
REPORT TO UKOLN
MANAGING ORGANISATIONAL CHANGE
IN THE HYBRID LIBRARY

DR LINDA BANWELL

PROFESSOR JOAN DAY

KATHRYN RAY

School of Information Studies

University of Northumbria at Newcastle

November 1999

CONTENTS

EXECUTIVE SUMMARY

1	INTRODUCTION	1
2	AIMS AND OBJECTIVES	3
3	CONTEXT	4
3.1	IMPEL Studies	4
3.2	From IMPEL to UKOLN	5
4	METHODOLOGY	7
4.1	The Colloquium	7
4.2	Data analysis following the Colloquium	8
4.3	Framework for Fieldwork	8
4.4	Fieldwork Sites	10
4.5	Developing a Matrix	11
5	FIELDWORK	12
5.1	Organisation of the Case Studies	12
5.2	The wider environment	13
5.2.1	Distance learning	13
5.2.2	Continuing education	14
5.2.3	Product branding	15
5.2.4	Entrepreneurism	16
5.3	The Context of the institution	17
5.3.1	Quality vs Quantity	17
5.3.2	Income generation	18
5.3.3	Operational model	19

5.3.4 Lifelong learning	20
5.4 Strategic management of the institution	21
5.5 Library Service Issues	23
5.5.1 User needs analysis	25
5.5.2 Communication	27
5.5.3 Quality and evaluation issues	28
5.6 Testing the Findings	29
6 SUMMARY	30
7 DEVELOPMENT MATRIX FOR HYBRID LIBRARIES IN EDUCATION	31
Development Matrix	32
7.1 The institutional level	33
7.2 Library and Information Services: generic issues	34
7.3 Library and Information Services : key issues	35
APPENDICES	
Appendix 1: Colloquium Briefing Paper	36
Appendix 2: Snapshot via email to Colloquium participants	43
Appendix 3: Project Team	47
Appendix 4: References	48

Managing organisational change in the hybrid library

Dr Linda Banwell
Professor Joan Day
Kathryn Ray

Executive Summary

The report describes a study funded by the Joint Information Systems Committee (JISC) through the UK Office for Library and Information Networking (UKOLN), conducted during the period January to June 1999. The study was a partnership between the School of Information Studies and practitioners in Information Services at the University of Northumbria at Newcastle.

This was a small scale project with a very large agenda – managing organisational change in the hybrid library. The project team recognise that Higher Education Library and Information Services are now, and will continue to be for the foreseeable future, hybrid: that is providing and delivering information in both traditional and new formats.

The project sought to identify likely future changes which will impact on the development of the hybrid library on higher education institutions; to identify a strategy and courses of action for managing these changes effectively; and to produce a development matrix as a basis for benchmarking within individual institutions. Evidence was collected through a Colloquium of key informants, using four broad predictive scenarios of Higher Education institutional structures in 2007 to identify key themes and suggest courses of action which institutions and Library and Information Services might take to manage change. These ideas were tested further within two sample institutions and again with Colloquium participants by e-mail.

The data obtained at the Colloquium was categorized into **eight main themes**:

Theme One: *The Wider Environment*

Theme Two: *Institutional Context*

Theme Three: *Strategic Management within the Institution*

Theme Four: *Library Service Issues*

Theme Five: *User Needs*

Theme Six: *Communication*

Theme Seven: *Quality and Evaluation*

Theme Eight: *Resources*

Whilst recognising its central importance, theme eight was seen by the research team to be too complex and too individual to the institutions to be an issue for investigation at field work stage in this study to add significantly to the wider picture.

Further analysis of this data by the research team informed the development of a framework to provide structure and clarity in the fieldwork exercise. Within this framework library service issues were viewed within the strategic management of the institution, the broader context of the institution itself, for instance its mission, its history, its size and diversity, and within the wider environment in which Higher Education Institutions operate. User needs; communication; and quality and evaluation emerged as three parallel themes within 'library service issues'.

Five **stages of development** through which themes could be tracked were identified as:

Stage A: Baseline – the starting point and the current status quo for many institutions

Stage B: Identify requirements – the point at which there is recognition of a need for the institutions to change.

Stage C: Congruence – this denotes a stage where the vision is starting to be implemented

Stage D: Embedding – at this stage appropriate and suitable partnerships develop from congruence and are accepted as part of the organisational culture.

Stage E: Full integration – at this point all of the diverse elements are assimilated signifying the maturity of an organisation able to take full advantage of the information revolution

Broader environmental issues were characterized by the following areas seen by Colloquium participants as of current importance:

In the wider environment:

- Distance learning
- Continuity of education
- Product branding
- Entrepreneurism

In the context of the institution

- The quality vs. quantity debate in relation to student numbers
- Income generation
- Operational framework
- Lifelong Learning.

Two fieldwork sites were identified for further testing of ideas emerging from the Colloquium. These chosen sites were selected to be towards opposite ends of the 'Old' – 'New' University Continuum. A range of respondents in each institution was invited to characterize the framework from their own individual viewpoints. A two-day intensive data

collection period was undertaken in each institution consisting of interviews, focus groups and workshops.

Following synthesis of the fieldwork, feedback was sought from Colloquium participants by asking them via e-mail to characterize one of the themes for their own institutions. Theme One – The Wider Environment, was chosen and provided further insights into the fieldwork findings.

The evidence presented in this report follows the Themes derived from the data. The fieldwork sites demonstrate the differences arising from institutions having missions with differing emphases: the new university is seeking to establish a competitive edge; and the long established university with an international reputation for high quality research and based in an attractive location is seeking to carry on in similar ways. The different approaches were exemplified in the “snapshot” sent to Colloquium participants. Replies received confirmed the need to develop an approach to managing change, which could be used within local institutional cultures to benchmark their developments

The Development Matrix provides a generic framework, presented in stages, against which Library and Information Service managers may benchmark their own development. In using the Development Matrix institutions need to be aware of the significant differences which individual missions will impose, as well as of the quality of leadership of Library and Information Services. It is too simplistic to stereotype the patterns of development through which services will evolve in meeting the challenges of the move through hybrid libraries to a more digitally based information service. The following is a quotation from a Colloquium participant and encapsulates the reality for LIS managers:

“The balance between strategic development and opportunism is a reality which we all face but, perhaps, the trick is to ensure that opportunities are seized which facilitate and enable the realisation of the broader strategies”

Despite the diversity in higher education in Britain and its reflection in the development of information cultures, this study has shown that common themes can be identified. By presenting them in the form of a matrix, it is hoped that individual institutions can find guidance on both strategic direction and on a course of action suitable for them.

1 INTRODUCTION

This report describes a study supported by the Joint Information Systems Committee (JISC) through UK Office for Library and Information Networking (UKOLN), conducted during the period January to June 1999. The study is a partnership between the Department of Information and Library Management (DILM) and practitioners in Information Services at the University of Northumbria at Newcastle.

This study builds on the findings of the IMPEL (IMpact on People of Electronic Libraries) and IMPEL2 projects (<http://ilm.unn.ac.uk/impel>) and continues the approach developed by IMPEL of qualitative investigation of change and monitoring of its impact in Higher Education Library and Information Services. The study also informs, and is informed by, the HyLiFe Project: the Hybrid Library of the Future (<http://www.unn.ac.uk/~xcu2/hylife/>), currently funded under phase 3 of the Electronic Libraries Programme (eLib). The University of Northumbria is a participant in the HyLiFe Project.

While the focus of IMPEL2 and other eLib phase 1 and 2 projects was on the development of the *electronic* library, the emphasis of phase 3 has shifted towards that of the *hybrid* library. eLib's support of five hybrid library projects in the current phase confirms the recognition that libraries are hybrid, and will continue to be so for the foreseeable future. Pinfield et al (1998) describe the concept of the hybrid library:

'The hybrid library is on the continuum between the conventional and digital library, where electronic and paper-based information sources are used alongside each other. The challenge associated with the management of the hybrid library is to encourage end-user resource discovery and information use, in a variety of formats and from a number of local and remote sources, in a seamlessly integrated way.'

Organisations of all kinds, including Higher Education Institutions, are subject to many forces for change: political, sociological, educational, technological, organisational, economic and cultural. The intensity and speed with which Higher Education Institutions are affected by such changes inevitably induces a sense of uncertainty and loss of control in which opportunities for creativity and innovation may be lost. This study seeks a greater understanding of the current internal and external environments with a view to better management of future Library and Information Services in the academic sector.

The concept of the hybrid library itself may be seen as one response to changes impacting on organisations, such as the widening use of information and communication technologies in all spheres of activity, and the espousal of the concept of lifelong learning. Within Higher Education Institutions, the integrated nature of the hybrid library reflects the need to respond to the information needs of a growing, diverse, demanding student population which is increasingly likely to be located away from main campus services.

The study focuses on the future. It attempts to roll forward current known trends, to predict and characterise the change process needed to bridge the gap between the present and the desired future both for individuals and for organisations.

2 AIMS AND OBJECTIVES

The overall project aim is:

To inform and support the effective future management and delivery of Library and Information Services (LIS) in the hybrid library.

The study brief highlighted the need for the identification of:

- issues likely to necessitate change in libraries
- illustrative management / organisational scenarios
- problems libraries will face
- how libraries are currently evolving to cope with change
- necessary actions to forward changes needed.

The study therefore addresses the following objectives:

- to forecast, with key expert informants, likely future changes which will impact on the development of the hybrid library in higher education
- to develop a strategy, with key expert informants and using predictive scenarios, for managing these changes effectively
- to review through fieldwork in two case study sites the strategy and course of action developed
- to produce a development matrix for dissemination to HE and LIS managers enabling them to benchmark developments in their own institutions.

3 CONTEXT

3.1 The IMPEL studies

The study is underpinned by the work of the IMPEL (Impact on People of Electronic Libraries) projects which have been running at the University of Northumbria since 1993. IMPEL2: Monitoring Organisational and Cultural Change, was a 28 month study funded as an eLib Supporting Study, the overall aim of which was to gain a deeper understanding of the organisational and cultural impacts associated with rapid technological and educational developments in Higher Education. It achieved its aims by undertaking four linked projects : a staff study, a user study, a resource based learning study and a staff training and development study. Twenty two Higher Education Institutions were used as study sites. IMPEL2 used a case study approach to its investigations which yielded rich data reflecting the complexity of the inter-relations between people, organisations and technology. It was based on an extensive, ongoing literature review which underpins this study, (Day et al, 1996).

