

The Value and Impact of End-User IT Services in Public Libraries

by

Juliet Eve and Peter Brophy

Resource: The Council for Museums, Archives and Libraries

2001

The Value and Impact of IT Access in Public Libraries: Final Report

Juliet Eve

Peter Brophy

Centre for Research in Library & Information Management (CERLIM)

The Manchester Metropolitan University

Geoffrey Manton Building

Manchester

M15 6LL

Tel: +161-247-6142

Fax: +161-247-6351

Email: cerlim@mmu.ac.uk

WWW: <http://www.cerlim.ac.uk>

Abstract

The Final Report of the Value & Impact of IT Access in Libraries (VITAL) research project, undertaken by a team at the Centre for Research in Library & Information Management (CERLIM), the Manchester Metropolitan University, UK. The project developed a methodology for assessing impact and undertook testing in three contrasting library authorities, Birmingham, Cheshire and Cumbria. The results of these tests provided evidence of positive impacts on a range of users across all three authorities and strong support for the concept of making Internet access available through public libraries. The Report ends with a series of recommendations and observations.

© Resource: The Council for Museums, Archives and Libraries 2001

The opinions expressed in this report are those of the authors and not necessarily those of Resource: The Council for Museums, Archives and Libraries.

RE/044

ISBN (Amended) 1-902394-57-7

ISSN 1466-2949

Library and Information Commission Research Reports are published by Resource: The Council for Museums, Archives and Libraries and may be purchased as photocopies or microfiche from the British Thesis Service, British Library Document Supply Centre, Boston Spa, Wetherby, West Yorkshire LS23 7BQ, UK.

The authors have asserted their Moral Rights.

Preface

This is the Final Report of the VITAL (Value and Impact of IT Access in Libraries) research project, funded by the Library & information Commission (and subsequently Resource: The Council for Museums, Archives and Libraries) over an eighteen month period during 1999-2000 and subsequently, for a five-month period, by the Manchester Metropolitan University. The Project's core aim was the development of a methodology which could be used by public libraries in the UK to gain insights into the value which users place on in-library IT access and the impact on them of that access. During the project, the methodology was tested in three library authorities (Birmingham, Cheshire and Cumbria) and the results of those studies are reported here. The methodology itself has been produced as a *Workbook*, which is available separately.

This Report includes evidence from the three participating library authorities of the value and impact of end-user IT-based services in their libraries. Clearly this evidence is specific to those authorities, but common threads are likely to be of wider significance. In addition, therefore, this evidence is also available as a separate executive report, which can be downloaded from the CERLIM website.

The authors would like to express their thanks to the many individuals who have given freely of their time to assist in the work reported. We are particularly grateful to members of the Advisory Committee: John and Joyce Allred, Ray Benton, Brian Gambles, Jo Hendry, and Margaret Kendall; to the three staff in our partner authorities who undertook the data collection and analysis, Deep Hunjan, Kate Turner and Claire Caution; to colleagues in the Department of Information and Communications at the Manchester Metropolitan University, especially Jenny Craven, who contributed to the earlier stages of the project; and to the Project Manager, Ms. Margaret Croucher. Any errors, misunderstandings or omissions are, of course, the sole responsibility of the authors.

Juliet Eve
Peter Brophy

Manchester
April 2001

Contents

Executive Summary	1
1. Introduction	4
1.1 Overall Aims	4
1.2 Objectives	5
1.3 Formative Evaluation	5
2. Background and context	7
2.1 Introduction	7
2.2 Internet provision	7
2.3 UK public library policy developments	8
2.4 UK government policy objectives	10
2.4.1 Lifelong Learning	11
2.4.2 Social inclusion	13
2.4.3 Modernising Government	14
2.4.4 Provision of ICT infrastructure	15
2.5 Conclusions	16
3. Public Libraries and ICT Services: Value and Impact	18
3.1 Introduction	18
3.2 Research context and areas of concern	20
3.3 User studies	23
3.4 Conclusion	23
4. The VITAL Methodology	25
4.1 Introduction	25
4.2 Preparatory stages	25
4.3 Testing the methodologies	26
4.3.1 Library users questionnaire	27
4.3.2 Non-users questionnaire	28

4.3.3	Interviews	29
4.3.4	Conclusions.....	29
5.	Results from the test implementations	30
5.1	Introduction	30
5.2	Library profiles	30
5.3	Library users	30
5.3.1	Survey administration.....	30
5.3.2	Initial analysis.....	31
5.3.3	Profile of respondents	32
5.3.4	Library use	33
5.3.5	Attitudes to ICT provision	34
5.3.6	Reasons for non-use of facilities	36
5.3.7	Use of facilities by ICT users.....	37
5.3.8	Value placed on access to ICT services.....	38
5.3.9	Conclusions.....	39
5.4	Non-users	39
5.4.1	Methods	40
5.4.2	Results	41
5.4.3	Results from the Birmingham non-users	41
5.4.4	Results from the Cheshire non-users	43
5.4.5	Results from the Cumbria non-users.....	44
5.5	Conclusions	45
6.	Conclusions and Recommendations.....	47
6.1	General.....	47
6.2	VITAL Methodologies	47
6.3	Evidence of Value and Impact	47
6.4	Recommendations.....	48

6.4.1	Implementation.....	48
6.4.2	Comparative findings.....	48
6.4.3	Longitudinal findings.....	48
6.4.4	Narrower focus.....	48
6.4.5	Broader focus – networked services	49
6.4.6	Broader focus – memory institutions	50
6.4.7	Value for money	50
6.5	Final Observations	50
	References	51
	Appendix 1 :Library Profile: Birmingham	A1
	Appendix 2 :Library Profile: Cheshire	A17
	Appendix 3 :Library Profile: Cumbria	A31
	Appendix 4 :Sample User Questionnaire (Cumbria)	A37
	Appendix 5 :Sample Non-User Questionnaire (Cheshire).....	A43

Executive Summary

The VITAL (Value and Impact of IT Use in Public Libraries) Project has developed transferable methodologies and gathered sample data to provide answers to the question, "What is the value and impact of the provision of end-user access to IT-based services in public libraries?". IT-based services in this context go beyond online public access catalogues to include access to the Internet, including the World Wide Web, email services, word processing and the like.

The background to VITAL lies in the rapid expansion of information and communication technology (ICT) based services in public libraries, led by a number of innovative authorities but given national impetus through a series of initiatives, notably the Library & Information Commission Report *New Library*. This expansion is taking place within the framework of a number of broadly-based government policy initiatives, including emphasis on lifelong learning for all citizens, on social inclusion and on modernising government. The roll-out of Internet access and other IT-based services has been accelerated through the work of the People's Network Team within Resource: the Council for Museums, Archives and Libraries, through funding for content creation, through a national training programme and through the allocation of funding for network infrastructure.

VITAL had a twin focus. Its main *raison d'être* was to produce methodologies which were capable of wide application in public library authorities and which would provide data on whether these developments offered value to users and had positive, or indeed negative, impacts upon them. By developing such methodologies, and successfully trialling them in three large authorities, the VITAL team succeeded in this first objective. The methodologies themselves have been published in a separate *Workbook*.

The second major focus lay in the gathering of indicative data to enable some conclusions to be drawn about value and impact. Clearly this effort could only be limited in scope: VITAL was a small, eighteen (+ five unfunded) month project which had a different major focus. Nevertheless the test implementations of the methodology gathered real data which, we believe, is sufficient to provide indicative answers. We argue that they *indicate* that where such services are available they are valued by their users, by public library users who do not happen, for whatever reason, to use those particular services *and* by citizens who do not themselves make use of the public library. While we are not in a position to comment on the value for money of the investment that has taken place, it is to date on such a modest scale that it would *appear* that investments are generating a significant value.

These summary findings are evidenced by the comments of individual users who were interviewed by us in each the participating authorities (Birmingham, Cheshire and Cumbria). Some of these comments are reproduced in the body of this Report, but the following give some idea of the general feelings which were expressed:

Libraries are the key to access for those without a computer at home.

Libraries should be modern and provide computer facilities as part of helping the community.

Users did, however, express the need for balance:

I still feel we need a good range of books. IT services must not take over.

Less than 1% of the library users and only 4% of the library non-users in our sample regarded ICT based services in the public library as unnecessary. The non-users were, indeed, highly supportive of these developments. Typical comments were:

Would use library if home computer not available.

