
The impact of e-lib: the emerging paradoxes

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Introduction

An earlier edition of LIRN (1) outlined the aims and progress to date of the IMPEL Project (IMPEL1) based at the University of Northumbria at Newcastle (UNN). The study which ran from 1993 to 1995 focused on the impact of the electronic environment on qualified Library & Information Services (LIS) staff in the Higher Education (HE) sector (2,3). Successful completion of case studies in six UK university LIS for the IMPEL Project was followed by an expanded study funded by the Joint Information Systems Committee (JISC) as a Supporting Study under the e-lib programme. This project, IMPEL2: Monitoring Organisational and Cultural Change, adopts a similar qualitative case study approach, retaining at its core the human aspects of electronic library development in a rapidly changing educational and technological environment.

IMPEL2 has five complementary strands, separate but linked studies of:

- Library and related support staff (including a longitudinal study of IMPEL1) sites.
- Academic staff users of electronic information systems and sources.
- Implications for LIS of Resource Based Learning (RBL) policies.
- Training and development for LIS staff in the electronic environment.
- The evaluation of e-lib's Netskills and EduLib (Training & Awareness) projects.

Between July 1996 and May 1997, 24 case studies have been conducted in 24 HE institutions ranging from HE Colleges, to large split site ex-polytechnics, to older established civic

universities to one whose LIS is a member of CURL (Consortium of University Research Libraries). Over 300 in-depth interviews have been held with LIS staff at all grades, computer services staff, academic staff, educational development and professional development staff and senior institutional managers. Questionnaire surveys and scrutiny of documentation have also been conducted. This 'overview' approach is untypical of most e-lib projects which have defined end-products such as in the Access to Networked Resources, Electronic Journals and Document Delivery areas. IMPEL2 is in a position to sound out the views, concerns and perceptions of the people working at all levels in LIS.

Through this process, the complexity of the rapidly developing technological and educational environment has become evident. Certain aspects of the current situation in HE LIS could be described as paradoxical. This point is illustrated through five paradoxes which are supported by IMPEL2 data. A fitting dictionary definition of a 'paradox' is supplied by Collins (4): 'A person or thing exhibiting apparently contradictory characteristics.'

First Paradox: Access

A user of electronic information systems and sources may be forgiven for being tantalised by their power, as confirmed by a Lecturer in Physiology:

'The availability of IT has made keeping in touch with developments in my research areas simple, effective and efficient.'

The electronic revolution promised access to databases, local and remote OPACs, electronic journals and document delivery, digitised versions of ancient texts. The Internet offers text, graphics and sound from desktop PCs both in the workplace and at home. The effect gives choice and freedom to the user, is empowering and democratising. Indeed, e-lib must be credited in having already in its short life developed both content and technology for the electronic library. The paradox can be found in the reliability, cost

and complexity of the systems. The user is faced with networks and telecommunications systems which lack robustness and which must be used very early in the day to avoid excessive traffic and slow responses. S/he must become adept at identifying and eliminating viruses whose impact may be inconvenient but may also be devastatingly destructive. The hardware costs, which initially seem manageable, escalate alarmingly when replacement and upgrading are taken into account. Passwords and identification for the time being remain a confusing barrier. The publishing industry and complexities of copyright law retain their stranglehold on electronic access to information; hard copy purchases of journals, for instance, are still often tied in with their electronic versions. The user is bombarded with too much material and may lack experience in the difficult task of sorting the wheat from the chaff. Consider the following verbatim comments:

'Access is critical. The global assumption that access is equal for all users is unrealistic.'
(Lecturer in Environmental Sciences)

'Systems are only effective when universally available to staff. Some staff have outmoded machines without online facilities and a drastically reduced budget.'
(Lecturer in Education)

'It's the same with CD-ROM searches. They're [students] ecstatic sometimes - they've got all these things they want. They think we hold all the journals that are attached to the index. So you tell them, 'just a minute, you've got to be quite selective - you're only allowed 15...or go to you public library and put pressure on.'
(Information Specialist)

