on the harmonisation of curriculum in twin or joint courses. Virkus and Tammamro (Tammamro and Dixon 2003, Virkus, Tammamro 2005) have tried to delineate functional models and requirements, in order to obtain expected results from twin/joint courses. Facing difference of values, administrative procedures and professional qualifications, how is it possible to coordinate and preserve the differences while moving toward the attainment of these common objectives? The choice was the agreement upon the professional profile to educate.

In US, WISE (Web based Information Science Education) brings together LIS schools to broaden the educational opportunities available to their students. The vision of this initiative is to provide a collaborative, cost-effective distance education model that will increase quality, access, and diversity of online education opportunities.

The conceptual model based on the creation and communication of information, indicated in the SET Guidelines seems to still be suitable. However the curriculum for digital library must be strengthened in the theoretical structure to adapt the offerings of courses to the new needs of the digital era. Meadows (2008) points out that the concern of the information scientist has traditionally been with the later stages of the chain – with organisation and storage in libraries and information centres, and with retrieval and use – but that there is, in fact, justification for study of all parts of the chain from its beginning. We also have to restate the social responsibilities which the new professionals responds to, and how they can do this work, thus clarifying the role and functionalities which are basic or essential to all information professionals. The development of a distinct core in the digital era covers cognitive and social aspects of how information and knowledge are created, organized, managed, disseminated, filtered, routed, retrieved, accessed, used, and evaluated.

In the broader institutional context of the digital library, the organisation of the resources and services are now related to the institutional infrastructure. As a matter of fact, an innovative approach to the profession sees the digital librarian committed to the social functions of facilitator in the community where there are libraries and information centres, supporting learning processes, active citizenship and integration in a multicultural society. Besides, because of the greater complexity of the digital environment, the new role is no longer linked to the library profession but it extends to all information professionals, with emerging difficulties linked to the convergence of professions up till now distinct one from the other and with their professional identities. Digital librarian creates an intellectual structure for digital objects and collections, expanding the possibilities of sharing, access and re-use the resources. As a consequence, the access is completely disintermediated and the Web interface replaces the librarian. Scholars were the first to use this opportunity, for enhancing their research in the University. The search engine and the portal are the new tools for interaction. However, there is an extension to information retrieval, with new functionalities and opportunities such as re-use and manipulation of resources, including virtual collaboration and communication between users. The reference service became more important than before. The digital library evidences the problem of the socio-technical systems: this is not a technical problem, but a social one.

Conclusion

This presentation has sought to demonstrate the support that international cooperation and international associations such as IFLA can give for strengthening LIS education. Digital libraries are not only technological systems and without support from professionals such as digital librarians, cannot bring about the social changes so desired by governments. We have outlined the social responsibilities which this profession responds to, thus clarifying the work that is basic or essential to all information workers. It points to some solutions which have been adopted by schools of librarianship, many of them involving collaboration with other disciplines to produce the required depth of knowledge needed to digital librarian. It also calls for changes in the schools' approach to teaching, learning, and research, and in the practitioner community's support for education in general and continuing professional development in particular.

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