Maybe in the future, when I have more time (e.g. when retire)

Having said that, there is evidence that non-users do not immediately think of public libraries as the place to go for Internet access, and that much greater efforts are needed to publicise these services:

I will use the libraries now....

Publicity required and advertise in community languages...

The Report concludes with a number of observations and recommendations, including the need for:

- ◆ widespread implementation of VITAL-style studies by library authorities to gather a broad range of data on value and impact in this area;
- ◆ further work to develop methodologies to enable comparisons to be made between authorities
- ◆ further work to ensure that findings are longitudinally valid;
- ◆ exploration of a narrower focus to examine how these issues vary at branch and local community level within an authority;
- ◆ emphasis on the challenges for local library authorities which arise from the provision of networked services through regional, national and international service groupings over which the individual library has little control;
- ◆ studies of the issues of value and impact within the broader range of memory institutions, and the appropriateness of particular IT-based services for each of these sub-sectors;
- ◆ work, within the Best Value and Annual Library Plan contexts, on the value for money of this type of service provision.

Overall, however, the VITAL team have drawn the conclusion that, on the evidence currently available, the provision of end-user IT-based services in public libraries has positive impacts on the communities and individuals served. This suggests that continued, and indeed accelerated, investment in such services would be justified.

1. Introduction

The VITAL Project was designed to develop and test methodologies for the assessment of the impact and value of end-user ICT services, including but not limited to Internet access, in public libraries and to disseminate this knowledge to policy makers and others. These methodologies were developed within the context of international and national work on performance measurement and service quality in electronic library contexts, of the Audit Commission's statutory framework for public library performance indicators, and of the work of CIPFA on public library statistics. The outcomes of the Project are both a set of methodologies for use by librarians and others for management purposes and to collect convincing evidence of use, impact and value; and evidence, drawn from the test implementations of VITAL methodologies carried out during the project, of the value and impact that end-user services can have. Both quantitative and qualitative approaches have been used in the project. The methodologies themselves are presented in a separate Workbook.

1.1 Overall Aims

The stated overall aims of the Project were:

- To develop and implement methodologies suited to the evaluation of end-user ICT-based services offered by public libraries;
- To gather and disseminate authoritative information on the value of such services and their impacts;
- To advise policy makers on the value and impacts of different services and of how values and impacts can be measured;
- To further develop UK expertise and leadership in this field.

The achievement of these aims would, it was argued, bring benefits to:

- *policy makers*, who would have access to methodologies and data which would enable the contribution of public libraries to the national lifelong learning initiative and to the networked information society to be assessed and evaluated. It would also underpin UK leadership of this area in the international arena;
- *public library managers*, who would have a new management tool developed in accordance with accepted standards to enable them to plan and evaluate services;
- *audit authorities*, who would have a standard methodology available to them to assess an ever-increasing proportion of services in public libraries;

- *customers of public libraries*, who would have meaningful information on the services available to them

- *collaborators with public libraries* (such as universities, further education institutions, businesses and the voluntary sector) who would have available information on the value, impact and range of services provided by their public library partners and thus on collaborative possibilities;

- *researchers and systems suppliers*, who would have a set of data and methodologies which would provide a basis for R&D activity in the development of services.

1.2 Objectives

The Project also developed some specific objectives which gave direction to its work. These were:

- To explore the current and emerging policy framework for ICT developments in UK public libraries;
- To explore the literature of end-user ICT in public libraries and of the evaluation of such services, supplementing the preparatory work undertaken in advance of the Project;
- To research appropriate methodologies for investigating these issues, with emphasis on methodologies which could be used by non-expert staff in public libraries and which were economic to apply;
- To develop selected methodologies into a standard VITAL set, and to document the approach;
- To train staff in the three partner authorities in the application of the methodologies;
- To apply the methodologies and analyse the results;
- To document the results of the test implementations of the methodologies;
- To assess the need for further work in this area;
- To disseminate the results of the Project.

1.3 Formative Evaluation

The Project took a self-critical approach and invited members of the Advisory Committee, and other experts, to evaluate approaches and findings and to

offer constructive feedback. The activity at the core of the Project, namely the development and testing of the methodologies, proceeded in an iterative manner so that findings could be fed back into the project as a whole. In addition, the project management methodology, with clear phases and milestones, enabled the project to remain on course and to deliver its results in a timely fashion. Dissemination, and not least the Expert Workshop held as part of the Project, provided peer feedback which was of immense value. In addition, the close involvement of senior managers from the three participating authorities ensured that current professional issues were given due consideration. Finally, the expert input of John Allred, who contributed to the Project in a consultancy capacity, provided a continuation with cognate developments, not least the *Open for Learning* work funded by the Department for Education & Employment.

In this way the Project paid attention to process, performance and impact issues and was able to modify its activities so as to maximise the learning that was achieved from them. A five-month non-funded phase at the end of the Project provided the opportunity to consolidate findings and reflect on their significance

2. Background and context

2.1 Introduction

Public libraries in the UK have been using information and communication technologies (ICTs) as far back as 1960 (Line, 1997), from online searching of databases to library management systems and, more recently, online public access catalogues (OPACs). Library staff have, therefore, become familiar with ICT-based systems for administrative purposes and, to some extent, with the use of ICT as a tool for answering users' queries (although it is worth noting that this second area was not widely developed in the public library sector until recently). It is probably the case that, certainly until the mid-1990s, only a minority of public library users would have experience of using computers. Since that date, however, public access to ICTs has grown rapidly in society and many people have started to use PCs in their work. During the second half of the 1990s particularly, developments in ICT provision, notably with the introduction of Internet access, have started to change the landscape of public library services within the UK (and elsewhere) with direct access to information sources, initially to an OPAC, becoming widespread. Increasingly the ICT-based services include Internet access. However, the picture remains very uneven, and to date little hard evidence has been produced as to the value of such services to their users. Equally, little evidence is available about non-users and the reasons why investment in public library ICTs does not always attract the use which is predicted.

2.2 Internet provision

Public libraries in the UK, then, began to introduce Internet access for members of staff and for the public during the mid-1990s. Such developments were, however, concentrated in a fairly small number of innovative authorities, and access – when it was provided – was often limited to library staff. Public access to the Internet, where provided, was usually a charged service and there was (and remains) some nervousness about allowing unlimited access, with some librarians installing blocking software in an attempt to prevent access to 'undesirable' content – an issue considered further in the next chapter. Budgetary and other constraints led to very slow development of these services in most authorities, although a few forged ahead rapidly. Croydon, for example, already known for innovative ICT developments such as CDROM networking, was one of the first to introduce end-user Internet access, doing so during 1994-95 through a British Library funded project (CLIP) designed to investigate the potential for such access in public libraries. Public Internet access within Croydon has grown enormously since then; Internet access is now available in all libraries in the borough, as well as in other community-based locations. The success of the CLIP project (Batt & Kirby, 1996) led to the establishing of Croydon Online, which is both a website providing information and services and a networking project which has formed partnerships with local organisations to extend access and provide innovative services (for example, in the areas of health and work) for the borough (Eve, 2000).

The example of Croydon has been replicated in other authorities throughout the UK, though provision and growth of services have taken place at different rates, leading to an inconsistency of provision within the country. This picture is changing, however, with the co-ordinated roll-out of infrastructure, training and content creation programmes currently being funded by the New Opportunities Fund (NOF), and overseen by the People's Network Team (www.peoplesnetwork.gov.uk).

What can be identified with certainty is that the rate of deployment of end-user ICT-based services is increasing rapidly. A 1995 public library Internet survey (Ormes and Dempsey, 1995) revealed that whilst 53% of public library authorities in the UK had some form of Internet connection, only 3% of individual service points offered access to the public. Just three years later the number of workstations with Internet access for public use had risen from 39 to 321, though the aim of making access in all service points available had not yet been achieved (Batt, 1998). More recent (2000) figures from the People's Network Team indicated that 89% of UK public library authorities had Internet access on at least one site, but only 21% of authorities had access throughout all sites. 41% of authorities had free Internet access in at least one of their libraries (People's Network Team, 2000). By April 2001, the position had advanced again, with 95% of authorities providing Internet access in at least one site and 32% access at all sites. In total, 6826 Internet access terminals were being provided at that date (People's Network Team, 2001).