'Electronic format doesn't cure problems of data quality. One can look up a well-known article on BIDS, ISI, say, and find 12 versions of 'the same' reference - 11 of which are incorrect.'
(Lecturer in Management Science)

Such experience can have a hardening effect on users' attitudes:

'Electronic information systems are very intimidating. Hitherto they are nothing more than a serious waste of time.'
(Lecturer in Law)

'Computers are the single worst invention known to man. They are time-wasting when they go wrong.'
(Lecturer in Manufacturing)

Second Paradox: IT and Information Skills

Take the case of the earnest student who is lulled into a sense of confidence that the new learning environment will enable him or her to make best use of available systems and will give support when needed. S/he may base this assumption on snippets from the recent Dearing Report (5):

'We recommend that all higher education institutions in the UK should have in place overarching communications and information strategies by 1999/2000'
(Recommendation 41)

and note with pleasure that 'use of information technology' is ranked alongside intended outcomes of teaching programmes such as, 'the knowledge and understanding that a student will be expected to have upon completion, cognitive skills such as understanding of methodologies or ability in critical analysis and subject specific skills, such as laboratory skills.' Indeed Dearing places use of IT alongside other key skills - 'communication, numeracy and learning how to learn.'

However, s/he may find it paradoxical that despite the growing demand from fellow students and tutors, LIS staff often appear to lack the necessary teaching skills and because of budget cuts, are thin on the ground. Provision of basic IT skills (eg e-mail, keyboard use, saving, printing), the essential grounding for information searching and handling, is often inadequate. Training in these skills and in information skills tend to be offered at the wrong time, too early for project work and dissertations; these skills are impossible to deliver effectively to large groups. Shortage of human resources and accommodation mean that LIS staff often need to teach using inappropriate methods at inappropriate times. A fundamental problem was summed up by a Lecturer in Economics:

'The key problem is that universities are willing to pay for hardware but unwilling to pay the cost of training and backup.'

Third Paradox: The Organisation

To those working in LIS, it appears self-evident that LIS (and computing services) are playing an increasingly central role in academic establishments. This results from growing trends towards student-centred approaches to learning, the higher profile afforded to research in many institutions and the pervasiveness of IT. The LIS is the obvious crossing point where skills, IT and information come together. The Follett Report (6) backs up this conclusion:

'[Libraries] play, and will continue to play, a central part in meeting the information needs of students, teachers and researchers in higher education.'

However in reality, historical factors and organisational structures within HE institutions have tended to inhibit the full potential of LIS. Spending power and political influence almost always is retained at school or faculty level so that difficulty in achieving cohesive centralised strategies for IT and information provision is increased. This tension between the centre and the academic departments could potentially slow down the implementation of developments stemming from e-lib, such as Access to Networked Resources, Electronic Short Loans and On-demand Publishing. The traditional image of LIS as reactive and service-oriented rather than strongly creative and political units still remains in the minds of many senior institutional managers and academics.

Where such views persist, policies for teaching, learning, research and IT are more likely to be made without full consideration or consultation with the LIS. Added to that, as more services are available at the desktop, users may begin to feel that, far from being central to their work, the LIS may simply be by-passed:

Scientific communication can take place in networks outside the library, and the increased offerings of databases can make the library a small and marginal part of the whole network.'
(7)

Fourth Paradox: Collaboration

The convergence of IT, telecommunications, networking technologies and information associated with the electronic library is accompanied by increased pressures for hitherto disparate groups to collaborate. Collaborations are occurring at many levels: between institutions, between LIS, between LIS and other central and academic departments, between groups of staff within LIS, between LIS staff and users, between self-supporting groups of users and between nations as they work together on developmental projects. A new ethos of resource pooling and joint working is developing.