The challenges affecting Higher Education in general and Library and Information Services in particular have been well documented by the IMPEL2 Project, which identified a number of emergent issues underpinning the development of the electronic library. These are equally pertinent to the concept of the hybrid library. Information providers are faced with the following challenges:

- The need for greater political awareness of developments within and beyond an individual institution
- Reduction in the unit of resource
- The importance of an institution wide Information Strategy
- Convergence of information and communication technologies
- Devolution of responsibility to non-professionally qualified staff
- Promotion of resources and closer liaison with academic departments as remote access increases
- Constant advancement of systems and sources
- Balancing new electronic and traditional resources
- Need for information staff to develop more complex information handling skills
- Increased work loads
- Provision of support for users within and beyond the library
- Provision of technical support within information services

- Growth of an end-user culture

Information users are faced with the following challenges:

- Awareness of new resources, increasingly electronic
- Access to electronic resources
- Acquiring more complex information handling skills
- Access to support, particularly for remote access
- Knowledge of the limitations of the resources

Stephen Pinfield of the BUILDER Hybrid Libraries project (URL: <http://builder.bham.ac.uk>), has similarly highlighted a number of issues which must be addressed to ensure the effective transition to a hybrid library:

- Information professionals need to acquire new skills.
- Decision-makers in the institutions need to recognise the potential of these new developments in supporting teaching, learning and research.
- Commercial providers must continue their moves to provide more open tailorable products.
- Information users must be assisted to develop new approaches to seeking and using information sources. "Hybrid library development must always keep users' interests at the centre if it is to achieve anything worth while". (Pinfield, 1998)

During five regional IMPEL2 workshops in 1997-1998, informed, experienced information professionals involved in the current delivery of information services identified a number of emerging trends in society and Higher Education. Commonalities were drawn from these trends and developed into a range of Scenarios (see Appendix 1) which were brought forward to this study's Colloquium.

3.2 From IMPEL to the UKOLN project

One of the outcomes of the IMPEL2 Monitoring of Organisational and Cultural Change was the production of five themed Guides to best practice in Library and Information Services (<http://ilm.ac.uk/impel>).

The Structure and Strategy Guide gives an overview of theory and practice at the time of the fieldwork in 1995-6, and the following general points are pertinent to this study:

- A clear mission is crucial and the whole institution must support it
- Vision and transformational leadership is vital to successful structural integration

- Flatter staffing structures reduce communication barriers
- Structures must be adopted which facilitate the pursuit of shared goals (e.g. team working, matrix structures)
- Training is needed in interpersonal skills to support new working practices
- An overarching Information Strategy is needed
- Quality measures need to be implemented

4 METHODOLOGY

The study uses a design based on qualitative methodology. Qualitative analysis

takes a systemic approach to understanding the interaction of variables in a complex environment (Salomon, 1991)

Qualitative investigation builds up rich pictures based on the testament of individuals. Such studies are bottom up, user driven, interactive, based on case studies and frequently longitudinal.

4.1 The Colloquium

Fundamental to the project was an intensive one day Colloquium held with fifteen invited key experts in the field. The aim of the Colloquium was to forecast likely future changes which will impact on the development of the hybrid library in Higher Education and to inform the development of a strategy for managing these changes effectively. Participants were identified by the purposive sampling of known innovators in the field.

Scenarios had been successfully used by the earlier IMPEL2 as a predictive tool to focus discussion in dissemination Workshops. The activity was based on the ‘Search Conference’ idea developed by F.E.Emery (Ackoff and Vegea, 1987). The exercise enabled participants to extrapolate the implications of current trends. Debate is thereby extended and enriched. IMPEL Workshop participants had identified the following trends in Higher Education which were used as a baseline for the Colloquium in the present study:

- A significant increase in student numbers which is likely to continue
- Growing diversity in the age and academic profile of students
- Development of a competitive, client-focused ethos in Higher Education and funding based on efficiency gain
- Changes in student funding leading to changed customer demand
- Increased collaboration between universities, industry and further education
- Modularisation of study programmes
- Greater emphasis on research following the Research Assessment Exercise
- Focus on teaching quality with Teaching Quality Assessment
- Growth of communication and information technologies providing a wealth of up-to-date information for those with the skills to access and use them.

As an outcome of the IMPEL2 Workshops, four broad models of Higher Education institutional structures in 2007 had been predicted (Walton, 1998). These both informed and provided a context for debate at the Colloquium in the current study.

- Business model
- Student-centred model
- Virtual model
- Hybrid model

The models themselves may be found in the Colloquium Briefing Paper (see Appendix 1).

Using these predictive scenarios as a basis, participants worked to review changes needed to their own existing practice to facilitate the desired developments and to devise together ways to bridge identified gaps.

The participants carried out two exercises designed to elicit their view of key factors driving change in Higher Education institutions, now and in the next five years. They were asked to identify processes (the “how”) and to characterise those processes (the “what”), drawing on their own experiences.

4.2 Data analysis following the Colloquium

The rich qualitative data obtained at the Colloquium were categorised, and seven main themes emerged:

- Theme One: *The wider environment*
- Theme Two: *Institutional context*
- Theme Three: *Strategic management within the institution*
- Theme Four: *Library services issues*
- Theme Five: *User needs*
- Theme Six: *Communication*
- Theme Seven: *Quality*

An eighth theme “Resources” was identified by participants as important. However, there was insufficient time to investigate this as widely as would have been necessary to add significantly to the picture.

4.3 Framework for fieldwork

Following the Colloquium, preliminary analysis informed the development of a framework in order to give structure, clarity and a point of departure for the fieldwork exercise.

Managing Organisational Change in the Hybrid Library

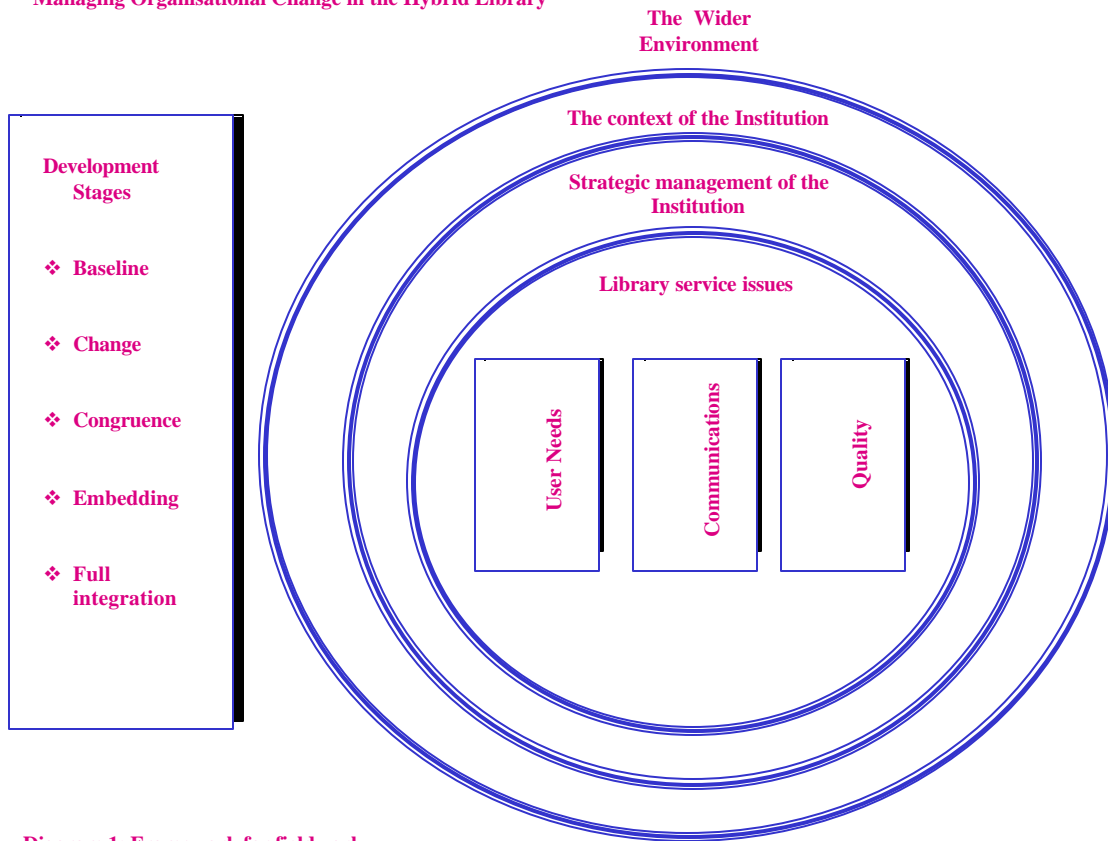


Diagram 1: Framework for fieldwork

The framework for fieldwork testing in Diagram 1 suggests that Library service issues must be viewed within the strategic management of the institution, the broader context of the institution itself, for instance its mission, its history, its size and diversity, and within the wider environment in which Higher Education Institutions operate.

The three *themes* within 'library service issues' on which to focus attention emerged as user needs, communication and quality and evaluation of services.

Five *stages* of development through which the Library Service Issues *theme* could be tracked were identified as:

- Stage A: Baseline
- Stage B: Identify requirements
- Stage C: Congruence
- Stage D: Embedding
- Stage E: Full integration

The broader environmental issues were characterised by the following *aspects* seen by Colloquium participants as of current importance at this higher level:

In the wider environment:

- Distance learning
- Continuity in education
- Product branding
- Entrepreneurism

In the context of the institution

- The quality vs quantity debate in relation to student number
- Income generation
- Operational framework
- Lifelong Learning

4.4 Fieldwork Sites

IMPEL studies had shown the importance of the institutional Mission in supporting the development of an information culture. Given the limited scope of the study, two sites were identified to be test beds for developing ideas emerging from the Colloquium. Those chosen were towards the opposite ends of the 'New' - 'Old' University continuum.