These developments have been led by a significant shift in policy making within the public library sector, and have fed back into the decision-making processes at national and local level. At the same time, it has to be admitted that there has been something of a bandwagon effect, with libraries installing PCs and Internet access without fully articulating either the reasons or the implications of so doing.

The implications and potential of expanding library provision to cover access to and delivery of electronic services has in recent years been reflected both by policy documents and statements from the UK public library sector, and by government. These policy developments are not unique to the UK, of course, and are mirrored internationally, particularly in the developed world. However the UK context is considered next.

2.3 UK public library policy developments

In 1995, the Library and Information Commission (LIC) was established to advise government on policy development and provide a co-ordinating role across sectors. One of the first tasks for the LIC was to examine the potential ICTs have for the public library sector, leading to the publication, in 1997, of the vision statement, *New Library: the People's Network* (Library and Information Commission, 1997). The report begins by quoting from two previous publications: *Reading the Future* (Department of National Heritage, 1997) and *New Britain: my vision of a young country* (Blair, 1996) both of

which predict that the role of the public library will be central to the development of ICT-based services, in terms of access to both information and to future learning opportunities. The impact predicted for public libraries was the necessity for “re-equipping (libraries) and reskilling their staff so that they can continue to fulfil their widely valued role as intermediary, guide, interpreter and referral point” (Library and Information Commission, 1997).

Recommendations of the *New Library* Report, which are not reviewed in detail here, come under five headings:

- ◆ The development of a National Information Policy
- ◆ The establishment of a Public Library Networking Agency
- ◆ The development of content
- ◆ The delivery of content
- ◆ A public library staff training strategy

Dempsey (1998) identified content and services as the core of the *New Library* proposals and predicted that public library services of the future will serve:

- ◆ Education and lifelong learning
- ◆ Citizen’s information and involvement in society
- ◆ Business and the economy
- ◆ Training and employment
- ◆ Community history and identity
- ◆ A national digital library.

For the immediate future, perhaps the most significant of *New Library*’s recommendations were the establishment of a dedicated network, interconnecting all public libraries, and the setting up of a Public Library Networking Agency to implement a programme for developing content and services, network infrastructure and staff training. These initiatives were designed to create a step change in public libraries’ use of ICT-based services to ensure the delivery of network-based services through every branch.

Although produced independently, the Audit Commission report of the same year, *Due for Renewal* (Audit Commission, 1997), also recommended that a focus on technological developments would be a way for public libraries to open up access to their collections and services. The report identified five areas for public libraries to concentrate on: partnerships, use of ICT, costing of services, stock management and service planning. It provided further

backing for innovation and development, and helped ensure that *New Library* achieved due recognition from all sides.

The enthusiastic response to the *New Library* report from government (Department for Culture, Media and Sport, 1998), which included a pledge to provide £20 million for staff training and a further £50 million for the creation of digital content, led to the setting up of a number of task forces, concentrating on the implementation of the vision for a public library network, covering content creation, infrastructure, and training. The results of the task group considerations were published in a companion document, entitled *Building the New Library Network* (Library and Information Commission, 1998), which set out a detailed strategy for implementation of the network, including funding possibilities. The report also suggested that a body to oversee the implementation would provide the strategic focus needed; subsequently, the People's Network Team (<http://www.peoplesnetwork.gov.uk>) was established, initially as part of the LIC, and now working in the newly created *Resource: the Council for Museums, Archives and Libraries*. The People's Network Team is responsible for providing guidance and support to UK public libraries in the area of ICTs, and also co-ordinates and advises on the funding opportunities available.

The challenge and opportunities facing public libraries, articulated in *New Library*, have been identified by a number of organisations representing the sector, both internationally (e.g. UNESCO, 1994) and at European level (e.g. PubliCA, 1999), emphasising public library roles, particularly in the more formal provision of lifelong learning and access to electronic information and services. Within the UK, the LIC (before being merged into Resource) produced a number of policy statements and recommendations covering the role libraries have to play in delivering lifelong learning (Library and Information Commission, 1999) and in tackling social exclusion (Library and Information Commission, 2000a). Resource has held a conference on the *Empowering the Learner* Report (Library and Information Commission, 2000b) and DCMS and DfEE have produced official responses. Many of these developments in policy direction have taken place against a backdrop of significant governmental activity in similar areas, and we next briefly examine that area.

2.4 UK government policy objectives

Since the Labour government took office in May 1997, a series of policy statements and initiatives have been launched which not only provide a challenge for today's public library service, but, significantly, have indicated that the government expects the service to play an integral part in broader societal development, and is willing to provide some funding for this. The major policy directions are articulated in the statement *Our Information Age* (Central Office of Information, 1998) which set out the government's plans to exploit the benefits of the information age for all citizens in the UK. The key areas outlined in this paper and backed up by numerous other documents and initiatives, were:

- Lifelong Learning – the idea that each citizen needs to be learning throughout life. The encouragement of take up of learning opportunities and the expansion of access to quality materials would be crucial.
- Social inclusion – the concern that all citizens should be able to play a full part in society and enjoy a fair share of wealth and opportunity.
- Modernisation and delivery of government services, as set out in the *Modernising Government* White paper (Cabinet Office, 1999) and including a shift towards e-government.
- The expansion of ICT facilities, both as necessary for the delivery of learning and training opportunities, and as essential tools for citizens to thrive in the 21st century in terms of access to services, work, cultural and leisure opportunities.

As stated in *Our Information Age* (paragraph 32), libraries are well-placed to contribute to the achievement of the government's key objectives, by providing facilities for those who do not have access elsewhere and acting as community information centres:

Libraries also have a major part to play in widening access to essential services for those who could not otherwise afford them. Just as public libraries brought knowledge to many through books in the 19th century, they can do so through information and communications technology (ICT) in the 21st century.

Each of the above policy areas is next considered in this context.

2.4.1 Lifelong Learning

Lifelong learning has been defined as “a deliberate progression throughout the life of an individual, where the initial acquisition of knowledge and skills is reviewed and upgraded continuously, to meet challenges set by an ever changing society” (Brophy, Craven and Fisher, 1998). It is seen by governments throughout the world as an important contributor to national prosperity, particularly as we move from an agricultural and manufacturing society to one based on information and knowledge. The UK government has taken this issue very seriously, with a raft of green and white papers and various supportive initiatives.

Connecting the Learning Society (Department for Education and Employment, 1997) set out proposals for the development of national ICT connectivity, including the networking of all schools and other public sector institutions such as libraries and museums by 2002. The National Grid for Learning (NGfL) would be established to provide educational content and services, developed by private-public partnerships:

- Access to quality-assured online learning and teaching materials.

- A series of interconnecting networks to support learning, located in universities, colleges, schools and libraries.
- Advisory services.

A key role for libraries would be to act as a public access point to the Internet and to have skilled staff to guide people in the use of new technologies and to “deliver education and learning in its broadest sense” (Department for Culture, Media and Sport, 1998). Libraries would also be called upon to provide resources to support lifelong learning and to act as access points to resources relating to government and citizenship: to be a “key resource in the increasingly competitive cultural and service industries of the global information age” (Library and Information Commission, 1999a).

The Learning Age: a new renaissance for a new Britain (Department for Education and Employment, 1998) set out the government’s principles by which the demand for learning would be stimulated and delivered. These included:

- investing in learning to benefit everyone.
- lifting barriers to learning.
- the sharing of responsibility for learning between employers, employees and the community.

The paper set out the government’s plans to establish the University for Industry (Ufi, now known as LearnDirect), to create a nationwide open and distance learning network providing access to high quality learning packages, available at work, at home or in learning centres, using leading edge technology. The aim was to establish 1000 learning centres by 2001, locating them within schools, public libraries or community centres.

The following year, *Learning to Succeed: a new framework for post-16 learning* (Department for Education and Employment, 1999) outlined the government’s vision:

To build a culture of learning with will underpin national competitiveness and personal prosperity, encourage creativity and innovation and help build a cohesive society.

The paper set out the scheme for creating a Learning and Skills Council, which would work with others, notably the Ufi, the Campaign for Learning, and broadcasters to “champion lifelong learning for all” and to encourage the development of “learning businesses”.

The BBC, which already broadcasts a range of educational programmes and provides supporting materials through its website, has adopted the challenge of delivering lifelong learning as one of its key tasks (Dyke, 1999):

If we can deliver our vision the BBC will have made a major contribution to the learning society. If we don't, millions could be left without an education and, as a result, without a role and without a future.

