Selling information science to scientists:

the role of careers guides in the promotion of library/information science

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How did you become interested in library/information work—by reading careers guides? Not if you're a science graduate, wagers the author. . .

CAN you remember how you first became interested in library/information work? Did you start by shelving books in the school library? Or did you get hooked on the historical biographies in the local library and yearn for the chance to read the new books before anyone else could lay their hands on them? Or did you, after three or four years' hard labour at university or polytechnic decide, following much advice from careers advisers and much reading of the piles of careers guides on offer, that the library/information science (LIS) profession was the one you most wanted to join?

If you are in that latter category, then you probably have a degree in either English, History or a foreign language.[1] Scientists will be very very few and far between,[1] which is unfortunate given the wide range of information jobs in which a scientific background is very useful if not essential. Doubtless you can think of many reasons why science graduates tend not to go in for LIS work. LIS work is perceived as poorly paid with quite a small employment market and poor job mobility. LIS courses are "soft", unlike the "hard" world of information technology, for example. Above all else, librarians are regarded as a shy, boring, uninteresting lot. (You should see the look on the faces of the students I teach when I get on down at the Polytechnic discos if you don't believe me!!) We all know a lot of it is not true, that money isn't (quite) everything. The problem is convincing starry-eyed science graduates that it's worth forgoing a few pounds for a very interesting and rewarding job. How do we get that message over?

At this point, enter the careers guide, for many students their only brief contact with the prospect of work within the LIS profession. How do these guides see LIS work and LIS courses? Do they attempt to give any reasonable description of LIS work, or do they merely serve to confuse the reader? How easy is it for a science graduate, looking for scientific jobs or science-based courses, to come across details about LIS work or courses?

This article is drawn from a much larger study of science graduate recruitment to LIS courses I made during 1986.[2] Two types of careers guide are examined: firstly, those produced by the independent commercial organizations—the Careers, Research and Advisory Centre (CRAC), New Opportunity Press and Kogan Page—and secondly, those produced by the Association of Graduate Careers Advisory Services (AGCAS) for university and polytechnic careers centres. For comparison, references will be made to the promotion of information technology conversion courses.

Three types of careers guide are produced by the independent publishers, but only those concerned with postgraduate courses give much coverage to library/information science. The three types are:
- general employment guides, such as *Graduate opportunities (GO)* and *Graduate employment and training (GET)*;
- occupation/subject related guides, such as the *Directory of opportunities in new technology (DONT)*;
- postgraduate course guides, such as the *Directory of opportunities for graduates 4: guide to postgraduate study (DOG4)* and the *Student's guide to postgraduate studies in the UK*. (A full list of careers guides covered is given in Appendix 1.)

General employment guides

OF the five guides available at Loughborough University Careers Centre, only two contained references to postgraduate courses. These were: *Graduate opportunities (GO)* and *Graduate employment and training (GET)*. Course coverage in both cases is limited to a list of addresses of institutions, plus advertisements placed by some academic institutions. As Figure 1 shows, this advertising is minimal. Furthermore, these advertisements, which only cover LIS courses with one-line title entries, are hidden away in small sections on postgraduate courses (*GET* gives 18 pages to all postgraduate courses in a publication 812 pages long; *GO* gives 63 out of 709) rather than being prominently displayed in the large employers' sections—for example, Plessey even have colour advertisements on the back covers of both guides. Statistics show that most graduates leave for employment after their first degree. In 1983–84 it was 45.4% of all graduates.[3] Graduates reading these general guides are thus more than likely to miss what few entries for LIS courses there are as they will be looking at employer entries, not those for courses.

Employer entries for LIS work in *GET* and *GO* confirm what Nick Moore has observed in his studies of the emerging markets,[4] that employers outside the traditional LIS job markets do not regard LIS qualifications as being essential for LIS work in their organizations. This is clearly shown by the results in Figure 2. *GET* lists only two employers who see a qualification in librarianship as being necessary for library work. In contrast, 20 employers offer information science work to science graduates with no LIS qualifications. In *GO* the situation, as far as LIS departments are concerned, seems even worse: LIS qualifications are not even listed in the index of required disciplines, i.e. not one employer requires recruits to have LIS qualifications! As will be observed again later, science graduates are being given the message by employers that LIS qualifications have little value.