- The **New** university, a former Polytechnic, is committed to widening participation and lifelong learning through local partnerships with schools and further education colleges, and strong community and industrial links. Research is flourishing but in a few highly specialised niche areas. Students from the region predominate.
- The **Old** university is a long established foundation with a strong research ethos across the whole institution. Recruitment of staff and students is national and international.

A range of respondents in each institution were invited to characterise the framework from their own individual viewpoint. Key contacts within the libraries of each institution selected individual and group interviewees to represent the range of users and information service providers. The Project Officer undertook a two day intensive data collection period in each institution.

4.5 Developing a Matrix

Analysis of the fieldwork data increased understanding of change processes and informed the design of a 'Development Matrix' against which to benchmark an organisation's changing information culture. An extract of this matrix was then offered by email for comment by Colloquium participants and their responses added to project findings to date. The refined version is included in this Report as 'The Development Matrix' (Section 6.1) and is intended for wider dissemination separately from this report.

5 FIELDWORK

This section presents evidence organised by the themes which form the basis of the fieldwork framework, and as characterised in the two fieldwork institutions. Interviews were recorded and transcribed and provide a rich picture to contextualise the project findings. A summary of views from each institution is included here. They give a snapshot based on the views of a relatively small number of individuals. More extensive fieldwork would be needed in the two institutions in order to provide a picture which could be termed representative of all points of view in the institution.

Fieldwork at New University

Interviews were conducted with the Director of Information Services; two Assistant Directors, based at different sites, one of whom is also the IT Development Manager; the Customer Services Manager; one Deputy Site Librarian; one Slides Librarian; and one Library Assistant. All the sites within the system were represented by the personnel involved in the interviews. At this institution, an attempt was made to assign different themes emergent from the Colloquium for discussion with an appropriate representative. For example:

Themes	Respondent
▪ The Wider Environment and Context of the Institution	Director of Information Services
▪ Strategic management and library service issues	Assistant Director/Site Librarian
▪ Quality and institutional context	Assistant Director/IT Development Manager
▪ User needs	Customer Services Manager
▪ Library service issues	Slides Librarian, Deputy Site Librarian
▪ User needs and communication	Library Assistant

Each interviewee was presented with the outline material relevant to the particular themes and asked to comment in the context of their own institution.

The result of the fieldwork is an assessment of the extent to which the organisation shows now, and how it might in the future show, the characteristics of being a creative, flexible and innovative organisation.

Fieldwork at Old University

At the Old university, interviews were conducted with the University Librarian, the Vice Principal for Academic Services and Information Strategy, and a member of the Senior Management Team. Project Officers also attended a meeting of the Strategy Group, membership of which comprised the Librarian, Faculty Librarians, Assistant Librarians and Senior Library Assistants.

In addition at this institution, discussion of the themes emerging from the Colloquium was carried out in a library focus group which included Faculty librarians, sub-Librarians, a Deputy Librarian, personnel from other academic support services and academic staff.

Interviews and workshops with those personnel outside the library covered the contextual issues and those concerned with the strategic management of the university. At the workshop for non-library staff participants drew up an organisation chart and considered, in the light of major Themes in Higher Education, how this was likely to change by the year 2007. Those with library staff focused on Library service issues, in particular the three Themes - Users Needs, Communications and Quality. The interviewees were given data derived from the Colloquium and asked to comment on the issues raised under each of the headings. The focus group participants of one of the above three Themes in the context of their own institution.

5.2 The wider environment

Of the many issues currently shaping Higher Education, Colloquium participants focused their discussion upon the development of distance learning; continuity in education; product branding; and entrepreneurship. A summary of discussions on these at field sites now follows.

5.2.1 Distance Learning:

Overview

This term encompasses a wide spectrum of activities. Distance Learning is used by many Higher Education institutions as a cost-effective way of expanding their activities, widening opportunities for students at home and abroad, and harnessing Information and Communication technologies for more flexible delivery. With Distance Learning there is a physical separation of student from the institution responsible for provision of teaching and conferment of degree. Since the student need not move to the location of the resource provider, the resources are transferred (physically or electronically) to a location convenient to the student, e.g. their home or place of work

Distance Learning: Colloquium

Colloquium participants identified aspects and actions to do with distance learning based on their collective expertise and experience. They agreed that distance learning was clearly vital in order to increase potential markets and increase student numbers. They agreed that specific actions could be taken by the institution to promote distance learning, such as the

development of a Distance Learning Policy and embed it into the strategic mission of the university;;

introduction of a Distance Learning Co-ordinator in Information Services;

putting in place an infrastructure between Library and Computing Services to promote convergence of approach to integrating the use of Information and Communication technologies.

Distance Learning: New University

The provision of distance learning is seen as central to growth and development at the New University. The ultimate goal is to cater for as many distance learning students as those who are campus based. Distance learning is seen as having the potential to reach out to a wider audience and increase the number of potential students, which is important where location and reputation may fail to attract recruits.

Distance Learning : Old University

Here, “distance learning is talked about but there is a lack of preparedness to invest”. The Old University sees itself as nurturing traditional methods of teaching, with the quality dependent on student/tutor interaction. Its vision is of learning together, fostering a community where the main driver is research and teaching delivered largely to people who come to the campus. The City provides sufficient attractions to entice students, fuelling the campus based culture, and the prevailing view is: “why change if the old system works?” A distance learning policy is seen as possibly endangering the reputation of the university by producing second class courses. It has no problems attracting new recruits, with a culture firmly embedded into its existing practices. It sees its position as “more challenging than those institutions who see their future as distance learning based as we will have to continue to provide hardware support centrally as well as access remotely as we anticipate people based on the spot”

5.2.2 Continuing in education

Overview

The erosion of the concept of a ‘job for life’ has meant that many people may find themselves having to retrain for new posts. Others may become aware of a need to upskill to keep abreast of new developments within their working environment. With the advent of IT, more people may need to become multi-skilled. Such cases illustrate a need for continuing personal/professional development. In the course of acquiring education, learners are likely to experience discontinuity in that they may move in and out of a learning environment. Strategies may be necessary to facilitate the processes of transferring from the learning to the working environment and vice versa.

Continuing education: Colloquium

Colloquium members identified the central aspects of continuing in education as the need for the institution to espouse lifelong learning policies with accompanying mid career training/Continuing Professional Development. There was consensus amongst participants that such issues will be fostered by such actions as introducing a lifelong learning strategy, developing cross-sectoral collaboration and courses aimed at re-training. The philosophy should be developed of teaching how to learn rather than teaching specific skills.

Establishing or maintaining links with industry were seen as important in promoting continuing in education.

Continuing education: New University

A cross-sectoral collaboration exists between university, Further education colleges and public libraries which provides a supportive learning environment, and the view was expressed that “through cross-sectoral collaboration you can open up opportunities for everyone”. An increased diversity of students is evident, and a philosophy is developing whereby in the context of lifelong learning students must learn how to teach themselves new skills.

Continuing education: Old University

Continued Professional Development and lifelong learning are important features. Here also there is co-operation between local colleges, Further Education colleges and the University. This is seen as enabling students to fit into the education scheme at the academic level appropriate to their needs.

The faculties of Engineering and Chemistry were identified as having strong links with industry - these disciplines are areas of national decline as far as student recruitment is concerned but the Old University has retained their numbers. The view was emphasised that most political and financial effort in the Old University is expended in research but that there are nevertheless enough people who value teaching and value interaction with students for a balance to be maintained.

5.2.3 Product Branding

Overview

Increasingly business and marketing principles are being introduced into the Higher Education context. Branding and marketing a degree programme as a ‘product’ involves business thinking, behind which lies the desire to get and keep ‘customers.’ The idea of retention extends not only to having students complete the entire three/four year course but also, with reference to **continuing education** (above), to attracting them back to the same Higher Education institution in the future. Product branding requires the forging of a unique identity which makes the institution different, offering something special that rival institutions cannot match.

Product Branding: Colloquium

Colloquium participants had discussed the importance of marketing courses offered and the need for this activity to be embedded in the culture of the institution. They recognised that the attraction of a particular city is often more effective in recruitment than the course itself. Specific actions recommended by Colloquium to promote product branding included:

identifying what appeals to students other than education e.g. sports facilities;

promoting a distance learning strategy;

reviewing what succeeds for other Universities;

re-packaging the University's image; and

establishing and maintain strong links with the city/town to aim for an inviting atmosphere overall.

Product Branding: New University

The New University is finding it difficult to identify niches in the market. It offers a wide range of courses and marketing is seen as a crucial issue. As part of this drive the need is recognised for the library to focus its resources as new courses develop. The library is seen as a key player: "every university needs a library and you can judge a university by its library".

Product Branding: Old University

The Old University is one of the top ranked universities, where product branding builds on reputation and excellent research ratings. In addition, the image of the City will continue to attract high quality students. However, concern was also expressed that they may lose out with the product branding of other universities through not embarking on a distance learning strategy. "Things don't happen first at the Old University. They're unwilling to be first, but like to go for the tried and tested; this means losing market shares". But there was confidence that "when it enters the market, its name alone should give it a share of that market". On the other hand some respondents felt that "we must keep reinventing the image to appeal", and that at present the Old University reacted rather than initiated.

5.2.4 Entrepreneurism

Overview

As with **product branding**, this is a concept borrowed from the business context. Entrepreneurs need to have the foresight to anticipate changes in the Higher Education sector. By monitoring and appraising the Higher Education environment they can highlight areas which they need to think about and respond. Early identification of emergent trends has the potential to give the Higher Education entrepreneur the edge over his competitors, to develop and tailor services and engage in **product branding** to attract students. The ability to make sound financial and technical forecasts may assist in the development of new funding frameworks and robust infrastructures.

Entrepreneurism: Colloquium

Aspects described as "entrepreneurism" and highlighted at the Colloquium centred around the complex issues involved in lifelong learning and the identification of unseen opportunities to encourage learning. Access courses, the UfI and the "learning world" were all specifically raised as ways forward.