The Learning and Skills Council is complemented by a network of local councils, in order that a focus on local planning and provision, and the addressing of disadvantage via targeting can be effectively managed. There are currently myriad schemes and opportunities at local level which provide and facilitate access to lifelong learning, including ICT learning centres and local learning partnerships.

2.4.2 Social inclusion

Social inclusion/exclusion and access issues have long been a key theme in debates about the emerging “information society”. The National Working Party on Social Inclusion (INSINC) set out to examine the impact of ICTs on local communities and investigate how technology could be used to achieve greater social inclusion in an Information Society. Their report, *The Net Result* (INSINC, 1997) stressed the potential of ICTs to tackle social exclusion and disadvantage, but emphasised also that the “factors which give rise to social exclusion are mainly economic...[requiring] social policy...to continue to confront and to overcome economic disadvantage”. Recommendations included:

- The establishment of a network of Community Resource Centres across the UK using appropriate bases such as schools, libraries and community centres. These centres must be publicly funded and based on sustainable business plans.
- The development of policy to stimulate the development of ‘neighbourhood areas’ in community networks and other local networking initiatives.
- The establishment of concerted efforts in the education and training sectors to improve levels of ‘information capability’, focusing on people’s ability to recognise information needs, to access information, and to exploit information.

In December 1997, the Social Exclusion Unit was set up by the Prime Minister, with a remit to help improve Government action to reduce social exclusion using ‘joined up’ approaches. The Unit set up 18 Policy Action Teams (PATs) to work on solutions to a range of interlocking problems (such as high levels of unemployment, crime and ill-health, and poor education) characteristic of poor neighbourhoods. A number of reports have been issued, including one looking specifically at the role of ICTs in fostering social inclusion, which indicates that libraries are important providers of ICT services and can therefore assist in “closing the digital divide” (Policy Action Team 15, 2000). The report recommends an increase in uptake of ICTs for providing community based facilities, and sets a target for April 2002 for ensuring that

deprived areas have at least one public access point. These facilities should be provided in “places where people naturally congregate”, libraries being a prime example (Policy Action Team 15, 2000:58). The Department for Culture, Media and Sport has produced a document focusing on the role of libraries in developing a “socially inclusive information society” (Department for Culture, Media and Sport, 1999:23), and suggests that libraries promoting ICT services to local communities in a number of ways, such as:

- ◆ IT awareness days.
- ◆ The development of community calendars.
- ◆ The management of discussion lists on local issues.
- ◆ The preparation of newsletters and multimedia documents about the neighbourhood.

Such initiatives, it is argued, would place public libraries at the forefront of action to promote social inclusion.

2.4.3 Modernising Government

The White Paper setting out the Government's programme for modernising Government (Cabinet Office, 1999) focused on five key commitments, including the use of new technology to meet the needs of citizens and business. It envisaged that libraries would act as one access point for these services. In the first Annual Report on the Modernising Government programme, the Minister of State identified the following key points (Cabinet Office, 2000):

- ◆ “a clear framework developed around the Government's policy goals;
- ◆ a focus on the user of government services;
- ◆ targets to drive forward change and delivery;
- ◆ the right delivery mechanisms. We work nationally and locally to bring together those who can most efficiently deliver the best results;
- ◆ becoming an e-government - not for its own sake but to improve and transform services;
- ◆ building on innovation;
- ◆ tracking progress across the board. Of course problems will occur. When they do, we need to intervene quickly and firmly. People depend on public services. We can't let them down;
- ◆ communications. We need to tell people what we are trying to do and report on progress. We need to listen to what service users are saying, to their priorities, their fears and their ambitions. And we have to ensure

that their views make a difference, feeding into the whole process from beginning to end;

- ◆ modernisation with a purpose, to deliver the results that matter and that will make a difference.“

The driving forces behind the initiative were restated in the same Report as follows:

- ◆ “The need for every organisation to improve continuously.
- ◆ Greater demand from citizens to be treated as customers and to get the results they need.
- ◆ A recognition that we need to embrace ever greater diversity in our society.
- ◆ New opportunities to transform services because of the spread of new technologies.
- ◆ Increased globalisation - enabling us to compare our performance with others, showing that bureaucracies can change.
- ◆ A realisation by politicians that showing the public sector that it is valued - and giving it the resources it needs to do the job effectively - will lead to better public services for all.”

The relevance of these issues to public libraries themselves is obvious: what is not perhaps as clear is the extent to which public libraries will be able to seize the opportunity to become the delivery point of choice for a variety of government services.

2.4.4 Provision of ICT infrastructure

The programme to deliver access to ICTs, for learning opportunities as well as to access information and services, has included a number of initiatives, and has been supported by a series of funding programmes, several of which apply to public libraries. One of the earliest was the Wolfson Libraries Challenge Fund, run in conjunction with the Department for Culture, Media and Sport, which in 1999-2000 provided just under £3,000,000 for ICT infrastructure projects, with a similar amount in matched funding from successful authorities. One of the participants in the VITAL project, Birmingham, was a successful applicant for Wolfson funding in 1997-98, 1998-99 and 1999-2000.

The Government’s initial response to the proposals in *New Library* promised financial support in the form of £20 million for basic ICT training for all library staff, as well as a fund of £50 million which would be available, via a bidding

system, for the development of digitised content. These schemes were funded by the New Opportunities Fund (NOF), and implemented with the assistance of the (then) Library and Information Commission. During 1999, the Community Access to Lifelong Learning (CALL) fund was announced, also funded by NOF. The programme contains three strands, which provide capital funding to:

- Support the development and running of a nationwide network of ICT learning centres with online access.
- Fund Community Grids for Learning, which will provide community-based content for adult learners.
- Support the People's Network, which will link up every public library to the Internet, community web sites and the National Grid for Learning. This strand of funding is only available to Public Library Services.

The last strand is currently being implemented on an allocation basis by the People's Network Team; this will do much to even out provision of ICT facilities throughout the UK (for further details on the specifics of the allocation of funding, see <http://www.peoplesnetwork.gov.uk/project/allocation.html>). In recognition of the fact that some library authorities have already achieved significant progress in this area, a challenge fund has been created for those more advanced libraries, to encourage innovation, particularly in the areas of sustainability and provision in rural areas.

In addition to the CALL funding, public libraries are eligible to apply for funding under the DfEE sponsored Learning Centre initiative (Capital Modernisation Fund), which is designed to create learning centres in areas of social deprivation. Around £250 million is available for the establishment of 700 learning centres. As these monies are aimed at organisations not already receiving similar funding, public libraries are not able to apply for infrastructure funding from the scheme, but are eligible to apply for funding for improvements to buildings housing ICT Learning Centres, if these are in the specified areas of social deprivation.

The Bill and Melinda Gates Foundation has also donated funding (\$4 million in total to date) for 46 ICT training labs in libraries based in deprived areas, providing also two PCs in a further 320 libraries in deprived areas. This money is being rolled out alongside the CALL People's Network funding.

2.5 Conclusions

The environment in which the modern public library is operating is emphatically one of extensive and rapidly increasing use of information and communication technologies. Government has the expectation that ICTs will be used to deliver an increasing range of its services, while the commercial sector is offering more and more of its products in the same way. Users of services, whether or not they are users of public libraries, are becoming

increasingly ICT-literate, although there is a significant proportion of the which is suffering exclusion for a variety of reasons.

The potential role of the public library has been recognised in a range of government initiatives and funding is starting to follow policy as libraries become equipped with the hardware, software, network access and staff skills needed to enable them to play a full part in these changes. However, to date there is little evidence as to whether this investment in public libraries is generating value for money and having an impact on the citizens which it is intended to benefit. The VITAL project was designed to play a part in gathering initial indicative evidence and, more importantly, developing and testing methodologies to enable public library authorities to undertake this work themselves. Within the context of Best Value and the new Public Library Standards, such studies will undoubtedly be an essential part of their management strategies in the future.

3. Public Libraries and ICT Services: Value and Impact

3.1 Introduction

As Chapter 2 indicates, government policy seems likely to ensure that ICT facilities for public use in UK public libraries will expand rapidly in the next few years, providing a network of access to information, learning opportunities and other services. Strategic priorities such as social inclusion and lifelong learning have enabled public libraries to claim a role as key delivery points for ICT access, and they have been successful in attracting considerable funding from a variety of initiatives.

