Education for Library and Information Science in the UK

Sandra Parker.
Visiting Research Fellow, Research Center for Knowledge Communities, University of Tsukuba.

Degrees and post graduate qualifications in Information and Library Science
There are currently 16 Universities in the UK which have courses accredited by CILIP (see Appendix A). Currently there are:

- 14 undergraduate courses - 7 B.A.(Bachelor or Arts) and 7 B.Sc.(Bachelor of Science) programmes
- 44 Masters level -29 M.Sc.(Master of Science) and 15 M.A.(Master of Arts)

There are universities which have courses which are not accredited by CILIP, for example the University of Strathclyde in Glasgow where the Graduate School of Informatics has many programmes which are not accredited.

The number of Schools of Librarianship has fallen as universities seek to streamline academic departments. Most courses are now housed within wider Schools or Faculties, bringing together aspects of information systems and computing. Interest by students in full time undergraduate courses in Librarianship, has fallen with only 4 programmes now having 'Library' as part of their title. 16 Masters level programmes still have 'Library' in their title.

In the past ten years the great expansion has come from distance learning programmes in both undergraduate and post graduate education, where students can maintain posts and study simultaneously.

The Government undertakes an assessment of the teaching quality in each subject area on a periodic basis, and gives a rating. The last exercise was undertaken in 2001. For the report see: http://www.qaa.ac.uk/revreps/subj_level/qo6_01.pdf

Research activities/Doctoral Programmes
The UK currently has a Research Assessment Exercise (RAE) which is undertaken every five years or so, which is conducted nationally to assess the quality of UK research and to inform the selective distribution of public funds for research by the four UK higher education funding bodies. Each subject is examined and each department in a university is graded on a scale of 1-5. The top rated departments in 2002 were in Sheffield and Salford Universities, who both were awarded a 5* and City University, London and Loughborough University who were each awarded 5.

Funding for doctoral and post doctoral research in Library and Information Studies has been restricted in recent years and the funding bodies have changed their priorities. The major funding bodies with direct responsibility for librarianship such as the Department

of Culture, Media and Sport, The British Library and the Library and Information Commission (now the Museums, Libraries and Archives Commission- MLA) ceased to have research funds which they distributed to university departments.

The Library Division of the Department of Culture, Media and Sport re-located its research funding to the Arts and Humanities Research Board. The Economic and Social Research Council (ESRC) and the Engineering and Physical Sciences Research Council (EPSRC) both fund research in the sector. The Further and Higher Education Funding Councils fund research through the Joint Information Systems Committee (JISC) into academic libraries.

Professional Qualifications
Until the 1960's the Library Association conducted formal examinations which, when passed, were the qualifications necessary for admittance to the Register of Qualified Librarians as an Associate of the Library Association (A.L.A.). With the development of degrees in librarianship and library science by universities in the 1970's the Association gave up direct individual examination of candidates and instead accredited the departments in Universities which offered these courses by mapping the courses against the Body of Professional Knowledge as decided by the Association. (See Appendix A for the current accreditation content checklist). They also visit the departments on a regular basis to examine the quality of the courses to ensure that candidates are covering an appropriate syllabus.

Thus since the 1960's candidates who want a professional qualification in librarianship either successfully undertake:
- a 3 year full time degree in librarianship
- or if they have a degree already, a one year full time post graduate/ masters' degree

The course has to be accredited by The Library Association or The Institute of Information Scientists - now united as CILIP (The Chartered Institute of Library and Information Professionals). Each candidate has to have been a member of CILIP for at least one year, then undertaken a period of work experience, usually one year working full time. They then submit to CILIP a Professional Development Report, which if successful, enables the candidate to be admitted to the Register of Professional Librarians, and to become a full Member of the Chartered Institute of Library and Information Professionals (MCLIP).

These courses are now becoming very diverse in nature. The information revolution has spawned many university level courses in information management and communications which contain some elements of the previous traditional qualifications, but not all, and the task of accrediting courses is now much more complex. The Institute is currently examining the options that are available. A new *Framework for Qualifications* will come into effect in April 2005. The Institute has also recently re-examined the Body of Professional Knowledge (see below) and is in the process of updating the Course Accreditation: Content checklist (See Appendix B) in line with this current thinking.