Entrepreneurism: New University

Here lifelong learning is the key in the university's mission. Particular effort is taken to encourage people into learning, including initiatives such as the Learning World; University for Industry pilot; combined study skills courses; access courses; cross-sectoral collaboration. The main challenge is seen as meeting the needs of distance students via the World Wide Web although meeting the needs of campus based students is seen as being easier

Entrepreneurism: Old University

The Old University does have a leading edge but entrepreneurship also has its place. "It is well-established and conservative but there is entrepreneurship and a spirit in some of the faculties". The university has ancient roots, with a long pedigree, tradition and culture, and there is fear of a loss of a sense of history. There is confidence for the future: "we will change slowly not rapidly but if the market changes underneath us we are in the position to react to the change"

5.3 The Context of the institution

The key aspects identified by Colloquium participants in the Wider Environment were then translated into reality in the context of each fieldwork institution, characterising the institutional culture.

5.3.1 Quality vs Quantity

Overview

Higher Education institutions are subject to rigorous control from organisations such as the Quality Assurance Agency, which ensures the quality and academic standards of Higher Education programmes of study. Decisions to expand and develop services may result in 'spreading oneself too thinly' and thereby impacting on quality. There is a need to try to balance continuous development with the maintenance and improvement of standards. Higher Education organisations may be faced with cuts in their budgets but a continuing requirement that they represent value for money. The introduction of student tuition fees has led to a more discerning and demanding student body, necessitating a more customer-oriented environment

Quality vs Quantity: Colloquium

Colloquium participants had identified effective communication and having an effective strategic plan as the key underpinning of achieving quality. Actions to be taken with Library and Information Services to achieve this goal include teamwork, effective leadership to give directional steer, promoting customer service awareness through appointing a Customer Service Manager, rotating senior staff, establishing a quality framework of service standards and close liaison between Library and Information Services and academic departments.

Quality vs Quantity: New University

Here there is a clear directional steer from a strong leadership. The culture of the institution strongly dictated by the Vice Chancellor. This has resulted in strategic planning underpinned by a quality framework involving the development of service standards, demonstrating a commitment to the users of services. Performance measures are reported to the users, e.g. the percentage of books returned to the shelf in a specified time. Customer service is seen as crucial in the quality of the Library Information Service - the library is very customer orientated and has developed a Customer Services Manager position to underpin the ethos. Customer comments are invited and replies generated within four days. There is a training programme in customer awareness - facilitators are mainly library assistants, in order to foster teamwork and integration. In addition, there is a “close liaison between us and the academic department and research. We want a close relationship as this is important to our quality framework”

Quality vs Quantity: Old University

This is seen as a successful institution, but that it must know when to change. Indeed it needs to change to test the quality of the service, and it must be aware of the need to take opportunities. Thought is being given to the quality of teaching because the government’s agenda emphasises teaching in an institution where most of the income comes from research although this does not mean teaching is poor.

In library service terms, quality is seen as being very difficult to achieve with a service spread over more than 22 sites. Effective communication is clearly important, but “you can change the world with only 6 disciples but if you don’t see them it is more difficult”. Measures have been taken such as rotation of senior staff. The view was also expressed that “the library service is unworkable, inefficient yet receives few complaints. We don’t lose the goodwill but [must] develop and make more of the service - involve, consult widely and create ownership”. This will be achieved with fewer, better paid multiskilled staff.

5.3.2 Income generation

Overview

Political pressures arising from government policies drive university education programmes. Student numbers are rising and the mix of students continues to diversify. Funding is dependent on the subjects offered and the quality of university teaching and research programmes. Student may be charged for premium services Outsourcing of certain services and processes may occur and, as new alliances are forged, some insourcing activity for example consultancy, may develop, providing additional income.

Income generation: Colloquium

Colloquium participants discussed aspects of income generation including franchising courses, externally funded projects such as European Union, working in the community and with industry and the establishment of spin-off companies.

Income generation: New University

Here additional income is generated for the Library and Information Services through externally funded projects for example, the British Library and NHS hospital trusts. Improvements in networking and working within the community also provide opportunities for income generation as does the spread of lifelong learning through, for example, working with local hospitals.

Income generation: Old University

Here spin-off companies in industry research fields are the usual income generating model.

5.3.3 Operational model

Overview

Franchising of complete or part courses to Further Education colleges has implications for library services and service agreements, resources and staff. Unitised or modularised courses similarly impact on operations, possibly requiring a re-assessment of the current model and consideration of alternatives to cope with new patterns of delivery. Cross-functional teams may replace older models based, for example, on Faculties or on specific services.

Operational model: Colloquium

Colloquium participants in this context discussed multi-disciplinary teams and the operational issues surrounding them. In Library and Information Services terms they were seen as small teams catering for the needs of specific groups of customers, which would encourage openness and consultation between departments. A library liaison representative may be appointed in each academic department.

Operational model: New University

In the New University there is close liaison between academic departments and Library Information Services. The provision of information is targeted and specialised with four site libraries, each catering to the needs of two Schools. The libraries are run differently to meet the needs of the different staff and student population. In addition, “franchising is important and we take our links with the colleges very seriously”.

Operational model: Old University

Here franchising is not significant. It is an elitist institution aiming for a niche in the market where people attend the university rather than needing information to be provided off-campus. Multi-disciplinary approaches to research are a success, and the old department/faculty structure is breaking down. “Openness and consultation is important. We must involve the faculties properly. Each department has a library liaison person but they are not generally dynamic and have a lack of interest”.

5.3.4 Lifelong Learning

Overview

Standard degree programmes have been joined, in the Higher Education arena, by employment based training and this trend is likely to intensify with initiatives like the University for Industry (Ufi). Longer term, the maturing of Ufi may result in more individualised learning accounts requiring innovative, tailored information skills teaching programmes, designed by subject experts who may occupy hybrid posts, based partly in Information Services and partly in the academic departments they serve. Many Universities have modularised their courses and, in consequence, attract a wide range of non traditional students. This non traditional identity may stem from study mode (e.g. part-time), from age (e.g. mature students) or from ethnic origin but, whatever its source, it is realising the concept of the socially inclusive university. This enlarged, enhanced population may necessitate a reassessment of Equal Opportunities policies.

Lifelong Learning: Colloquium

At the institutional level of implementing lifelong learning policies the Colloquium participants focused on the issues surrounding the development of study skills through such means as:

Developing an interactive relationship between academic and LIS staff;

Fostering cross-sectoral support for lifelong learning;

Developing an information skills package on the web for lifelong learners;

An information skills module embedding into the curriculum;

Producing self-help guides for new students and staff.

Lifelong learning: New University

Here, information skills training is seen as crucial. Approximately 6000 students are trained each year via workbooks, an information skills module, and help sheets. Library staff are involved in the provision of information skills training for students. This is dependent upon the degree of academic involvement of different departments. The city is very committed to lifelong learning and cross sectoral partnerships are well developed.

Lifelong learning: Old University

Here library staff must adopt a sensitive approach towards information skills training. Library staff do not generally become involved in undergraduate course training, for example, information skills classes. There is, however, a growing acknowledgement that the process of the delivery of teaching has changed, and that there is a need to teach study skills in the context of lifelong learning.

5.4 Strategic Management of the Institution

The fieldwork framework (Diagram 1, page 8) identified *stages* representing milestone developments which can be applied to the remaining themes and characterised in fieldwork institutions. Theme Three: Strategic Management within the institution is generic, affecting all services in an institution.

<i>Stage A</i> <i>Baseline</i>	This is the starting point, the current status quo, and serves as a level which may be used as a measure or comparison
<i>Stage B</i> <i>Identify requirements</i>	This is the point at which there is recognition of a need to change and decisions are taken and strategies devised based on identified needs.
<i>Stage C</i> <i>Congruence</i>	This denotes a stage at which the results of decisions taken begin to gel.
<i>Stage D</i> <i>Embedding</i>	At this stage the appropriate and suitable developments and partnerships emergent from the congruence phase become accepted parts of the organisational culture.
<i>Stage E</i> <i>Full integration</i>	At this point, all the diverse elements are assimilated into a unified whole signifying the achievement of the goal.

Stages A -E were also characterised in the theme Library Service Issues, and its sub themes which are described in the next section.

Strategic management issues - Stage A: Baseline

New University

In the New University, baseline activity consisted of developing effective teamwork and a common vision throughout the whole university. The focus became people: staff and users of services.

Old University

In the Old University, baseline activity was characterised by leadership rather than management. It was thought by some that this imposition of a leadership culture would stifle initiative to develop individual strengths, for example, rotation of senior staff to keep refreshing the management. A chaotic environment works by allowing staff the freedom to express their opinions; and yet creativity is important.

Strategic management issues Stage B: Identify Requirements

New University

At this stage there was a recognition of a need to change. Senior staff restructuring took place, with a training programme looking at team work, common vision, change management, flexibility of team and future job roles. The library service was divided into four sites to encourage a conducive environment with a focus on customers. There was development of smaller staff teams with a defined leader and supporting staff structure. Working together was the key. “Our academics see us as an integral part of the learning culture. There is an awareness of the role of the library”.

Old University

Here too there was a sharing of values and a growing appreciation of the benefits of working together with meetings between Heads of Units and Support Services to hear about planning procedures prior to development decisions within the library. There was also a feeling of: “do we really need to change?”

Strategic management issues Stage C: Congruence

New University

This stage saw the development of tools which underpin change including staff training; devolution to different sites; encouragement for staff to be creative; pooling of ideas; taking on new projects. There was recognition of a new reality with the appointment of an opportunistic Director and development of the view that “training should be in-service rather than in-university”.

Old University

This stage was: “a shifting process which cannot be undertaken without pain”. It saw the development of strategy groups as instruments which then created the need to change and “with consultation creativity emerges”.

Strategic management issues Stage D: Embedding

New University

At this stage a change of culture followed the appointment of a new Director. There was an increase in the use of IT in providing Library and Information Services and the accompanying requirement to upskill all staff. New services such as Distance Learning developed. Changes were underpinned with staff development with the outcome that staff confidence improved; staff felt valued; cross-working and flexibility increased.

Old University

At this stage: “the Old University allows freedom with devolved budgets but within a framework for steering [overall direction]”.

Strategic management issues Stage E: Full Integration

New University

More flexibility and creativity has been achieved because of a creative Director with high standards.