Much of the capital funding for ICT infrastructure has come from sources external to core library funding. It seems unlikely that this trend will continue in the long term, however, and the funding of maintenance and replacement and upgrading will therefore be a long-term issue. Thus, in addition to the need to provide evidence to central government of the value and impact of ICT-based services, library managers will increasingly need to persuade local policy makers and elected representatives that libraries offer value for money locations for ICT-based public services – both in absolute terms and in preference to other possible service points. Measures and indicators will need to be developed and implemented to provide managers, funders, and policy makers with reliable information about the uses made of these services and how they contribute to national and local government social, economic and other agendas.

The UK government has become more proactive in introducing formal reporting requirements for public libraries in recent years. Current measurements of library performance, as required by the Audit Commission and as part of Annual Library Plans, tend to be quantitative measurements and still focus on the traditional elements of library services such as numbers of service points, book issues, etc. The Department for Culture, Media and Sport library standards consultation paper, for instance (DCMS, 2000), whilst recognising that “ICT development is a key issue” concentrates on standards which “recognise the importance and popularity of print-based services and community resources”. Community resources are, of course, increasingly electronically delivered; however, only two ICT standards were suggested, one relating specifically to the provision of online catalogues (OPACs), the other being a figure for total number of workstations (7 per 10,000 population) *including* OPACs. The final standards document for England, published in February 2001, revises this figure *downwards* (to a minimum of 6 per 10,000) although the Welsh standards retain the earlier proposed level. The final version also expands the definition of ‘workstation’ to include those terminals with access to the Internet, although this is not a compulsory requirement. The document points out that all static service points are expected to provide public Internet access by the end of 2002 (Department for Culture, Media and Sport, 2001).

Whilst it is valid to state that the provision of ICT services is still very much in the developing stages, these do seem a little unambitious even for those libraries still to benefit from significant investment in this area. The standards

also include a measure relating to annual visits to a library's web site, although the DCMS acknowledges that no data is yet available to set this particular target (it will be defined as the top quartile of all authorities). However, it is notoriously difficult to gather such data reliably, or to interpret it in any meaningful way, as "hits" to a web site do not directly relate to individual instances of use and may reflect success in promoting the URL to search engines more than anything else. Far less do such statistics reveal anything significant about satisfaction, usefulness of the information retrieved, etc.

There are, however, signs of a growing awareness that some other forms of evaluation, particularly of a qualitative nature, are required to genuinely assess value and impact of all public services, rather than just levels of provision or service performance. Thus the Audit Commission performance indicators for 2000/2001 (Department of the Environment, Transport and the Regions, 1999) include the assessment of satisfaction levels of customers (those seeking a particular book or piece of information). Since customer satisfaction is at the core of quality management, these shifts can be taken as indicative of an increasing concern with the quality, as well as the quantity, of provision. As part of local government, libraries are required to participate in the ongoing Best Value programme, placing "a duty of best value on local authorities to deliver services to clear standards - by the most economic, efficient and effective means available" (Audit Commission, 2000). Best Value will be a continuous process of service improvement and includes consultation with users as a key component, something with which public libraries are very familiar (Liddle, 1999).

The library and information service sector itself has also been active in developing appropriate performance indicators. Within the EQUINOX project (Brophy, 2001a) there was a concerted pan-European effort to identify a set of performance indicators for the electronic library, to complement the traditional library set published in ISO11620 (International standards Organisation, 1998). The EQUINOX set was intended to be applicable across all library sectors, although it was recognised that some variations might be necessary to provide for regional and local differences. The final set (although still subject to development, and likely to be issued by ISO as a Technical Report) was as follows:

- 1. Percentage of the population reached by electronic library services*
- 2. Number of sessions on each electronic library service per member of the target population*
- 3. Number of remote sessions on electronic library services per member of the population to be served*
- 4. Number of documents and entries (records) viewed per session for each electronic library service*
- 5. Cost per session for each electronic library service*

6. *Cost per document or entry (record) viewed for each electronic library service*
7. *Percentage of information requests submitted electronically*
8. *Library computer workstation use rate*
9. *Number of library computer workstation hours available per member of the population to be served*
10. *Rejected sessions as a percentage of total attempted sessions*
11. *Percentage of total acquisitions expenditure spent on acquisition of electronic library services*
12. *Number of attendances at formal electronic library service training lessons per member of the population to be served*
13. *Library staff developing, managing and providing ELS and user training as a percentage of total library staff*
14. *User satisfaction with electronic library services*

The final indicator reinforces the point that measuring quality of provision is of increasing importance. Further details of the EQUINOX approach are available at the project web site at <http://equinox.dcu.ie/>.

These developments combine with an increasing interest from public library authorities themselves, particularly in light of a focus on more formal provision of lifelong learning opportunities and development of ICT learning centres, in finding ways of demonstrating the value of what public libraries provide and the impact of, particularly, ICT services on the individuals and communities using them.

3.2 Research context and areas of concern

One of the key issues for public libraries is, therefore, that of proving that they are the most suitable location, or at least one of the best placed, for ICT services to be accessed. Library usage figures interpreted broadly do support the claim that the public library is indeed a “democratic” institution, open to all:

Public libraries are already used by 58 per cent of the population. They are a first stop for information, they are widely used by children and young people as an adjunct to formal learning, and their reputation for supporting the knowledge-seeker is unparalleled. Their unique combination of resources, services and personal support attracts some 1.3 million visitors every working day, and 10 million users visit frequently - at least once a fortnight. Library staff respond to over 50 million enquiries each year, on a universal range of topics. (Library and Information Commission, 1997).

A policy statement from the Library and Information Commission on libraries and social exclusion (Library and Information Commission, 2000) stated that:

By their very nature libraries and information services already embody the values necessary to contribute to a socially inclusive society.

However, the evidence to support such statements is at present mixed. Research such as that carried out recently by Leeds Metropolitan University into how and if libraries specifically tackle issues of inclusion provides a challenge to the image of the library as an inherently “democratic” institution (Muddiman *et al.*, 2000). Previous research has highlighted, for instance, that service provision for those from ethnic minorities may be less than satisfactory. The *Public Libraries, Ethnic Diversity and Citizenship* study (Roach & Morrison, 1998) found, for instance, that the “public library service has not yet managed to engage freely with ethnically diverse communities”, and that its structure “is restrictive in terms of service access and denies ethnic minorities a stake in the public library system.”

One of the recommendations of this report related specifically to information technology, arguing that ICT would “become increasingly important ... and ... extend access and choice,” but warning that ethnic minority communities which do not currently use public libraries may not have access to new technologies:

Efforts should be made to lock community sector organisations into the growing information technology networks and to develop the capacity of those organisations currently seeking to address needs not being met by the public library service. (Roach & Morrison, 1998:173).

Projects such as those typically receiving awards in the annual UK “Libraries Change Lives” scheme also indicate that librarians are becoming increasingly aware of the need to target and address the needs of specific groups within their communities (Library Association, 2000). These projects often involve the use of ICT.

It has also been suggested that behind these problems lies the issue that public libraries are trying to become “all things to everybody” (Comedia, 1993) delivering traditional core services (such as book lending), taking on a variety of other roles *and* becoming ICT learning centres within their communities. Kinnell and Sturges (1996) comment:

At the heart of the issues surrounding public libraries, from their inception up to the present day, has been an imprecise formal definition of their role. Should they be a medium of education and instruction, an information source, a cultural focus for communities, or an addition to people’s leisure pursuits through the lending of fiction? ... There is so much that (public) libraries do and so much that they could do.

It is not surprising that some researchers have questioned the perception that ICT access points *automatically* belong in libraries, suggesting that libraries

may not always be best placed to tackle some issues such as levels of user comfort with the technology or training needs, and, specifically, challenge the claim that libraries are the ideal – or only – location for such services.