The solitary exception to this trend of employing non-LIS graduates to do LIS work is the entry in each guide for the SCONUL (Standing Conference of National and University Libraries) graduate trainee scheme. As this scheme is designed specifically to encourage graduates to join the LIS profession, it naturally asks for graduates with no formal LIS qualifications. Unfortunately, these advertisements are not targeted at science graduates, other than to state that: "Candidates with first or upper second are more likely to be short listed, especially if offering subjects other than history or English", and refer to library work experience, not information work. Thus one would not expect these advertisements to have much impact on the non-committed science graduate. Neither guide would, therefore, appear to offer much positive help to LIS departments endeavouring to recruit science graduates to their courses.

Figure 1   Advertisements for postgraduate library/information science courses in commercial careers guides*

Guide title	Lib	LIS	IS	IM	IT
DOG4	1	1	0	0	4
DONT	0	0	0	1	2
GET	0	0	0	0	1
GO	0	3	2	1	8
Student's	1	0	2	1	3
Total	2	4	4	3	18

Key: Lib = MA Librarianship or Librarianship and Arts Administration; LIS = MA/Dip Library and Information Studies; IS = MSc/Dip Information Science; IM = MSc Information Management; IT = MSc/Dip Information Technology.
Guide title: DOG4: *guide to postgraduate study*, 1985; DONT: *directory of opportunities in new technology*, 1985; GET 1986: *2000 employers*, 1985; GO 1986: *graduate opportunities*, 1985; Student's guide to graduate study in the UK, 1986, 1985.
(* Numbers refer to number of entries for particular courses, rather than for physically separate advertisements.)

Figure 2 Scientific organizations recruitment of library/information science workers

		Type of work		
Careers guide		IS	Lib	Total
GET:	LIS qualifications required	0	2	2
	LIS qualifications not required	20	9	29
GO:	LIS qualifications required[1]	—	—	—
	LIS qualifications not required	5	5	10
ROGET:	LIS qualifications required[2]	—	2	2
	LIS qualifications not required	2	1	3

Key: LIS = Library/information science; IS = Information science work; Lib = Library work.
Notes: 1 LIS qualifications not listed in discipline index.
        2 IS qualifications not listed in discipline index.
NB: Survey only covers science organizations advertising for employees.

Occupation and subject related guides

MOST of these guides cover employers only. However, one guide which does give coverage to courses is the *Directory of opportunities in new technology (DONT)*. Many LIS professionals like to see themselves as being involved in the "information business" which they see as being at the forefront of the new technology future. Unfortunately, *DONT* gives no coverage to LIS work or courses (Figure 1), whilst giving extensive coverage to subjects such as computing, information systems design, nuclear physics, robotics and—of course—information technology. (That said, course information is very limited as it consists of course titles under the institution's heading, so even if LIS courses were covered in this guide, given the style of entry used, they would leave the non-committed and poorly informed graduate none the wiser.)

Postgraduate courses guides

TWO guides were available for examination, *Directory of opportunities for graduates 4: guide to postgraduate study (DOG4)* and *The student's guide to graduate studies in the UK 1986*. These ought to give detail on course content, but fail to do so. *DOG4* gives a long list of uninformative course titles, classifying LIS courses under social science—hardly a place where science graduates are likely to look—and including subjects such as information engineering (social science!!) and management of information systems, thus, one would assume, causing maximum confusion amongst poorly informed graduates! Again, advertisements can be used to provide more information about LIS courses, but—presumably because such advertisements cost money—few are visible. What advertisements there are give no more information than the course title and thus serve no useful purpose.

The students' guide is equally uninformative, again listing titles only. The only courses for which detailed information is given are the MLib and Diploma offered at the College of Librarianship Wales (CLW), which gives a good descriptive paragraph listing topics such as online searching, automation in libraries, information systems analysis and personnel management in libraries. However, this detail occurs in a separate section on LIS courses, not in a position where it might be read by science graduates who will probably only look at science-based courses.

To sum up, all the guides listed do little to inform the non-committed science graduate about LIS work, or LIS courses. The general guides provide little course information and, moreover, they also suggest to science graduates that LIS qualifications are of little value to many employers recruiting for scientific LIS work. By implication, therefore, LIS courses are not worth taking. Those guides which do cover LIS courses simply provide long lists of course titles—often buried under social science, and poorly indexed—which tell the reader nothing about the course content. Apart from the information on the courses at CLW, most advertisements placed by institutions teaching LIS courses consist of one-line title entries—see Figure 3. Such advertisements are bound to confuse, given the even larger number of advertisements for other "information" courses (Figure 4). Unless LIS departments are prepared to follow CLW's example, independent careers guides will continue to be of little real use as a means for promoting the true nature and content of LIS courses to graduates.