Every profession requires a knowledge base which describes the specialist subject knowledge that practitioners are expected to acquire for current and future professional practice. This is known as the Body of Professional Knowledge and has been defined by CILIP as a broad framework of areas of knowledge and practice which characterizes information and library work. It has some overlap with knowledge bases of other professions such as computing and records management. This is not a curriculum, which must provide more opportunities for specialisms, but a core schema (see CILIP Prof Dev C 076).

The Body of Professional Knowledge

Knowledge:
> The shared beliefs and understanding of the individual and society through both personal and collective memory.

Representation and organization:
> The conceptual structures such as classification schemes, taxonomies, ontology, and controlled vocabulary such as thesauri, providing a semantic map.

Documentation:
> The recording of knowledge as data structures in any medium. This includes the processes, institutions and infrastructures associated with publishing.
> Subject indexing represents and locates the content.

Communication:
> The means by which knowledge can be transmitted which enables information to be generated for the benefit of users. This necessitates an understanding of information need and user behaviour. Document content includes metadata construction, content analysis, representation, evaluation, abstracting, indexing and secondary processing such as digitization, structural tagging, mark-up and hypertext linkage.

Collections/Information Resources:
> The maintenance and curation involves information resources management including selection, acquisition and disposal, storage and display, cataloguing in accordance with international or local standards, classification, metadata construction, provision of physical and /or logical access to content, preservation and records management.

Information service provision:
> The provision of access to and exploitation of, such collections on behalf of specific user/client communities: information literacy, retrieval, data mining, information brokerage, websites and portal design and maintenance, and the general information architecture which provides the framework within which information resources are created, analyzed, evaluated, moderated and manipulated to meet the needs of users.

Application Environments

The ethical framework:
> encompasses professional standards and codes of practice; the proper relationship between information providers and their clients; acknowledgement of personal

responsibility for professional actions; conformity with the law, both generally and specifically; respect for human rights and lifestyles of clients and colleagues.

The legal dimension:
engages the information professional with the law relating to data protection, freedom of information, environmental information regulations, intellectual property; libel, obscenity and defamation; discrimination; right of access to information; breach of confidence, right of privacy and aspects of the law - such as employment, equal opportunities, contracts and licensing, health and safety, copyright and other intellectual property rights, and computer misuse.

Information policy:
concerns those provisions and regulations which determine or delimit access to information and information media, facilitate or prevent the dissemination of information, and relate to information law.

Information governance:
assures the enactment of policies, standards and strategies for the ethical use of information and adherence to relevant legislation at the level of the organization.

The communications perspective:
provides oversight of the dynamics of information flow in society, in and between regions, nations, governments and the broad span of information industries.

Generic and transferable skills

In order to apply specialist and domain-specific knowledge and skills the information professional may need a range of generic and transferable skills, including computer and information literacy, the ability to train and educate users in information skills and interpersonal skills; management skills, especially relating to human and financial resources; marketing ability; training and mentoring skills; and familiarity with research methods.

CILIP: The Fellowship of the Chartered Institute of Information Professionals

Five years after gaining admission to the register members can apply to become a Fellow. The Fellowship (FCLIP) is the highest level of professional qualification awarded by the Chartered Institute. It recognizes a high level of personal commitment and achievement and is seen as essential in order to establish the philosophy of continuous involvement and learning about the subject throughout a career.

CILIP: Para-professional staff and library assistants

There was pressure to provide opportunities for people working in the field with a wide range of experience, but without appropriate academic qualifications, to be admitted as members of the Institute. To address this issue, from 2005 Affiliated Members of CILIP may apply for Certification. The award will be recognized by the award of new post nominal letters, ACLIP, which holders will be entitled to use whilst they remain in membership.

Courses for Para-professional staff and library assistants

There are many courses in the UK for library assistants and para-professional staff. Many are part of the National Vocational Qualifications (NVQ) in Information and Library Services. This qualification is divided into levels 2-4 which are competence based and are available to anyone working in a library or information service, in either a paid or voluntary position. In the UK all such qualifications are the responsibility of a Sector Skills Council, which for libraries is Lifelong learning UK. This organization is also responsible for non-degree level courses in community based learning and development, further education, higher education, and work-based learning.

Maintenance of Professional Qualifications
The field of library and information science is rapidly changing and developing. There has been pressure on the Institute to re-validate the Chartership of those currently working as professionally qualified staff, to ensure that everyone practicing has an up to date qualification.