Just as problematic to the library system's claims to being the most appropriate site for public internet access is the terms in which such claims are made. In addition to showing they are well trusted and frequently visited public sites the argument is usually made that libraries' core mission is information provision and that computers and the internet are merely the current means through which such needs can be satisfied. Thus the World Wide Web is sometimes described as simply a large library. Analogies are frequently employed to suggest that new technologies are merely new means of doing familiar things. Such forms of argument are undoubtedly powerful but do have a number of limitations. Specifically they underplay the significance of the combination of elements and the qualitative developments that occur through the use of a new medium. They also tend to ignore 'those forms which are not in any obvious way derivative, and which can be usefully seen as innovating forms' of the media itself. By using such analogies to justify placing the technology within the remit of an organisation associated with one of the earlier forms, libraries risk exaggerating these tendencies by stressing some aspects of the use of the internet over others. (Liff, Steward & Watts, 1999).

In support of this, the same authors comment that whilst librarians are comfortable with use of the Internet as an information or research facility, there exists some discomfort with other uses (e.g. email, chat rooms), although these services are usually allowed. This is certainly a justified analysis, as is evidenced by discussion on the lis-pub-lis email discussion list (archives available at: <http://www.mailbase.ac.uk/lists/lis-pub-lis/>) about "appropriate" use of Internet facilities, with some libraries seeking to restrict use to "serious" use.

As we do not charge, we feel that we have more rights to determine how the system should be used, and with limited facilities, prefer that the Internet is used to access information, whereas email is often used for informal chat and its use and content may be open to abuse. Although Internet users have to sign our terms and conditions of use, which state that they cannot use email, it is an area of confusion for members of the public and quite difficult for staff to enforce. The email element of the program has been omitted from the public access browser, but use of HotMail is very difficult to spot. If we see someone obviously typing in more than usual, a quick glance over their shoulder and a quiet word is usually sufficient. We are also attempting to prevent the access to HotMail in the first place through the use of CyberPatrol, by identifying it as a forbidden site. (Walters, 1998).

The introduction, and apparent endorsement by some professionals, of a policing function over access to content and services raises all manner of concerns which go well beyond the scope of this Report. However, we note that, unless handled carefully, attempts to restrict or even censor access

could undermine libraries' attempts to be seen as the access point of choice and certainly as 'value free' agencies. As yet there has been little public debate on this issue, but the stance librarians take could be critical in determining the roles they play in the future. And, as Brophy, Craven and Fisher (1999) point out, "it would be easy to over-react and introduce censorship when the extent of the problem may merit a less draconian approach".

3.3 User studies

Coles' (1998) study of UK public libraries identified evidence of a "wide and disparate group of library users who in turn displayed a variety of attitudes toward IT". It revealed that attitudes were generally positive towards the use of computers, and that people were concerned that without regular access to ICT they would be unable to keep abreast of technology. The study identified public libraries as being the only viable option of access to ICT for some. Coles concludes that "public libraries have successfully promoted the book and reading since their inception. A continuation of that success must be in the promotion of the benefits of computers, in particular digital information sources and community networks". (Coles, 1998: 41).

More recent research carried out by Sheffield University and Somerset Training and Enterprise Council has suggested that "developments in information technology have resulted in some confused perceptions of the public library service" (Lilley and Usherwood, 2000). For example, members of the public were "led to believe inaccurately that a member of staff would guide them step by step" through the *Computers Don't Bite* initiative created by the BBC and available in many public libraries. The research also found that a "book based perception of the library service persists", yet "changing perceptions and higher expectations in terms of the provision of new technology" were also evident.

This lack of clarity on the part of the public about the role of the library is not surprising. As an institution, the public library has for 140 of its 150 years' existence been primarily concerned with providing reading and information materials in print, and is still in its infancy when dealing with electronic materials and services. However, users in the above survey expected libraries to provide more ICT in the future and considered this a valid role "even if they themselves did not like it very much." The emphasis on providing a core and much valued book-based service, yet also delivering access to ICT services seems set to last, particularly as government initiatives in the lifelong learning area, delivered largely via ICT, continue to develop.

3.4 Conclusion

While many reports, and many commentators, have urged that the public library be seen as the natural home for public ICT, including Internet, access,

the evidence to support this contention is at best mixed. The confusion which has been noted in public perceptions of libraries' roles is evident also in a number of policy statements, which offer a series of possible contributions (to lifelong learning, to social inclusion, to information access and so on) without clearly articulating how these are to be achieved. Too often, for example, statements about public libraries' role in education reveal a lack of understanding of learning itself. Librarians must not be afraid to acknowledge that education involves far more than access to information – even when that information is presented in an ultra-modern medium – and that their services can only provide part of the environment needed to make lifelong learning flourish. The ability to demonstrate a deep understanding of pedagogy would greatly help librarians make their case. (For a more extensive treatment of this issue see Brophy (2001b)).

Clearly considerably more work is needed to establish both an achievable model for the public library of the future and to equip it to deliver old and new services using old and new media in an integrated fashion. To inform policy makers, it is important that there is reliable information available on the value and impact that ICT-based services can and do have. It is to that issue – and the core of the VITAL Project – that we now turn.

4. The VITAL Methodology

4.1 Introduction

As stated in Chapter 1, one of the key aims of the VITAL project was to develop a set of methodologies to enable evaluation of the impact of ICTs in public libraries, and the assessment of their value to end users. The methods were designed to be straightforward to implement for public librarians who may not have extensive experience of carrying out research, yet robust enough to provide useful data which could, with careful interpretation, be compared between different library authorities. The three library authorities chosen to pilot the methods which were developed reflect the different circumstances of authorities across the UK: Birmingham, an inner-city authority with a multi-ethnic population; Cheshire, a more rural authority, with some large towns and a population reflecting a diversity of economic circumstances; and Cumbria, a large, rural county authority with some very small libraries serving a population dispersed over wide geographical distances.

These three library authorities piloted the methods developed in the initial stage of the project, and the results from those studies fed into the final methods, collected together in the *Workbook* which is the companion to this report. This section, therefore, does not contain detailed descriptions of the final methods, but reports on the process of the project and the testing of the methodologies by the library authorities. The results obtained from those test implementations are reported in Chapter 5.

4.2 Preparatory stages

During the first phase of the project the team examined methodologies being used elsewhere to obtain information about library value and impact. As noted earlier, most of the data collected systematically has been quantitative in nature, although there is a more recent trend towards the inclusion of measures of user satisfaction, which – while expressed quantitatively – represent a qualitative dimension. The *Best Value* process, for example, places a duty on local authorities to consult with their clients and to take into account their views on service performance.

It is also noticeable that in assessing the value of library services there has been something of a trend towards the recording of ‘rich pictures’ of use. These are individual accounts of the value and impact of interaction between a user (or sometimes group of users) and a library service. They are indicative and must be used carefully, for no one interaction can tell the whole story of a library’s service performance. Nevertheless, when used as part of the story, and when their evidence is triangulated with other evidence, they form a valuable input. An early example of their use can be found in the report, *Open & Distance Learning in Public Libraries* (Brophy et al. 1996).

The conclusion reached in this stage of the work was that the methodologies should enable the collection of both quantitative and qualitative data, and that among the latter there should be encouragement to collect statements (whether positive or negative) from library users and non-users, in which they express their views, preferably in their own words. It has to be recognised that impacts are personal, especially when they concern learning which is itself an intensely personal experience. By collecting a representative range of such opinions and looking for common threads, the researchers aimed to build up an overall picture of user perspectives on value and impact. To set this evidence in context, each library would provide a background profile document describing its services, the availability of end-user ICT services, etc. The resulting portfolio of data would enable evidence to be cross-checked and conclusions drawn.

On the basis of these observations, the team developed a detailed evaluation plan and devised a first draft of evaluation instruments. Again, readers are referred to the *Workbook* for details of these.

4.3 Testing the methodologies

Each library authority seconded an existing member of staff to work half-time on the project for a period of six months, beginning in July 1999. The members of staff had a variety of previous research experience and varying levels of responsibility within their library, reflecting the different contexts within which the methodology proposed would be utilised. At the beginning of the test phase, the researchers were invited to an initial training day, at which they were given the initial draft 'workbook' of methods, consisting of some introductory material about conducting research, a proposed questionnaire for library users and another for library non-users, and an interview schedule. Discussion throughout the day gave the researchers and the VITAL team the opportunity to refine the questions and to raise any particular issues relating to the implementation of the methods. The questionnaires and interview schedule were further circulated within the project's Advisory Committee before being finalised and printed for distribution to the three authorities. As the researchers had varying experience of carrying out this type of project, the workbook was designed to provide a directed approach to the research. Guidance on how to conduct interviews, for example, was provided, as well as specific examples of quantitative data to be collected (for example, number of PC workstations available, number of PC hours booked per week) for inclusion in the background context to be provided. Again, this approach was designed to fit the reality of library staff across the country attempting to apply the VITAL methodologies at a future date.