AGCAS guides

TURNING now to the guides produced for the universities and polytechnics, AGCAS produce a guide to employers— *Register of graduate employment and training (ROGET)*—and a series of careers information booklets such as *Opportunities for biologists*. Although ROGET is concerned with employers rather than courses, it does offer the reader the following descriptions of LIS work:

"*Librarian*
Librarians are typically responsible for:
– Classification, cataloguing and displaying materials to ensure effective storage and ready access to reader.
– Reference service to readers from simple questions of fact to detailed research requiring specialist knowledge.
– Providing acquisitions lists, bibliographies, abstracts, literature surveys, organizing displays and exhibitions, care of equipment, general organization of library and staff.
– Keeping up to date with new techniques in library work, mechanization, computerized information retrieval, etc.

"*Information science*
Work similar to that of a librarian, but information scientists often have specialized information handling training and may be part of a research team. Particularly responsible for:
– Finding, evaluating and providing scientific and technical information, indexing, classifying, storing and retrieving information.
– Scanning scientific and technical literature, preparing bibliographies, reports, surveys, supplying information to research teams, abstracting, writing technical reports.
– Translating scientific and technical writing, editing technical papers and abstracts, researching problems in information science."[5]

This confirms what Margaret Slater found in her 1985 study on careers guidance,[6] that careers advisers are well informed as to the nature and content of LIS work. Fortunately for the LIS profession, this is reflected in the content of the AGCAS careers information booklets. However, what *ROGET* contains is, like *GET* and *GO*, a series of employer entries. Four are targeted at LIS graduates and, again, there are entries which offer LIS work without LIS qualifications (Figure 2). There is an entry for the SCONUL scheme, but, as was observed above, this is of little appeal to science

Figure 3 Library/information science departments advertising in commercial careers guides

Institution	Course title	No of adverts
City University	MSc Information Science	2
	Dip Information Science	1
	MA Librarianship and Arts Administration	1
Ealing College of Higher Education	Dip Library and Information Studies	1
Leeds Polytechnic	MA Librarianship	1
Robert Gordon's Institute of Technology	Dip Library and Information Studies	2
University College London	MSc Information Science	1
	MA Library and Information Studies	1
5 Institutions	8 courses	10 adverts

(All advertisements covered are one-line entries in large advertisements for the parent institution, except for Ealing—see text.)

"need for the LIS profession to do more to convince employers that LIS graduates have valuable skills to contribute"

graduates. Much more attractive for those concerned with LIS recruitment are the AGCAS guides targeted specifically at science graduates from particular subject areas.

Figure 5 shows the coverage given to the LIS field by some of these guides. Coverage varies: for example, *Opportunities for geologists*, under the heading "Museums and libraries", gives little detail other than the need for postgraduate qualifications. It is a pity that this section does not refer to the wider applications of LIS work. That said, the copy currently available dates from 1983. Perhaps the newer version will give a more accurate picture of the scope and variety of LIS work.

Much better is the coverage of LIS work in *Opportunities for biologists*. Under the heading "Information and library work" the guide refers to information work as involving the use of computerized information retrieval systems and literature searching, to the need for an MSc in information science and the advantages scientists may have in the traditional LIS job market, because of their "rarity value". Perhaps even more pleasing is the reference to indexing and abstracting work for the Commonwealth Agricultural Bureaux and technical publishing with Derwent Publications Ltd. Both areas of work are what Moore would see as the emerging market.[4] However, even in these guides, the promotional message is marred by the statement that "Graduates without further training are acceptable" for the emerging market jobs. Recruitment to LIS courses relies on the qualifications

obtained having some value amongst employers, otherwise students will not bother with them. Thus, there would appear to be a need for the LIS profession to do more to convince employers that LIS graduates have valuable skills to contribute. Doubtless, much of the problem is due to ignorance amongst employers as to the sort of training offered by information science courses, so LIS promotion needs to be aimed not only at graduates, but at employers as well.