All of these qualifications remain valid only as longer as the individual remains in membership of CILIP. Although CILIP membership is large, about 22,000 members, many librarians and information workers practice without obtaining or maintaining membership and thus without formal professional qualifications.

Role of the Museums Libraries and Archives Council (MLA)
The MLA is the Government body which has the responsibility for the strategic development of museums, archives and libraries in the UK. In this capacity it has responsibility the work force within the sector. It has recently issued a **Workforce Development Strategy** for England which covers a range of activities designed to make the sector's workforce inclusive and representative; to enhance leadership and workforce skills; to improve learning opportunities in the workplace and to develop robust data about the size, make-up and skills contained in the 'knowledge' sector.

The actions which MLA will need to take in developing the workforce will include:

identifying the barriers preventing young people from black and minority ethnic backgrounds from entering the workforce and fund traineeships encouraging black and minority ethnic candidates to take up careers in museums, libraries and archives.

piloting a form of apprenticeship, providing new routes into the workforce.

developing a new leadership and management skills programme for museums and for archives, aligned with activities already in place for libraries as part of Framework for the Future, the government's ten-year strategy for public libraries.

MLA has committed £1.2 million to supporting workforce development during 2004/05. As part of the Strategy it will integrate workforce development actions into all of its strategic programmes and will require grant recipients to demonstrate good practice in workforce development.

The future and contemporary issues

Many challenges currently face the education and training of library and information science professional staff in the UK, as elsewhere in the world. The curriculum is ever expanding and developing. However there is still the need to teach the basic philosophies of the subject, ensuring that students and people currently working in the sector are equipped with the skills and knowledge to undertake the activities that will be expected of them in their library and information posts. They must also be equipped to address complex information problems, encompassing the skills needed in the rapidly expanding virtual world.

There is an impetus for change which comes from the developments in technology, increased user expectations and knowledge. There has always been a tension that arises between doing professional work and managing professionals and organizations to deliver effective and efficient library and information services.

If a profession is to remain relevant in the future it must build a picture of what is to come, be alive to the opportunities which may be offered and to the threats that may be faced. Horizon scanning is the key to survival and the emerging trends which come from the literature are:
- Information literacy teaching and training
- Working effectively with other professions in multi-disciplinary and cross sectoral teams
- Knowledge Management (explicit and tacit) rather than information management (documents and data)
- The advances in information technology and the need for high level technical ICT skills such as metadata, expert systems and even artificial intelligence
- Leadership is identified as a common issue which needs attention across all sectors

If the UK and Japan find all of the above to be very expensive then, to paraphrase Tom Peters, the American management guru:

If you think education and training is expensive, then try ignorance

Appendix A

Courses in library and information studies accredited by CILIP

Aberdeen
BA(Hons) Information Administration.
Part-time .

BA(Hons) Information & Library Studies.
Full-time .

Postgraduate Diploma/MSc Electronic Information Management.
Full-time, part-time & distance learning.

Postgraduate Diploma/MSc Information Analysis.
Full-time, part-time & distance learning.

Postgraduate Diploma/MSc Information & Library Studies. Chartered Members of CILIP
may be given direct entry to the MSc level upon completion of a research proposal.
Full-time, part-time & distance learning.

Postgraduate Diploma/MSc Information Management.
Part-time.

Aberystwyth
BSc Econ Information Management Major.
Full-time

BSc Econ Information Management Single Honours

MSc Econ / PG Dip Information & Library Studies.
Full-time & distance learning

MSc Econ / PG Dip Information Management.
Full-time.

MSc Econ / PG Dip Management of Libraries and Information Services.
Distance Learning.

MSc Econ / PG Dip Health Information Management. Distance learning.

MSc Econ Information Systems.
Full-time.

MSc Econ / PG Dip Records Management.
Full-time & distance learning

Birmingham
Postgraduate Diploma/MSc Information & Library Management. Full-time & part-time

Postgraduate Diploma/MSc Health Information Management. Full-time & part-time

Postgraduate Diploma/MSc Digital Asset Management. Full-time & part-time

Brighton
BA(Hons) Information & Library Studies.
Full-time & part-time.

MA Information Studies. Full-time & part-time.

