Research reports

The IMPEL Project at the University of Northumbria at Newcastle: background, methodology and progress

CATHERINE EDWARDS
Department of Information and Library Management
University of Northumbria at Newcastle

PROFESSOR JOAN M DAY
Head of Department of Information and Library Management
University of Northumbria at Newcastle

GRAHAM WALTON
Faculty Librarian, Information Services Department
University of Northumbria at Newcastle

Introduction

The IMPEL Project (IMpact on People of Electronic Libraries) is now into its second year. The project's focus, succinctly expressed by its title, is on the human implications of increased provision of information by electronic means, all too easily neglected at a time when technology is developing faster than it can easily be assimilated. The project grew out of it's leaders' personal and professional interests, those of a Head of Department of Information and Library Management and of a practising academic librarian; it is strengthened by such collaboration. A Steering Group of seven, each with acknowledged special expertise, meets regularly and provides guidance and support; the value of their input cannot be underestimated.

This initial stage of IMPEL concentrates on qualified librarians in the UK higher education sector, laying the groundwork for possible future study of other groups and related aspects of the phenomenon commonly referred to as the 'electronic library'.

Background

The background to the project has been documented in a lengthy review of the literature [1]. Chief among background factors is the changing teaching and learning environment of UK higher education, witnessed by:

- steadily increasing student numbers, unmatched by increases in unit of resource;

- pressures for universities to widen access to higher education to non-conventional or untypically-qualified students;

- steady rise in the volume and cost of books and journals;

- slow but steady increase in the use of computer-based learning materials (CBL), under pinned by the work of the Computers in Teaching Initiative (CTI) and Information Technology Teaching Initiative (ITTI);

- increasing, but still variable, levels of computer literacy among students and academic staff.

The timely publication of the Joint Funding Councils' Libraries Review Group Report (Follett Report)[2] coinciding with the start of the IMPEL Project, recognized the increasingly central role of libraries in the education process. The Report also recognized the potential of the convergence of computing and communication technologies in enabling libraries to respond actively to that role. University campuses are increasingly wired up to offer distributed access to computing facilities from the library catalogue to online databases, to standalone and networked CD-ROM databases, to the Joint Academic Network (JANET) in the UK, and to international information sources on the Internet.

In its recognition of the potential of the shift towards information technology and information access as "essential to create the effective library service of the future," the Report addressed in its recommendations the impact on library staff, and the Group commissioned a consultant's report, the Fielden Report[3] to investigate human resource management issues currently facing higher academic libraries.

It is against this background of educational and technological change, that the IMPEL Project considers the organizational, social and even cultural changes affecting academic librarians as they strive to adapt and move forward to a different environment.

Aims

The study therefore investigates the practical and personal impacts of change. In particular:

- changes in the nature, boundaries and structure of librarians' work, particularly in relation to learner support;

- the role of different groups, such as subject specialists;

- relations with colleagues, users and other departments, especially academic departments, within the institution;

- the extent and consequences of closer working relations with computer services departments;

- decision-making processes and librarians' input to them;

- constraints and problems met in delivering an increasingly electronic service;

- effects of associated changes in management and staffing structures;

- the training question- the knowledge, skills and attributes required by librarians - and how that question is being addressed;

- the role of Schools of Library and Information Studies in an electronic age;

- librarians' attitudes, grasp of the issues and vision of their future.

The researchers see little value in mere description of the findings. The aim of the study is to produce outputs which will be of value to the sector, outputs relating to organizational and social issues, training issues, strategy issues. Distilled to its essence, the project aims to draw out the key factors in managing information provision in a networked campus environment.

Methodology

An early meeting of the Steering Group clarified the approach by advising the research team to concentrate its efforts at the more advanced end of the electronic library development spectrum. Following a delightfully simple technique suggested by Dr Susan Procter of the Institute of Health Sciences at UNN, a one-page questionnaire was sent out to 98 chief librarians in the UK higher academic sector, of which 83% were completed and returned. The questionnaire asked five questions based on key factors in the development of an electronically-based information service, identified in the literature. These related to:

- a written IT strategy;

- the extent of convergence with computing services;

- training for LIS staff to operate in an electronic environment;

- innovative use of electronic networks for delivering information;

- student access to the JANET network.

Respondents were given space for any comments on the impact of electronic networks on LIS staff and also asked if they would be willing to participate further in the study.

The answers offered were scored as to whether they fully, partially or did not at all meet the pre-determined criteria, so that a simple calculation could be made. Eleven institutions out of these which replied fully met all the criteria. This figure was narrowed to six by taking into account other elements such as the age, type and size of institution and any additional insightful comments offered. The six institutions are the universities of Aston, Cardiff, Central Lancashire, Cranfield, Stirling and Ulster, which provide a good geographical spread, as well as institutional variety. The values, of course, are not absolute and the selection in no way implies that these six institutions are in some way superior to the others. Indeed, in such a fast-changing environment, the same selection procedure conducted six months later would doubtless have produced a different result. However, the criteria upon which the questionnaire was based were felt to be fundamental ones and initial visits to the sites by the researcher showed all to be well advanced towards an electronically-based library and information service.

The research team were extremely pleased that the library directors from all six selected institutions agreed to take part in the study. This response tended to confirm the project's timeliness and relevance. Over the summer of 1994 the researcher paid an initial visit to each site, a useful exercise for both parties, allowing exchange of questions and information and laying the groundwork for the forthcoming case studies.