Throughout this phase, the researchers were provided with ongoing support in the form of additional appendices to the workbook (for example, guidelines on data entry of questionnaire results), site visits, and regular email and telephone contact.

The methods developed for the test implementations consisted of the following:

- background context: the collection of baseline qualitative and quantitative data about the demographics of each library authority as well as the provision, and where possible, use of ICT services;
- a printed questionnaire, distributed to library users;
- a questionnaire to non-users, either asked on a face-to-face basis or over the telephone;
- a series of semi-structured interviews with existing ICT users.

4.3.1 Library users questionnaire

After the standard questions were agreed upon, some additions or slight alterations were included for each authority, dependent on the particular context. For example, it was agreed that questions relating to library OPACs would not form part of the standard questionnaire (since OPACs were not universally available), but one authority inserted a section relating to its newly-introduced computerised OPAC as it seemed an ideal opportunity for this evaluation to be undertaken. These variations were regarded as an essential part of the methodology: the data must primarily focus on the local situation rather than forcing services into an artificial, and therefore sometimes misleading, standard framework.

Five hundred questionnaires were distributed to each library authority, which then made its own decisions about the number and location of library sites to include in the research. This ranged from four sites in Birmingham and Cheshire to six sites in Cumbria, with each site receiving a number of questionnaires proportionate to its size and opening hours. The distribution methodology adopted was very similar to that recommended by the existing CIPFA PLUS surveys. [CIPFA (Chartered Institute of Public Finance and Accountancy) has developed the PLUS (Public Library Users Scheme), which distributes a standard questionnaire and methodology to member library authorities (67% of all authorities were members in 1998) to assess user levels of satisfaction with library services.] It was felt that this approach would be familiar to the libraries involved and to future users of the methodology – and has already proved to be successful. However, as this was a pilot, aimed at testing the validity of the methodology and the effectiveness of the questions, it was felt that 500 questionnaires would be a sufficient sample, and the library authorities were not required to issue the numbers usually required using CIPFA calculations (based on the number of library visits to a given site per week). Consistent with CIPFA implementation guidelines, authorities were encouraged to number the questionnaires, and distribute them within a range of time slots during the week which would facilitate as diverse a representation of users as possible.

4.3.2 Non-users questionnaire

Again, a set of standard questions was developed for surveying non-users within each authority. However, the methods selected for administering the survey varied between the authorities according to local circumstance and resources available. Again, this was a deliberate decision taken with the aim of securing replicability in a wider-scale roll-out. Each authority was encouraged to aim for a target of 300 non-user responses; this proved to be very challenging within the timescale of the testing phase (6 months). Cumbria was, in fact, able to undertake the survey on this scale, due to assistance from their Information and Intelligence Team within the County Council. A telephone survey, using the VITAL questions, and drawing on an existing database of known library non-users was undertaken on behalf of the library. For Birmingham and Cheshire, who did not have access to these resources, reaching the target number proved much more difficult. One of the recommended approaches from the VITAL team was the “street survey” approach, which was used in Cheshire with some success in the larger towns, such as Chester, but proved to be very time consuming in smaller areas. Thus, Cheshire finally used a combination of this approach and a method which involved targeting employees of the County Council via email and inviting them to complete the survey by telephone. Birmingham felt, for various reasons, including staff safety, that the “street survey” would be inappropriate, and opted instead for a targeted method of contacting groups who are currently under-represented amongst library users. A list of community groups catering for a range of people was drawn up and groups contacted and visited. The researcher was then able to conduct the questionnaires and engage in some profile-raising and promotion of library services. It was noted, however, that this method would not provide a sample which was necessarily representative of the population as a whole.

This part of the research proved to be the most difficult for those authorities without access to the type of database resources and assistance available in Cumbria (where, again, it was felt that the street survey approach would be inappropriate, due to the size of towns, and the vast distances involved in surveying across the County). It was felt, however, that this was an important part of the research, as it not only provided the opportunity to contact non-users and promote library services to them, but also to ascertain whether the introduction of ICTs would encourage some non-users to begin taking advantage of library services. Developments during the course of the VITAL project, such as the introduction of Best Value, indicate that this type of community consultation will become increasingly important. Furthermore, by linking VITAL-type questions into other consultative exercises, some of the difficulties experienced by the researchers would be removed.

4.3.3 Interviews

One of the aims of the VITAL project was to encourage the collection of qualitative data in library authorities, in order to supplement quantitative figures about ICT usage and non-usage with detailed 'rich pictures' of individual use, able to demonstrate more clearly the *value* of such services as illustrated by the voices of the users themselves. It was thus considered very important that a series of semi-structured interviews be carried out with existing ICT users across the three authorities. The use of an interview schedule assured consistency of approach, yet allowed sufficient flexibility for individual researchers and interviewees to explore areas most relevant to themselves. A total of 107 interviews were carried out with ICT users, varying in length from 15 to 40 minutes. The interviews were taped in Birmingham and Cheshire, but not in Cumbria, where notes were taken which were later typed up. Although not specifically required as part of the VITAL methods, Birmingham and Cheshire also organised some focus groups, in order to include the views of younger users, who, it was felt were heavy users of the ICT facilities, but who could not be included appropriately in the interviews.

It was recommended that, where taped, the interviews should be fully transcribed before analysis. Due to time constraints, both the transcription and the full analysis proved to be difficult to complete, so a method was devised to speed up the process but allow for meaningful analysis to take place. Data relating to each question was grouped together so that it could be considered across the range of interviews, and any themes identified. Given more time, each library authority would have liked to have developed their analysis further, as the initial results proved to be highly informative and useful when illustrating the value of ICT services to those outside the library service. This kind of data collection does require considerable time and resources but is a highly effective way of illustrating the impact access to such services can have, for individuals and communities, beyond the 'dryness' of usage figures.

4.3.4 Conclusions

The results from the test implementations of the methodology proved to be highly instructive; overall, the methods selected were appropriate and yielded useful data. On the basis of this learning changes were made to the questionnaires and incorporated into the final *Workbook*. Where difficulties were experienced, this was largely due to time or resource limitations; conducting research of this nature, especially incorporating the commitment to qualitative data collection and analysis, will require both time and staff resources, but can prove to be very rewarding and highly instructive. It also has to be recognised that few library authorities can dedicate staff to this work, so that staff training for those for whom this will be just one part of their duties also becomes a significant issue. Nevertheless, it will become increasingly necessary to undertake such exercises if the value of the People's Network is to be demonstrated as it rolls out and develops over the next few years.

5. Results from the test implementations

5.1 Introduction

In presenting the results obtained during the VITAL project it is important to emphasise that they derive from a trial application of the developing methodology. Although initial piloting had taken place, the implementation of the methodologies was intended to provide feedback to enable them to be refined and clarified: it was not the roll-out of a finished product. Nevertheless the results were real: they were not simply a pilot exercise, but took significant samples of users in each authority and conducted data gathering and analysis rigorously. Thus the three participating library authorities surveyed their users and non-users systematically and gathered data which proved of immediate value to them.

The purpose of this section is to present a summary of that data, and in so doing to demonstrate to a broader audience that evidence of both the value and the impact of these services is available. At this stage we would suggest that the evidence presented here should be treated as *indicative* of value and impact, not as a final or definitive statement.

5.2 Library profiles

The first stage of the methodology (see the *Workbook* for details) involved the collection of baseline data to provide a profile of the library authority and its services. It is important that results are read in the context of the profile: for example, it tells the reader about the extent of ICT provision and, to give one example, whether charges are made for access to the Internet. We did not attempt to prescribe the exact format for baseline reports, believing that it was better to allow the staff concerned to describe their library services, and their context, in their own way. We did, however, provide headings to indicate the scope of the profile and the areas it should cover: these are set out in the *Workbook*. There was, of course, discussion of the profiles which were produced and some modifications were made to clarify aspects of the services. The profiles developed for Birmingham, Cheshire and Cumbria are reproduced, in a slightly edited form to fit with the content of this Report, in Appendices 1-3.