MA Information Management. Post-experience course. Full-time & part-time

Bristol
 MSc Information & Library Management.
Full-time and Part time.

Edinburgh
MSc in Information Management.
Full-time & part-time

Glasgow
Postgraduate Diploma/MSc Information and Library Studies.

Leeds
BA(Hons) Information & Communication Management (sandwich mode or part time mode for students employed in the information sector. Subject to taking Information Services for Business Organisations)

Postgraduate Diploma / MSc Information Studies.

Liverpool
 BA(Hons) Business & Information (Subject to Placement being taken).

Postgraduate Diploma/MA Information and Library Management.
Full-time & part-time - Next accreditation July 2006.

London
Department of Information Science, The City University
Postgraduate Diploma/MSc Information Science. Full-time & part-time
Postgraduate Diploma/MSc Information Systems & Technology (Information Pathway).
Post-experience course. Full-time & part-time.

Postgraduate Diploma/MA/MSc Library & Information Studies. Full-time & part-time

MA/MSc in Information Management in the Cultural Sector. Full-time & part-time

School of Library, Archive, and Information Studies, University College.
Postgraduate Diploma/MA Library & Information Studies.
Full-time & part-time

MSc Information Science. Post-experience.
Full-time & part-time.

MA Electronic Communication & Publishing.
Full-time & part-time.

Department of Applied Social Sciences, London Metropolitan University

MA Information Services Management.
Full-time & part-time

Thames Valley University

MA Information Management (Library and Information Services Pathway). Full-time & part-time

Loughborough
 BA(Hons) Library & Information Management.
Full-time. Three and four year courses.

BSc(Hons) Information Management & Computing (subject to placement).
Full-time. Four year course.

BSc(Hons) Information Management & Business Studies (subject to placement).
Full-time. Four year course.

MA/MSc Information & Library Studies.
Full-time & part-time.

MSc Information Studies.
Full-time & part-time.

Manchester
BA(Hons) Information & Library Management.
Full-time & part-time.

BSc(Hons) Information Management.
Full-time & part-time

MA / PG Dip Library and Information Management.
Full-time & part-time.

MSc / PG Dip Information Management.
Full-time & part-time

Newcastle
 MA/MSc Library Management.
Full-time part-time & distance learning.

MSc Records Management.
Distance learning.

MA/MSc Information Studies. Post-experience course.
Distance learning.

MA/MSc International Information Studies. Post-experience course.
Distance learning.

MSc Web Information Management.
Distance learning

BSc(Hons) Information & Communication Management.
Full-time & part-time

Sheffield
BSc Information Management.
Full-time.

MA Librarianship.
Full-time.

MSc Information Management.
Full-time.

MA Library & Information Management. Post-experience course.

Full-time.

MSc Information Systems.
Full-time..

MSc Chemoinformatics.
Full-time.

MSc Health Informatics.
Full-time

Appendix B

Course Accreditation: Content Checklist 2003

A	Information Generation Communication and Utilization

		Core Module Codes	Optional Module Codes
A1	Principles of information science		
A2	Identification and analysis of information flows and resources		
A3	Principles of collection and data management		
A4	Knowledge organization and information retrieval		
A5	Information evaluation		
A6	Data restructuring and information presentation		

B	Information Management and Organizational Context

		Core Module Codes	Optional Module Codes
B1	Development & Provision of Information Services and Products		
B2	Strategic tactical and financial planning of information services		
B3	Information services marketing and business development		
B4	Quality issues and liability		
B5	Information service performance assessment		
B6	Information system / organization analysis		
B7	Analysis of User Education Needs		
B8	User Studies and Education		

C	Information Systems / Information and Communication Technologies

		Core Module Codes	Optional Module Codes
C1	Specification, identification, analysis, implementation, evaluation and utilization of manual and electronic systems and tools		

D Information Environment and Policy

		Core Module Codes	Optional Module Codes
D1	Legal and regulatory issues		
D2	Professional and ethical issues		
D3	International and transborder information transfer		
D4	Regional, national and international information policies and issues		

E Management and Transferable Skills

		Core Module Codes	Optional Module Codes
E1	Human resource management		
E2	Training and development		
E3	Financial and budgetary management		
E4	Statistical analysis		
E5	Research methods		
E6	Project management		
E7	Language skills		
E8	Communication/interpersonal skills		
E9	Practical experience		