To make matters worse, some guides omit information work altogether. As Figure 5 shows, the guides for civil engineers, mechanical and production engineers, and psychologists ignore LIS work totally. *Opportunities for mathematicians* gives a vague reference to information work under the heading "Work requiring a general scientific background". Those guides which do cover LIS work are, one hopes, a very useful aid to science graduate recruitment, given that they are targeted specifically at them. It is to be hoped that, eventually, all guides will include details of information work, so that no science graduate reading such a guide is left uninformed as to the nature and content of LIS work and LIS courses.

Conclusion

IN conclusion, it can be seen that there is a wide variation in the coverage given to LIS between the independent commercial guides and those produced by AGCAS. The independent commercial guides give little information other than the course titles. LIS departments could possibly pay for additional information to be included as advertisements—indeed

the College of Librarianship Wales seems to be doing so already. However, these guides do not target LIS information to any particular group of graduates, so could make little impact if LIS departments were actively trying to recruit science graduates.

In contrast, LIS work is well covered in those AGCAS guides which choose to mention it. All the guides should be developed to include sections on LIS work, so that all science disciplines are targeted for LIS promotion.

However, problems still remain; as has been seen many employers do not specify the need for LIS qualifications—indeed, careers guides often give the same message. This does little to help LIS course recruitment. LIS departments could target employers with LIS course information. Better still, the LIS professional associations could themselves produce promotional guides and give careers advice, and could tell employers about the advantages of employing LIS graduates. Thus, careers advice should be but one part of a campaign to create a much greater level of public awareness of the role of LIS workers and the value of the information business to society as a whole. The LIS professional organizations—the Library Association, the Institute of Information Scientists and Aslib—can do much to bolster the professional image and thus increase public awareness of the work we do. However, any national promotional campaign would depend most of all upon grassroots support from all the libraries and information units throughout the country. In the same way that every late train, surly porter or dirty station prevents British Rail from "getting there", every badly organized library, unhelpful librarian or unanswered inquiry would harm any newly polished professional image. Marketing theory tells us that promotion means offering the consumer a product that he or she considers worth taking trouble to acquire. Promoting LIS work as a career for the science graduate is thus but one small part of promoting LIS work in the whole of society.

Figure 4 Postgraduate "information" course titles advertised in commercial careers guides

Qualifications	Course title	No of adverts
MSc Dip	Business Information Technology Systems	2
MSc	Computer Science and Information Technology	1
MSc	Foundations of Advanced Information Technology	1
MSc	Information Engineering	2
MSc	Information in Medicine	1
MSc	Information Management	3
MSc Dip	Information Science	4
MSc Dip	Information Systems	2
MSc Dip	Information Systems Technology	3
MSc Dip	Information Technology	18
MSc Dip	Information Technology for Management	2
MSc	Information Technology for Manufacturers	2
MSc	Information Technology (Medical Physics)	1
MSc	Information Technology Systems	3
MA Dip	Library and Information Studies	4
MA	Librarianship	1
MA	Librarianship and Arts Administration	1
Total	17 course titles	51

(Advertisements from course guides listed in Figure 1.)

Notes: 1 Duplicate advertisements count once for each time they appear, whether in the same guide or more than one guide.

2 List covers advertisements only, not formal lists of courses.

References

1 Armstrong, C. J. *A study of students on first degree or postgraduate diploma courses in schools of library and information science.* Aberystwyth: College of Librarianship Wales, 1983. (BLRD report no 5783.)

2 Edwards, J. A. *The recruitment of graduate science students to library/information science courses: a marketing approach.* Unpublished thesis, 1986.

3 Department of Education and Science. *Education statistics for the United Kingdom: 1985 edition.* HMSO, 1985.

4 Moore, N. *The library and information workforce: the emerging markets for librarians and information workers* (Pts 1–2). Acumen, 1985.

5 Association of Graduate Careers Advisory Services. *ROGET 86: register of graduate employment and training.* Manchester: Central Services Unit, 1985.

6 Slater, M. *Careers guidance and library/information work.* Aslib, 1985.

Appendix 1: Careers guides surveyed

1 Association of Graduate Careers Advisory Services. *Opportunities for graduates in any subject*. Manchester: Central Services Unit, 1985. Other titles with dates: *Opportunities for biologists*, 1985; *biochemists*, 1986; *chemical engineers*, 1986; *chemists*, 1985; *geologists*, 1983; *mathematicians*, 1985; *mechanical and production engineers*, 1984; *metallurgist and material scientists*, 1985; *physicists*, 1986; and *psychologists*, 1986.