Institutional needs are recognised, and Away Days are organised for senior staff to encourage meetings with senior managers across the university. And the future? “We cannot see virtual reality happening. Our navigational role is coming out more and more. Information skills training has increased over the last two years”.

Old University

Here too there is more student-centredness in response to students becoming paying customers. The need has been seen to find out about individual needs, being addressed by the introduction of nine working groups which include over one-third of the library staff. And the future? “How do we manage all of the tools which have been developed to handle the vast amount of information - digital/hybrid tools - do we need tools and humans?”

5.5 Library Service Issues

Themes 4 to 7 of the fieldwork framework relate to the delivery of Library and Information Services and were identified in the Colloquium as being those of central importance. They are presented in stages A-E, as outlined at the start of Section 5.4

Overview

Access to library services may need to be more flexible in order to accommodate the varying modes of attendance and learning styles of part-time and pre-degree students. Information services and network access may be rationalised and improved, possibly facilitated by convergence of Library and Computing Services. Transactions may be made by e-mail and dial-in access as well as more traditional means especially by those engaged in distance learning. The “access versus holdings” debate may stabilise as many of the pilot eLib programmes become a reality. Self service facilities may affect staff deployment which means that the workforce may have to be multi-skilled to work in more than one area of the library and staff development programmes need to be innovative to equip staff for change.

Library service issues Stage A: Baseline

New University

It was identified that all aspects of the hybrid library needed to be developed and owned within Information Services. With this identification the IT Development Manager was appointed. This post enabled the growth of the culture of Information Services as well as the further development of a distance learning policy. The position of an IT Development Manager supported the move away from the traditional culture of the Information Services. Staff were encouraged to be proactive which improved their confidence and ability to cope with the change

No further data from the **Old University**.

Library service issues Stage B: Identify Requirements

New University

At this stage staff were retrained to cope with changing student information technology needs. Staff training was accompanied by a clear focus contributing to the cultural change fostering an open attitude. Direction and encouragement were both present. The level and type of training was dependent upon the particular site library, and were therefore focused on clientele. In one site there is an open learning approach to training where the staff progress through workbooks at their own speed. Open learning materials are incorporated into help sheets and handouts for the students. Training programmes are initiated for term-time staff at the beginning of September to ensure their skills are up-to-date. There is co-operation between academic staff and information services staff for user education, which is incorporated into the degree programme and is subject specific. There are forums for students to express their particular needs and provision of hands-on practical experience for users. Common goals are seen as easier to achieve at a smaller team level rather than a global level. The institution has now “embedded IT into people’s every day work - so when staff do displays, they use word-processing, staff produced multimedia handouts etc. This got them using IT in their everyday work - they are now self-starters”

Old University

At this stage, the senior management role was seen as being “to lead by giving the vision, leadership, working in parallel and not abdicating any responsibility”. The view was expressed that: “library and academic staff need to be in partnership regarding the quality of information - they need to use the skills that we have or the future will bypass the library and we will just buy things in and contract them out”.

Library service issues Stage C: Congruence

Neither case study was able to provide context to this level and therefore the suggestions are taken from the Colloquium.

Library service issues Stage D: Embedding

New University

By this stage, site librarians were representing the library in the academic schools. Librarians were attending appropriate Quality Board and Programme Board meetings increasing their awareness of new courses and how to meet developing needs. Priorities have changed: “the catalogue record needs only to be as good as it needs to be and it doesn’t need to be any better. The money should be spent on supporting the user; staff training; materials etc.” But progress still depends upon the institution allocating this service sufficient finance. “The organisational aims and plans are embedded in the university strategy and everything we do underpins the university goals”.

Library service issues Stage E: Full Integration

New University

The position has been achieved where the university is multi-disciplinary in terms of people and systems. For example, “all shelvers are trained and upskilled - this improves morale and confidence - we wanted to have everyone upskilled”. Projects now include staff from all sites for example the customer care project has involvement of at least one member of staff from each site. But: “we must push forwards and cannot be complacent as the academic staff would forget the library’s’ existence”.

5.5.1 User Needs Analysis

The introduction of student tuition fees has led to a more discerning and demanding student body, necessitating a more customer-oriented environment. Core services may be tailored to individual groups of users in negotiation with Schools. Premium services may be developed via service level agreements, the cost of which may be borne by the student. For core and premium services to be successfully targeted, monitoring and tracking of changing needs and information seeking behaviour needs to have taken place. Formal user education sessions may use video-conferencing, on-line discussion to cope with distance learners and those engaged in lifelong learning as well as tailored individual surgeries.

User needs analysis Stage A: Baseline

New University

The baseline is epitomised by this statement: “people want what they want when they need it - if you try and tell them what they need they don’t want it”.

Old University

The university has grown organically making it difficult to ensure a systematic method for undertaking user needs analysis. Surveys had been undertaken to provide an historical picture of user needs rather than plans for future development. They have been undertaken on a sporadic basis, dependent upon the staff resources. Users and their immediate needs were seen as conflicting, cyclical, depending on the “flavour of the month”.

User needs analysis Stage B: Identify Requirements

New University

At this stage, managers begin to feel that they must be aware of the needs of the users. There is a wide range of users so it is vital to have different ways of satisfying these various needs. For example, make sure that information is provided on the web on the lowest grade server. It is: “important not to be dictated to by what you have done for the last few years and to have an open mind”, and: “make sure you give the users what they need and what will best support them rather than being of benefit to the staff”.

Old University

By this stage, concern is generated about how the user is identified. A consequent development is the establishment of “The Librarian’s Vision of the Future” working party as well as a number of strategic working groups to analyse this problem. These groups contribute to the development of an official Information Strategy. They have an important monitoring role on the use of resources.

User needs analysis Stage C: Congruence

New University

Needs are now seen as being subject to change. A system must be continually assessed to ensure its success. There is a recognition that although the present framework works well there must always be an available method for improving this, for example, the effectiveness of interactive skills training must be monitored. The provision is growing for users to develop their interactive learning skills and mechanisms including self-help packages, mini-skills sessions, hands-on information skills modules and sessions. “We undertake huge surveys every two years and smaller more regular ones where there is a new service”.

Old University

“Evaluation of resources used to be done by academic staff and the library staff, selecting the type and quality of the material . Now the users do this and they need training in analytical and evaluation skills”.

User needs analysis Stage D: Embedding

New University

At this stage questions are being asked as to whether the present mechanisms are providing adequate support to the user. Changes may need to be incorporated.

Old University

User education is provided in the smaller sites but there is insufficient time to do this in the larger sites. Similarly, user monitoring cannot be achieved in the larger sites but is useful in smaller sites. To be successful this must consist of a partnership between the students/researchers/staff

Stage E: Full Integration

New University

By this stage, generic frameworks are now also available from other universities. These are investigated to see if they can be adapted for the New University - “we are always in a state of changing”.

5.5.2 Communication

Overview

The Library Strategy will drive developments and will be based on the University Strategic Plan, which will be disseminated institution-wide. Library staff at all levels need to be aware of the Strategy, and involved in changes, so that they can share the vision and their role in it. A customer-centred approach, incorporating user needs analysis, should ensure that good communications permeate the organisation.

Communication Stage A: Baseline

New University

No further data

Old University

At this stage the library sites were very fragmented, so effective communication was difficult. The perception was that some academic staff have low regard towards the library staff. This feeling depended upon the library site.

Communication Stage B: Identify Requirements

New University

Here relationships between library staff and academic staff are very good. There is a feeling that the library staff are effective at communicating with academic staff which aids the students as their needs are more likely to be met. Communication is undertaken in an informal friendly way, and is effective. Teamwork is promoted and aids the process of communication.

Old University

At this stage an information strategy for the university is useful, but it is acknowledged that the users require something more informative setting out what can be expected from the library service - "but can this be a stick to hit yourself with?". It is recognised that there must be an institution wide communication policy. For example, already in the Medical School, all marks distributed to students via email. If all departments embraced this policy it would set the ground rules. User empowerment is developing where there is a customer focus and puts the user "at the centre".

Communication Stage C: Congruence

New University

The New University is aiming for campus wide usage of email, but this is very dependent upon the IT capabilities of the various Schools. This has already been established at one

campus and works very well. Email has improved the working environment as staff receive information relating to the wider picture of events since minutes from meetings are always circulated

Old University

At this stage convergence is required between the library and computing service to enhance the email network and culture. Standards are required in this multi-site environment

Communication Stage D: Embedding

New University

No further data

Old University

Institutional commitment and directive are evident by this stage.

Communication Stage E: Full Integration

No further evidence offered.

5.5.3 Quality and Evaluation Issues

Overview

There may be an increasing imperative towards measurement and accountability with any changes to services backed up by evidence of effectiveness and targets set required to be both measurable and achievable. Evidence of effectiveness may be provided by sound statistical information obtained from Management Information Systems and such information may be used externally for quality assessment and collaborative ventures and internally, for review processes linked to annual monitoring and resource allocation. Value for money may be demonstrated by benchmarking and costing.

Quality and evaluation Stage A: Baseline

New University

No further data.

Old University

This is the starting point: “we have a lot to learn. We gather information but do not use what we learn - although this is changing”. The Old University is hopeful that the new system will help aid standards in service delivery.

Quality and evaluation Stage B: Identify requirements

New University

No further data.

Old University

Evaluation of the quality of services via surveys, Senior Library Assistants' involvement, and the Liaison Structure. Service targets are being established internally, with focus groups being undertaken. There is still resistance to the concept: "academics distrust the quality concept - it smacks of the factory floor - the idea that scrutiny goes against the ideology of academic freedom".

Quality and evaluation Stage C: Congruence

New University

No further date.

Old University

At this stage much is undertaken, especially by SCONUL, but the view is expressed that it is not evaluated effectively in terms of Value for Money and Total Quality Management. There is also a recognition that a reliance on regular statistics can result in missing what cannot be easily identified or quantified. Consequently: "we are looking at recognising and measuring quality and have two working groups, internal and external, working together. There is little point in setting targets unless the library staff are involved in the process".

Quality and evaluation Stage D: Embedding

In both universities it was appreciated that the findings from surveys and liaison needed to be implemented. And having established service targets - are they being met?