There is a paradox, however, in that the recent element of competition and entrepreneurialism which has been encouraged in HE by central government, is antithetical to the collaborative culture. At the individual or group level such a culture tends to be counterbalanced by differing agendas and extreme self-interest. Within towns and regions the expansion and growing research profiles of 'new' universities may be treated with suspicion by older, established institutions. Where student numbers are large and resources limited, LIS tend to be unwilling to admit students from neighbouring institutions. There are well-documented and profound cultural differences between computing and LIS staff (8) which are not easily overcome by asking them to work in partnership. The following statement made by a Head of Computer Services illustrates how deeply polarised these groups may be:

'There's a strongly-held view, amongst the heads of computer centres around the country that the librarian role is over-rated in the structure of organisations - it's only there really because of Caxton and his press - and that IT is very complex and powerful and librarians have too much time on their hands. That is a generally-held view.'

In a climate of competition and academic pressure, individuals do not always embrace the spirit of sharing:

'There is a temptation not to tell colleagues too much (eg about BPI on Disk) so as not to crowd

out their availability.'
(Lecturer in Public Services Management)

An important benefit of e-lib is that at the project level it has brought disparate groups together - LIS, Computing Services, Educational Development Services, old and new, small and large institutions. It remains to be seen how this collaborative spirit can be carried forward beyond e-lib.

Fifth Paradox: Professional Identity

As the end of the 20th Century approaches, this is a most exciting time for LIS staff when the developing hybrid library demands the skills of professional librarians and offers them the opportunity to enhance those skills, expand their role and scope of activity. Their working day is likely to involve creating subject-based Web Pages, teaching electronically-based information skills, developing workbooks and teaching packs, liaising with departments and taking management decisions. The LIS professional potentially has a strong strategic direction, particularly in relation to student-centred learning. The subject specialist has a key role to play in today's education:

'I think there is always going to be a need for an information specialist role. It might not always be called that...but I think there is always going to be a need for a professional role like that just to make the link between the departments and the workings of the library, if nothing else.'
(Information Specialist)

Evidence suggests, however, that this view is increasingly untenable. The sacrosanct status of the 'subject specialist' is under threat. With budget restrictions causing reductions in staff numbers, the introduction of team structures and the heavily electronic bias creeping into working practice, multi-skilled generalists are finding favour over specialists. More responsibility is being devolved to junior levels and the skilled 'paraprofessional', who may be qualified in fields other than librarianship, gains in importance. Job labels themselves are changing so that the 'subject librarian' is increasingly becoming known as the 'information specialist' or 'liaison librarian'. Senior management are seeking to recruit 'hybrid'

staff, people with skills in information, computing, teaching and management. One University Librarian raised an interesting question:

'What's going to be interesting...is when we next advertise one of these jobs, what happens when we get somebody applying who has got a qualification in, say, information management, which isn't the traditional librarianship and isn't the traditional computing, but is actually in the middle of that?'

Conclusion

This paper attempts to look at different interpretations of reality. The idealised perspective from one side of the paradox is contrasted with opposing negative views. The major issue facing LIS staff is how they can influence the emerging reality. LIS staff do wish to be central to HE by supplying quality information services which maximise both their skills and the available technology. They would want their services to be acknowledged and valued by information-skilled users, whether they be academic staff or students. e-lib could be seen to have supported librarians in this process in two important ways. Firstly, the various electronic services developed by e-lib which have speeded up the process in the transition to electronic delivery; indeed, one of the chief benefits of the e-lib programme has been the learning which has come out of it, resulting in a firmer knowledge base on which to develop effective electronic LIS services. Secondly, there have been many LIS staff involved at a practical level in e-lib projects. They have acquired a valuable range of skills which can be transferred to LIS after e-lib. These skills include evaluation, project management, effective collaboration and networking.

It is vital that e-lib gives careful consideration to the effective dissemination of these experiences. The wider library community will benefit from e-lib if an appropriate dissemination strategy ensures that the lessons learned benefit the sector well into the next century.

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