2 Association of Graduate Careers Advisory Service. *ROGET 86: register of graduate employment and training*. Manchester: Central Services Unit, 1985.

3 Bridgewater, A. (ed). *GET 1986*. Cambridge: Hobsons, 1985.

4 Careers Research and Advisory Centre. *The students' guide to graduate studies in the UK, 1986*. Cambridge: Hobsons, 1985.

5 DONT. *Directory of opportunities in new technology*. London: Kogan Page, 1985.

6 Nicholson, A. (ed). *DOG4: guide to postgraduate study*. 2nd edn. New Opportunity Press, 1985.

7 Pierce, E. (ed). *GO 1986: graduate opportunities*. 15th edn. New Opportunities Press, 1985.

Figure 5 Coverage of library/information science in careers information booklets

Booklet title	Year	I	L	TW	Pat	Pub	M
Opportunities for graduates in any subject	1985	*	*				*
Opportunities for biologists	1985	*	*				
biochemists	1986	*	*	*		*	
chemical engineers	1986	*					
chemists	1985	*	*	*			
civil engineers	1985						
geologists	1983	*					*
mathematicians	1985						
mechanical and production engineers	1984						
metallurgist and material scientists	1985	*		*	*		
physicists	1986	*	*	*			
psychologists	1986						
12 guides		8	5	4	1	1	2

Key: I = Information work/information science; L = Library work/libraries; TW = Technical writing; Pat = Patent work; Pub = Publishing; M = Museum work/museums.
(Areas of work covered reflect the groupings used in each careers guide, e.g. "Library and information work, technical writing, and publishing".)

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Developments in undergraduate studies:
a new degree at the Polytechnic of North London
KEVIN McGARRY

THIS decade has been characterized by the growth and differentiation of those occupations that deal with information transfer and with the ways in which human beings communicate with each other. Along a wide spectrum of activity there are occupational groups dealing with the transfer of information from point of generation to point of use, applying their specialist skills to facilitate the intermediate processes of collecting, storing, organizing, and presenting recorded thought. *Futures*[1] did its best to make this position clear, and curriculum planners ignore this message at their peril. The degree, which is described in outline, is a partial response to this changing information environment; it is also influenced by the shared concerns of people working in different interdependent subject fields. The scheme represents an interdisciplinary approach by the Departments of Law, Sociology, Applied Social Studies—and Librarianship and Information Studies. The degree awarded is to be a BSc honours degree in Applied Social Studies and is composed of five "pathways". The intent of the scheme is to adopt an interdisciplinary approach to the public issues in contemporary British society. Librarianship, in its accepted curriculum definition, is part of the Information and communication studies pathway, thus giving the study of librarianship a wider angle of vision than it had in its more restricted forms. The result will be a BSc in Applied Social Studies for librarians and information professionals. (Other pathways are: Policy studies; Social research; Health studies; and Social work.)

Information and communication

THIS pathway is designed to develop theoretical insights and practical competence in three broadly interrelated fields: information technology; librarianship; and mass communications. The pathway offers various "clusters" of modules which lead to an understanding of the impact of contemporary information and communication systems on society and on the information professions, reinforced by practical competencies in the organization and presentation of information and in the design and maintenance of library and information systems. The more specific objectives are:
● to promote an appreciation of the contribution of the social sciences to an understanding of the role of information and communication systems in contemporary British society;
● to examine the technological, economic, legal, political and social contexts of the production, distribution and utilization of documents and information;
● to analyse the growth and development of the information and communications industry and its related professions;
● to equip students with the technical skills necessary for understanding programming, handling and analysing data appropriate to the latest developments in the design of information systems;
● to inculcate an informed sympathy with the plight of the disadvantaged groups in society and an awareness of the role of library and information services in the betterment of the human condition; and
● to enable students with a vocational commitment to librarianship and information work to undertake studies leading to professional recognition as librarians, information scientists and communication workers.

How the course is organized

THE basic building block of the course is the "unit of study". All units are of equal length—15 weeks or one semester. There are two semesters in the academic year each separated by one week: Semester A runs from September/October to mid-February; and Semester B runs from mid-February to June/July.

"an interdisciplinary approach to the public issues in contemporary British society"