Quality and evaluation Stage E: Full Integration

The espousal of continuous performance measurement is the outcome of the full integration stage.

5.6 Testing the findings

Following synthesis of the fieldwork, Colloquium participants were asked via email to characterise Theme One - The Wider Environment, in the context of their own institutions (see Appendix 3). This was done both to provide additional data and comparison with earlier findings, and resulted in the production of a generic Development Matrix, presented in Section 7.

6. SUMMARY

This was a small scale project with a very large agenda - managing organisational change in the hybrid library. It sought to identify likely future changes which will impact on the development of the hybrid library on higher education institutions; to identify a strategy and courses of action for managing these changes effectively; and to produce a development matrix as a basis for benchmarking within individual institutions. Evidence was collected through a Colloquium of key informants, using predictive scenarios to identify key themes and suggest courses of action which institutions and library and information services might take to manage change. These ideas were tested further within two sample institutions and again with Colloquium participants by e-mail.

The evidence presented in this report follows the themes derived from the data. The fieldwork sites demonstrate the contrasts expected from institutions with contrasting missions, reflecting a new university seeking to establish a competitive edge and a long established university with an international reputation for high quality research based in an attractive location. The different approaches were exemplified in the “snapshot” sent to Colloquium participants in Appendix 2. The replies received confirmed the need to develop a response to change relevant to local institutional cultures, demonstrated in the ‘Discussion’ paragraphs of the “snapshot”.

The Development Matrix which follows in Section 7 provides a generic framework, presented in stages, against which Library and Information Service managers may benchmark their development. In using the Development Matrix to benchmark Library and Information Services, institutions need to be aware of the significant differences which individual missions will impose, as well as the quality of leadership of Library and Information Services. It is too simplistic to stereotype the patterns of development through which services will evolve in meeting the challenges of the move through hybrid libraries to a more digitally based information service. The following is a quotation from a Colloquium participant and encapsulates the reality for LIS managers:

“The balance between strategic development and opportunism is a reality which we all face but, perhaps, the trick is to ensure that opportunities are seized which facilitate and enable the realisation of the broader strategies”

Despite the diversity in higher education in Britain and its reflection in the development of information cultures, this study has shown that common themes can be identified. By presenting them in the form of a matrix, it is hoped that individual institutions can find guidance on both strategic direction and courses of action.

7 DEVELOPMENT MATRIX FOR HYBRID LIBRARIES IN HIGHER EDUCATION

The development matrix which follows is based on the institution themes identified during the study. The framework diagram is deliberately repeated to add clarity to the matrix.

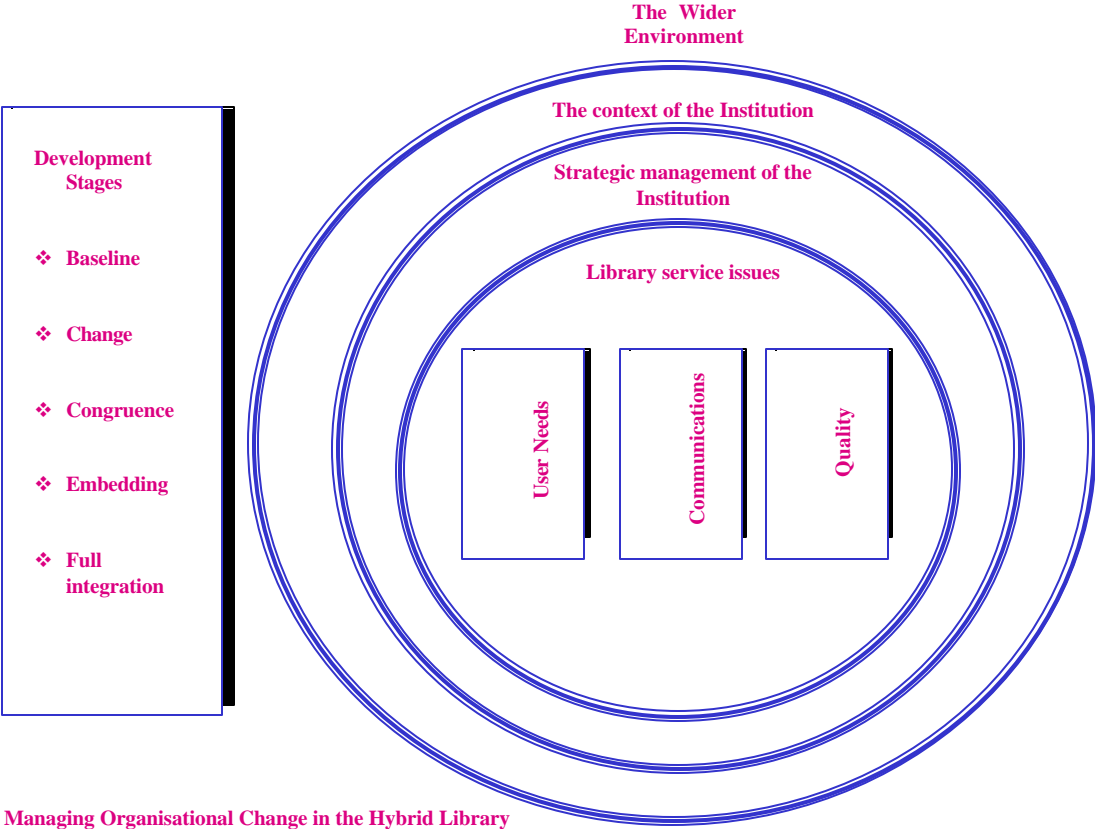
Section 1 of the matrix Context of the Institution is derived from Themes Two and Three: the Context of the Institution and its Strategic Management.

Section 2 of the matrix Library and Information Services: generic issues is based on Theme 4: Library Service Issues.

Section 3 of the matrix Library and Information Services: key issues takes each of the Themes Five to Seven: User needs, Communication and Quality and provides examples which could be customised by individual institutions.

Institutions could add other themes or relevance to them to the matrix, for example *Resources*, which did emerge as Theme Eight at the Colloquium, but was too complex and individual an issue to tackle at the field work stage in this study.

Development Matrix for Hybrid Libraries in higher education



7.1. The Institutional Level

Stages		Benchmarks indicating the point at which the Library/Information service can move on to the next level
Stage 1	<p>Baseline The starting point and the current status quo for many institutions</p>	<ul style="list-style-type: none"> • A focus on leadership • Identification of a common vision • Small groups working together across internal disciplines
Stage 2	<p>Change This is the point at which there is recognition of a need for the institutions to change</p>	<ul style="list-style-type: none"> • Strategies are developed based on the vision and identified needs • Decision making processes to achieve the change are clearly identified • Senior management accept the vision • Management is re-structured to reflect the proposed new working practices • There is closer working relationships between the library, computing and academic departments • The services are tailored to meet needs of all users • Flexible teams are developed to cope with the changes
Stage 3	<p>Congruence This denotes a stage where the vision is starting to be implemented</p>	<ul style="list-style-type: none"> • A breaking of the existing power bases • Increased staff training at all levels and in all disciplines • Devolution to smaller units • Encouragement of creativity • The development of project management
Stage 4	<p>Embedding At this stage appropriate and suitable partnerships develop from congruence and are accepted as part of the organisational culture</p>	<ul style="list-style-type: none"> • New post/role for the Information Manager • Recognition of the value of information services throughout the Institution • Increased flexibility of staff and systems • Thorough and continuous training, leading to • Improved role confidence, and • Increased optimism and motivation
Stage 5	<p>Full integration At this point all of the diverse elements are assimilated signifying the maturity of an organisation able to take full advantage of the information revolution</p>	<ul style="list-style-type: none"> • Student centred • A creative organisation • A learning organisation with: • Integrated working groups identifying future policies • Involvement of staff at all levels

7.2 Library and Information Services: generic issues

Stage		Benchmarks indicating the point at which the Library/Information service can move on to the next level
Stage 1	<p>Baseline</p> <p>The starting point and the current status quo for many institutions</p>	<ul style="list-style-type: none"> ▪ Recognition for the need for an IT Development Manager ▪ Growth of the influence of Information Services within the Institution ▪ Proactive staff and electronic product champions
Stage 2	<p>Change</p> <p>This is the point at which there is recognition of a need for the institutions to change</p>	<ul style="list-style-type: none"> ▪ Staff retraining ▪ Encouragement of open attitudes ▪ Clear direction and focus from management ▪ Co-operation between academic and information services for provision of training ▪ Student forums to ensure training levels and content are pertinent
Stage 3	<p>Congruence</p> <p>This denotes a stage where the vision is starting to be implemented</p>	<ul style="list-style-type: none"> ▪ Converged library/IT/other support services ▪ Identify achievable projects ▪ Sell benefits of any projects to senior management group ▪ Corporate commitment
Stage 4	<p>Embedding</p> <p>At this stage appropriate and suitable partnerships develop from congruence and are accepted as part of the organisational culture</p>	<ul style="list-style-type: none"> ▪ Library staff attendance at quality and programme boards ▪ Continual promotion of existence to academic departments ▪ support for research groups ▪ embedding of information services into the university strategy
Stage 5	<p>Full integration</p> <p>At this point all of the diverse elements are assimilated signifying the maturity of an organisation able to take full advantage of the information revolution</p>	<ul style="list-style-type: none"> ▪ Cross subject working groups ▪ Multi-disciplinary systems ▪ Cross functional institution