A pilot study was conducted in the Information Services Department of UNN, testing a case study framework based on the desired outcomes described earlier, it was important that the outcomes or end-products should control the approach. As well as enabling the researcher to build and test lines of questioning, the pilot study served to increase self-confidence and flexibility of approach.

The six case studies are taking place between September 1994 and February 1995. Each is based on three main sources of information - semi-structured interviews providing qualitative data, questionnaires providing quantitative data and additional information mostly in the form of documentation. Semi-structured interviews, up to two hours in length, were held with a range of personnel, particularly qualified librarians at different levels but also with information service directors, computing unit directors, institutional managers and library assistants where their viewpoint enlightened the main focus. The questions were mostly open questions designed to reveal the social and organizational implications of the increasingly electronic environment for each interviewee. Department directors and institutional managers were questioned in depth on strategic, managerial and institutional issues. Themes and topics defined in the case study framework were covered, although interesting diversions from the format were not discouraged.

Three brief questionnaires, based on Lickert scales, were introduced during interviews. These provide: quantitative data to balance the large amount of qualitative data; possible talking points; and a breathing space for interviewer and interviewee.

> The third main and very fertile source of information, documentation in the form of institutional plans, information strategies, training strategies, mission statements, staffing structure diagrams, for instance, also underpins the qualitative data gathered. Documentation contains essential clues about an institution and how it operates, sometimes as much in what it omits as in what it includes.

> A forthcoming workshop for IMPEL participants is intended to encourage discussion and exchange of experience, yielding yet more information. It will also release the story from its chronological reins. IMPEL's relevance is for the future not for the past.

Progress

At the time of writing, four out of the six case studies had been completed. The prospect and problems of data analysis loom large, with between 70 and 80 interview transcripts, matching piles of documentation and completed questionnaires to be studied. The proposed model for the data analysis is rooted in the desired outcomes of the project, which dictated the themes and topics of the case study framework.

Data from each site is gathered then keyworded and made attributable; it is broken up and fed down pyramid-style to illustrate or describe one or more themes or topics (at this stage embryonic chapter headings). The strands, trends, observations and facts identified within the resulting six case reports will then form the basis of the final outcomes of the project. Use of specialized software

packages to assist in the management and analysis of both qualitative and quantitative data is under consideration.

It would be difficult, if not unfair, while still in the collecting phase, to present detailed findings. However, it can safely be said that each of IMPEL's six case study sites is providing a rich feeding-ground for the researchers. Each is different in its history; each library and information service has had different influences in its development. Strict comparisons will not be possible or even useful.

Already there is a clear picture of academic libraries undergoing transition, under pressure as regards space, money and above all, for the librarian, time; time to keep abreast of new sources, time to teach users, time to train staff, time to introduce new systems to academic staff. Almost no one so far interviewed failed to demonstrate enthusiasm for their new electronic sources and systems but there are clear pressure points - on the enquiry desk, in the level of technical support, on the technical support people themselves, in the confessed level of IT-ignorance among librarians, and on the need for training.

There are factors pulling in two directions at once - the need to concentrate knowledge in a few heads and at the same time to spread it wider to more heads; the need for participative, consultative management which can prove impossible when decisions must be made quickly and decisively; the need for librarians to devote time to the development of the services they wish to and need to offer, when there is literally no time for them to do so.

Watch the journals and conference programmes for detailed analysis of the findings during 1995.

Conclusion

Hans Geleijnse quotes a surprising statistic:

> "... in the literature on library automation... only about 10 per cent of it involves human aspects. That is strange, if one considers that about 80% of the problems which arise in automation projects are due to problems in the human and organizational aspects of library automation."[2]

There is little to suggest that this observation would not hold true for current developments in library technology. Follett, too, is aware that,

> "... failure to provide staff with adequate training and deploy them effectively represents one of the single most important constraints on change and development in library and information provision, and can seriously undermine its effectiveness, especially when this depends on the implementation of new practices, or on information technology."[2]

References

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Academic library services for students with disabilities (Research project for the Daphne Clark Award 1991/2)

HAZEL CLARKE
Computing Library and Media Services
University of North London

Introduction

The project began as a challenge. The University of North London has a goal to facilitate access to all potential students with the academic ability to complete their chosen course. The library plays a key role in providing learning support, yet had no policy on providing for students with disabilities. The research project was formulated, and submitted to LIRG for consideration for the Daphne Clark award 1991/92. Unfortunately, work was interrupted by illness, and then by job changes, and so was delayed for a year. The project was completed in early 1994, although the work itself continues.

Aims of project

The main objective was to gain information on which to base a policy and plan of action to provide services for students with disabilities. Students at North London provided a practical base for the project.

Methodology

The project plan consisted of:

•   a literature survey and research to gain information about various disabilities;

•   visits to organizations, and practitioners - I am indebted to Peter Brophy at University of Central Lancashire for an invitation to spend a day with staff at their excellent centre; (the opportunity to see at first hand the wide range of equipment and to talk to the staff about the provision of services was invaluable);

•   research into finding the library users' own solutions - a case study focused on dyslexia support as a microcosm of disabilities in general;

•   a questionnaire was devised and a pilot survey conducted;

•   equipment was discussed with suppliers and users.