7.3 Library and Information Services: key issues

Stage		User Needs Analysis		Quality & Evaluation
Stage 1	Baseline The starting point and the current status quo for many institutions	<ul style="list-style-type: none"> • Sporadic surveys - no systematic practice. • A historical picture exists • Priority not afforded to this activity 	<ul style="list-style-type: none"> • Decisions are taken about what should be communicated and who it should be communicated to • The systems in place are uncoordinated or fragmented 	<ul style="list-style-type: none"> • Understanding of quality standards • Introduction of a new computer system to adapt to monitoring the changing standards in service delivery
Stage 2	Change This is the point at which there is recognition of a need for the institutions to change	<ul style="list-style-type: none"> • Awareness of diverse users needs • Various methods to satisfy needs • Development of working parties, involving a range of staff to identify needs • Monitor the use of resources 	<ul style="list-style-type: none"> • Objectives have been determined • development of an informal strategy document • Institution wide communication policy • Strong relationships built between academic staff and library staff 	<ul style="list-style-type: none"> • Service targets established • Constant evaluation of the services - surveys, and staff involvement
Stage 3	Congruence This denotes a stage where the vision is starting to be implemented	<ul style="list-style-type: none"> • Monitor effectiveness of interactive skills training • Provision of interactive learning skills including mini-skills packages, self-help packages 	<ul style="list-style-type: none"> • There is an institutional communication policy • Campus wide network • Convergence • Set of quality standards 	<ul style="list-style-type: none"> • Optimise the statistical data • Undertake qualitative data collection methods
Stage 4	Embedding At this stage appropriate and suitable partnerships develop from congruence and are accepted as part of the organisational culture	<ul style="list-style-type: none"> • User education and user monitoring • A restructured framework for needs assessment • Partnership between students, researchers and staff 	<ul style="list-style-type: none"> • Widespread implementation of a communication strategy, working at all levels 	<ul style="list-style-type: none"> • Ensuring that service targets are met
Stage 5	Full integration At this point all of the diverse elements are assimilated signifying the maturity of an organisation able to take full advantage of the information revolution	<ul style="list-style-type: none"> • Individual information seeking behaviour is recognised and satisfied • Generic frameworks adopted and adaptable 	<ul style="list-style-type: none"> • Student-centred communication strategy • Library involvement in the curriculum • User involvement in communication policy decisions • appropriate systems are in place multidimensional 	<ul style="list-style-type: none"> • Continuous performance measurement

APPENDIX 1 : COLLOQUIUM BRIEFING PAPER

Managing Organisational Change in the Hybrid Library

The aim of this six month project is to inform and support the effective future management and delivery of Library and Information Services (LIS) in the Hybrid Library.

The aim of the Colloquium is to forecast likely future changes which will impact on the development of the hybrid library in higher education and to inform the development of a strategy for managing these changes effectively.

The challenges affecting higher education in general and Library and Information Services in particular have been well documented, notably by the IMPEL2 Project undertaken at the Department of Information and Library Management, University of Northumbria at Newcastle (URL:<http://ilm.unn.ac.uk/impel>). The eLib3 Hybrid Libraries Programme is funding five hybrid library projects in recognition of the fact that the management of print-based resources will for the foreseeable future run parallel to that of new electronic information systems and services.

IMPEL2 identified a number of emergent issues underpinning the development of the hybrid library.

Information providers are faced with the following challenges:

- an increased political awareness
- funding cuts
- the importance of an institution wide Information Strategy
- convergence
- devolvement of responsibility to non-professionally qualified staff
- promotion of resources and liaison with academic departments
- constant advancement of systems and sources
- balancing new electronic and traditional resources
- accession of information handling skills
- increased work loads
- provision of support for users
- provision of technical support

- growth of end-user culture

Information users are faced with the following challenges:

- awareness of new resources
- access to resources
- information skills
- access to support
- knowledge of the limitations of the resources

Stephen Pinfield of the BUILDER Hybrid Libraries project (URL: <http://builder.bham.ac.uk>), has similarly highlighted a number of issues which must be addressed to ensure the effective transition to a hybrid library:

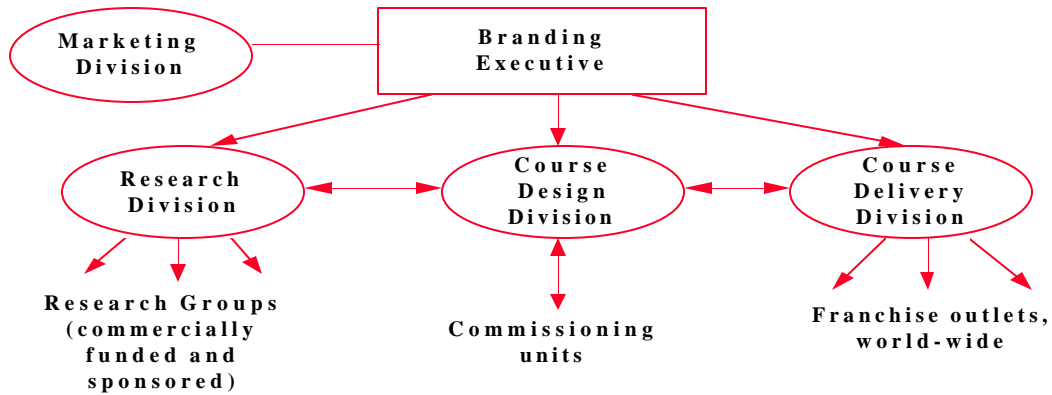
- Information professionals need to acquire new skills.
- Decision-makers in the institutions need to recognise the potential of these new developments in supporting teaching, learning and research.
- Commercial providers must continue their moves to provide more open tailorable products.
- Information users must be assisted to develop new approaches to seeking and using information sources. "Hybrid library development must always keep users' interests at the centre if it is to achieve anything worth while".

MODELS OF HIGHER EDUCATION INSTITUTIONS OF THE FUTURE

During the five regional IMPEL2 workshops in 1997-1998, informed, experienced information professionals involved in the current delivery of information services identified a number of emerging trends in society and higher education. Commonalities were drawn from these trends and developed into a range of emerging scenarios.

The use of scenarios is valuable as a means of involving groups in exploring both the wide and narrow contexts of an issue. They create the possibility of extending and enriching evidence already collected. The following scenarios are products of the IMPEL2 workshops and will be used during the Colloquium on 26 February to spark debate and further creativity.

Galactic University

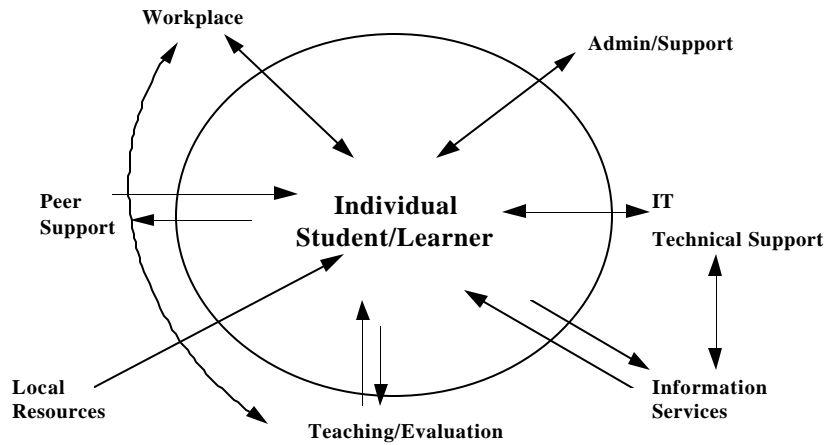


THE BUSINESS MODEL

In this framework marketing and branding are given a high priority. The emphasis is placed upon developing and promoting products so that services can either be provided from within the university or bought in from elsewhere. This suggests that the structure of the institution points outward to the wider world. This encourages the development of entrepreneurial pressures within universities with competition for the best deals on services and the possible adoption of placing a monetary value on services. The vision of a Galactic University may not be affordable as envisioned at the present time but this may be a solution for the future.

Within this framework the physical presence of the Library and Information Service is not clear. Will the Library and Information Service eventually become a commodity, another service which is bought in from elsewhere?

The Everyman University

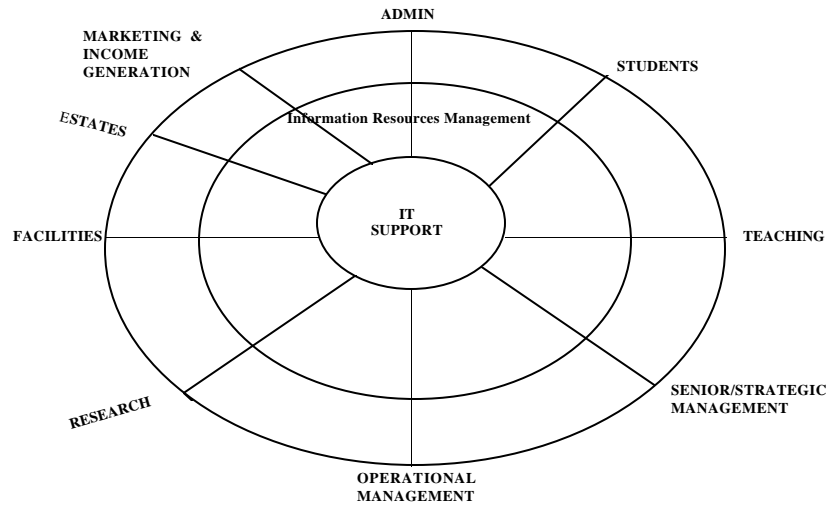


THE USER-CENTRED MODEL

The ethos of this framework is the importance of the learner. This is a philosophical approach in which the university is made up of a multitude of elements, all of which combine to place the learner at the centre. It suggests that every service within the university must work together, suggesting an emphasis upon integration.

Within this framework the Library and Information Service is viewed as another service, part of the integrated approach to support the student. Although specific links are drawn between the Library and Information Service and technical support there is no apparent hierarchy amongst the various services and no physical presence for the Library and Information Service.

University of the Airwaves

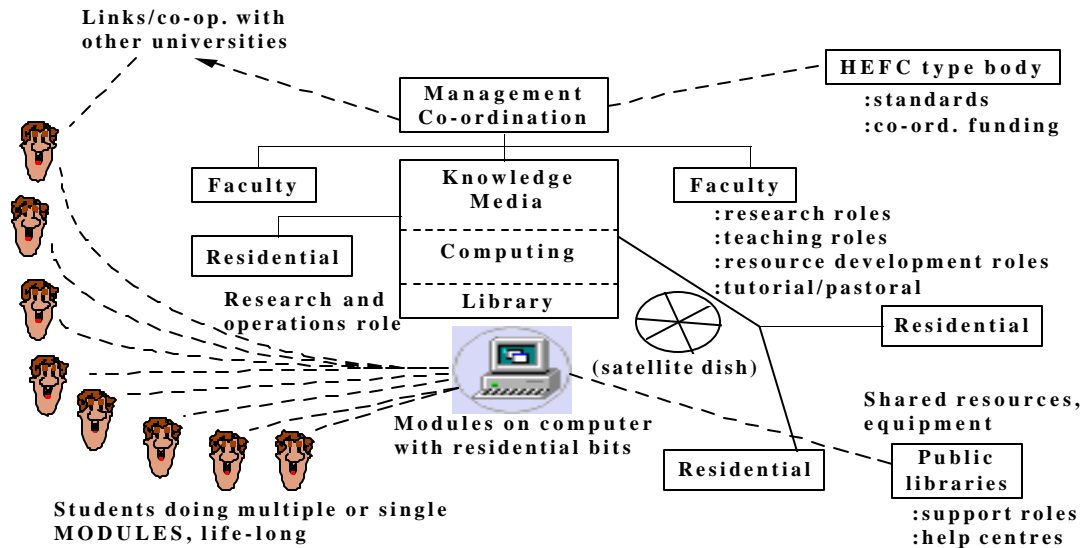


THE INFORMATION & COMMUNICATION TECHNOLOGY MODEL

This is the technological scenario whereby everything within the university is electronically managed. This framework envisions information technology at the centre of the Higher Education Institution. All services within the university are managed via an integrated information technology approach.

Although priority in this framework is given to information resource management no emphasis is placed upon a Library and Information Services which does not have a physical presence.

Bassett's University



THE INTEGRATED MODEL

This framework emphasises the importance of encouraging links and co-operation with other universities and public libraries; global communications; effective and high standards of teaching (tutorials and pastoral care); lifelong learning.

This is the framework which places the Library and Information Service at the centre of the university structure and stresses a physical location for the Library and Information Service which is integrated with computing and knowledge media. How do we get to the position where the library has this level of importance?

ONEDAY COLLOQUIUM

FRIDAY 26 FEBRUARY 1999

PARTICIPANTS

NAME	INSTITUTION
Sheila Corrall	University of Reading
Patsy Cullen	University College Bretton Hall
Ann Davies	The Open University
Elizabeth Davison	The London Institute
Ruth Jenkinson	Edge Hill College
Peter Leggate	University of Oxford
John McColl	University of Edinburgh
Patrick Noon	Coventry University
Edward Oyston	Sheffield Hallam University
Philip Payne	Leeds Metropolitan University
John Priestley	University of Plymouth
Chris Rusbridge	Electronic Libraries Programme
Jan Wilkinson	University of Leeds
Ian Winkworth	University of Northumbria at Newcastle

FACILITATORS

Dr Linda Banwell	University of Northumbria at Newcastle
Professor Joan Day	University of Northumbria at Newcastle
Catherine Edwards	University of Northumbria at Newcastle
Kathryn Ray	University of Northumbria at Newcastle
Graham Walton	University of Northumbria at Newcastle

ADMINISTRATOR

Maureen Dickson	University of Northumbria at Newcastle
-----------------	--

APPENDIX 2 - SNAPSHOT SENT VIA EMAIL TO COLLOQUIUM PARTICIPANTS FOR COMMENT

THEME ONE - HIGH LEVEL ISSUES

1. Distance Learning

The findings suggest that the culture of the university underpins the ethos of distance learning.

NEW University

- The provision of distance learning is perceived as being central to the growth and development of the New University, the ultimate goal being to cater for as many distance learning students as those who are campus based.
- Outreaching to a wider audience increases the number of potential students, vital for a university which cannot rely upon its city and reputation as key attractions for new recruits.

OLD University

- The Old University nurtures traditional methods of teaching, the quality of which is dependent upon student/tutor interaction.
- The vision is of people learning together, fostering a community of young students.
- The City of provides sufficient attractions to entice students to study at the university, fuelling the campus based culture.
- “Why change if the old system works?” encapsulates the findings from this university.
- A distance learning policy may endanger the reputation of the university by producing second class courses.
- As the university experiences no problems attracting new recruits, and its culture is firmly embedded into its existing practices, interviewees expressed no inclination to adopt a distance learning policy in its entirety.

Issue	How?
<ul style="list-style-type: none"> · Distance Learning · increase potential market/students 	<ul style="list-style-type: none"> · Introduce a Distance Learning Co-ordinator in Information Services · Converged Services or an infrastructure in place between the library and Computing Services

2. Continuity in Education

NEW University

- A cross-sectoral collaboration between university, FE colleges and public libraries which provides a supportive learning environment. The university has led the City in this scheme - increased diversity
- in the context of lifelong learning students must be informed how to acquire new skills as those they are taught at University will soon be out of date

OLD University

- CPD and lifelong learning are important features in this university. The university can gain from mid-career retraining which fosters the university community
- co-operation between Local Colleges, FE Colleges and the University enables students to fit into the education scheme at the academic level appropriate to their needs.
- anyone working in the HE sector must be aware of lifelong learning

Discussion

In the context of HE, lifelong learning is vital. The experience of these two universities suggests that irrespective of any existing culture the success of lifelong learning increases with full integration throughout the city. Cross-sectoral collaboration is the important link. This collaboration allows for the retention and retraining of students.

Issue	How?
<ul style="list-style-type: none">▪ Continuity in Education▪ lifelong learning▪ CPD▪ mid-career retraining	<ul style="list-style-type: none">▪ lifelong learning strategy▪ cross-sectoral collaboration within the city▪ teaching how to learn rather than specific skills

3. Product Branding

NEW University

- universities are not very good at identifying niches in the market
- marketing is a crucial issue
- offer a wide range of courses - everything but medicine
- suggest that as new courses are developed old or extinct ones should be dropped so the library can focus its resources
- “you can judge a university by its library”

OLD University

- the image of the Old University will continue to attract high quality students - this is a reflection of the City rather than the University
- it is important to recognise what appeals to the young apart from the education side
- product branding builds on reputation and excellent research ratings
- there is concern that the Old University will lose out with product branding due to not embarking on a distance learning strategy

Discussion

The culture of the university clearly affects attitudes towards product branding. The knowledge that students will be attracted to the Old University because of its prestigious position amongst HEI's enables a more relaxed approach. Conversely, within the New University a recognised culture has not emerged and as such, more effort is required to market potential courses.

The experience of the two participating universities suggests that the direction taken by the library in relation to product branding closely reflects the ideology and culture of the institution.

Issue	How
<ul style="list-style-type: none">• Product Branding• important to market courses offered• culture of an institution is important as the attraction of a particular City is often more effective than a course.	<ul style="list-style-type: none">• marketing is crucial• recognise what appeals to students other than education, e.g. sports facilities, canteens.• promotion of a distance learning strategy

- | | |
|--|--|
| | <ul style="list-style-type: none">• follow success of other universities |
|--|--|

4. Entrepreneurism

Case N

- lifelong learning is the key - particular attention is devoted to this in the mission statement. Particular effort is taken to encourage people into learning, including learning world; UFI pilot; combined study skills courses; access courses; cross-sector collaboration
- the main challenge is meeting the needs of distance students via the web - meeting needs of campus based students is easier

Case O

- this should be spotting the unseen opportunities rather than taking advantage of the seen opportunities
- The Old University does not lead but it does have its place
- The Old University has ancient roots, long pedigree, tradition and culture

Discussion

The culture of the university prevails in the context of entrepreneurship. The requirement for the Old University to be entrepreneurial is limited. Although ensuring they are not complacent, they can rely on their prestige and status. The New University must actively engage in new activities, unable to rely upon any previous traditions.

APPENDIX 3: PROJECT TEAM

Project Director Professor Joan Day

Project Manager Dr Linda Banwell

Research Assistant Kathryn Ray

Research Administrator Maureen Dickson

The following were also involved in this project:

Catherine Edwards , Research Associate, Hybrid Libraries Project, Department of Information & Library Management

Dr Pat Gannon-Leary, Senior Research Assistant, Department of Information & Library Management

Sandra Parker, Senior Lecturer, Department of Information & Library Management

Graham Walton, Visiting Research Fellow, Department of Information & Library Management and Principal Site Officer, Information Services.

APPENDIX 4:REFERENCES

ACKOFF, R.L. and VEGERA, E. Creativity in problem solving and planning: a review. European Journal of Operational Research, 7, 1987 pp.1-13.

BATE, P. Organisational culture. in R. ARMSON and R. PATON, Organisations: case, issues, concepts. Paul Chapman, 1994.

DAVIES, A., KIRKPATRICK, I. and OLIVER, N. The organisational culture of an academic library: implications for library strategy. British Journal of Academic Librarianship. 7 (2) 1992 pp.69-89.

DAY, J.M. and EDWARDS, C. Management structures for electronic libraries. In: Hanson, T. and DAY, J.M. (eds.) Managing the electronic library. Bowker-Saur, 1997.

DAY, J.M., WALTON, G., BENT, M., CURRY, S., EDWARDS, C. and JACKSON, M. Higher Education, Teaching, Learning and the Electronic Library. A Review of the Literature for the IMPEL2 Project: Monitoring Organisational and Cultural Change. New Review of Academic Librarianship. 2, 1996, pp.131-204.

DAY, J.M., WALTON, G. and EDWARDS, C. The culture of convergence. Proceedings of the 3rd International ELVIRA Conference 30 April - 2 May 1996.

PINFIELD, S. Realising the hybrid library. <http://mirrored.ukoln.ac.uk/lis-journals/dlib/dlib/October98/10contents.html>

RAY, K. and DAY, J. Student attitudes towards electronic information resources. Information Research: an Electronic Journal, 4 (2), 1998.

SALOMON, G. Transcending the qualitative - quantitative debate: the analytic and systemic approaches to educational research. Educational Researcher, 20 (6), 1991 pp.10-18.

WALTON, G., EDWARDS, C. Strategic management of the electronic library in the UK higher education sector: implications of eLib's IMPEL2 project at the University of Northumbria at Newcastle. In Raitt, D. (ed.) Libraries for the New Millennium: implications for managers. Library Association, 1997.

URL for IMPEL - <http://ilm.unn.ac.uk/impel/>

URL for Hylife - <http://www.unn.ac.uk/~xcu2/hylife/>