5.3 Library users

5.3.1 *Survey administration*

A draft questionnaire designed for completion by library users was included in the *Workbook*, and discussed during the training day. As noted in the previous Chapter, the standard questions were agreed upon, but some additions or slight alterations were included for each authority dependent on the particular context, and each authority made its own arrangements for

distribution. The target agreed was that staff would attempt to distribute 500 questionnaires to library users in each authority: again it is worth stressing that this sample size was adequate to test the methodology and to give *indicative* results, but was not necessarily the full sample that would be required when the fully-developed methodology was applied in practice.

The methods adopted for distribution proved very effective. Thus, the response rate from Cheshire was extremely high (92% of 459 distributed, across 4 library sites), from Birmingham also high (78% of 500 distributed, across 4 library sites), although less so in Cumbria (48% of 500 distributed, across 6 library sites). Variations in the way questionnaires were handed out within individual libraries as well as regional differences account for the different response rates; high response rates were achieved where questionnaires were handed to individual users and a place was provided for users to complete them. Overall, however, this was a successful approach in many respects: it enabled useful data to be gathered across all the authorities; it was familiar to staff in the authorities and could therefore be delegated to branch libraries; and because it involved frontline staff it ensured that awareness of the project was high.

5.3.2 *Initial analysis*

Results from the questionnaires were entered into a Microsoft Access database; the majority of questions (an example of the full questionnaire - from Cumbria - is provided in Appendix 4) yielded quantitative data about library usage, ICT usage and attitudes to ICT, but some open-ended questions were also included to allow respondents the opportunity to indicate reasons for their views. These questions yielded useful qualitative data, which provided some valuable insights into attitudes to ICT provision in libraries from library users who were users and from those who were non-users of the facilities.

Overall, 1041 questionnaires were returned, and out of these users, 231 (54 in Cheshire, 42 in Cumbria and 135 in Birmingham) indicated they used the ICT facilities in the library (not necessarily on that visit and excluding the OPAC), an overall usage rate of 20%. The individual percentage rates for each authority varied however, between 13% in Cheshire, 36% in Birmingham, and 18% in Cumbria. These results suggest that the use of ICT services is a minority interest at present, although – especially in Birmingham – a significant one. The reasons for non-use, as we shall see in section 5.3.6 below, are various and include the availability of access elsewhere, lack of interest and lack of knowledge about how to use the facilities. These findings seem to suggest that library users are *less* likely to be ICT users than the general population. For example, MORI estimated that 36% of the general population were Internet users in December 2000 (MORI 2000); clearly a considerably higher percentage will have computer access although figures for this are not as readily available. This fact may indicate that targeting libraries for ICT expenditure will be a useful strategy within the government's social inclusion agenda by providing significant numbers of non-ICT users

with a comfortable place to learn about and practice the use of new technologies.

All results presented below are based on the 231 responses from ICT users, and 810 responses from non-ICT users. All figures are percentages and represent the numbers of respondents answering any individual question.

5.3.3 Profile of respondents

The three sites selected for the trial reflect the different types of library authorities within the UK – an urban, inner-city authority (Birmingham); a rural authority with high levels of tourism but also relatively large towns (Cheshire); and a very rural authority, geographically large and diverse with low population levels compared with the rest of England and Wales (Cumbria). The following tables present a breakdown of the respondents by gender, age, and occupation.

	Male	Female
Birmingham	56	44
Cheshire	43	57
Cumbria	44	56
All 3 authorities	48	52

Table 1: questionnaire respondents by gender (percentages)

As can be seen from Table 1, there was a fairly equal balance between men and women, although the pattern in Cheshire and Cumbria of more women than men is reversed in Birmingham, which had a higher number of male respondents.

	Under 16	16-35	36-55	55+
Birmingham	8	57	19	16
Cheshire	3	27	38	32
Cumbria	3	21	36	40
All 3 authorities	5	35	31	29

Table 2: questionnaire respondents by age (percentages)

The age profiles for Cheshire and Cumbria are again similar, whilst the age profile of Birmingham is considerably younger (Table 2). Over half of all Birmingham respondents were aged between 16 and 35, whereas Cheshire and Cumbria had a more equal spread but more respondents in the higher age brackets. Although not shown in the table, more detailed analysis

revealed that the proportion of over 65s in both Cheshire and Cumbria was significantly higher than in Birmingham; a fifth of all respondents in both of the more rural authorities were over 65, compared with just 8% in Birmingham.

	employed	unemployed	student	retired	other
Birmingham	35	17	33	11	4
Cheshire	48	7	9	30	5
Cumbria	40	7	11	37	5
All 3 authorities	41	10	18	26	5

Table 3: questionnaire respondents by occupation (percentages)

As can be seen from Table 3 above, the largest group in each authority was made up of employed people (full-time, part-time, or self-employed), although this group was a smaller percentage in Birmingham than the other two authorities. Birmingham had the highest percentage of unemployed respondents (17%). The second largest group in Birmingham, almost as large as the employed group, was students, who represented 33% of the sample. Student representation in Cheshire and Cumbria was roughly a third of that in Birmingham. The second largest group in both Cheshire and Cumbria was retired people, making up 30% of the Cheshire sample and over a third (37%) in Cumbria, which reinforces the previous figures on age categories of respondents.

In both Cheshire and Cumbria, an overwhelming proportion of respondents (93% and 94% respectively) were white, whereas Birmingham boasts a multicultural, multi-ethnic population. The ethnic background of Birmingham respondents reflects this diversity; a slim majority (52%) of respondents was white, with the second largest groupings being Pakistani (16%) and Indian (13%). Other ethnic backgrounds represented included Black Caribbean (5%), Bangladeshi (2%), and Chinese (2%).

The profile, then, of Birmingham library users is significantly different than that of the more rural authorities. Users are ethnically diverse, younger, and more likely to be unemployed or students than users in Cheshire and Cumbria, where there are larger numbers of older and retired users and slightly more women represented than men.

5.3.4 Library use

All respondents were asked to indicate their main use of the library. In Cumbria and Cheshire, the overwhelming response was book related (e.g. borrowing of books, reading for pleasure, etc.), with very few instances of another main use. For example, in Cheshire, out of 360 comments, only 3 specifically related to ICT, and a further 12 indicated study or research as the main use. Similarly, in Cumbria, out of 214 comments, 4 were ICT related,

and a few again indicated study or research. In Birmingham, however, main uses identified correspond to the higher instance of ICT use indicated, and far more respondents indicated ICT related main uses of the library. Out of 364 comments, 127 respondents (35%) indicated use of CD-ROM, email, or the World Wide Web as their main use of the library. A further 43 indicated study or research as the main use, which is undoubtedly a reflection of the high percentage of students completing the questionnaires in Birmingham. These figures may also reflect the general demographic patterns of Internet use, which indicate that older people are less likely to be Internet users than younger people, and as has been noted above, the breakdown of age groups within the three test sites shows significantly higher numbers of younger respondents to the questionnaire in Birmingham and larger numbers of older people in Cheshire and Cumbria.

5.3.5 Attitudes to ICT provision

All respondents were asked to rate the importance of providing computer facilities in public libraries; 96% across the three authorities rated this as very or quite important. When asked to consider whether ICT facilities are: a) vital; b) an add-on service; or c) an unnecessary expense, again very few users (around 4% across the three authorities) considered them unnecessary, mostly due to the belief that people already had their own PCs, and therefore did not need to access such services in the library.

Table 4 summarises the opinions of all respondents on the provision of ICT facilities:

	ICT as vital	ICT as add-on	ICT as unnecessary
Birmingham	63	35	3
Cheshire	43	54	4
Cumbria	45	51	4
All 3 authorities	50	47	4

Table 4: Views of ICT provision (percentages)

Half of those answering overall (50%) considered ICT facilities as a vital service, although this varied between authorities, being higher in Birmingham (63%), and representing less than half in Cumbria (45%) and Cheshire (43%). Aside from the 3% regarding facilities as unnecessary, the remainder (47%) considered provision of facilities an add-on service; this again was different over the three sites, being a majority opinion in Cheshire (54%) and Cumbria (51%) but representing just over a third of responses in Birmingham (35%). Respondents were requested to give views to back up their answers, and the majority did. Typical responses from those considering ICT facilities as vital were:

It is growing increasingly important in modern society and access for all is essential.

*Future developments will render access to computer/Internet facilities vital for isolated communities for educational and economic reasons.
[Comment from Cumbria]*

Libraries are the key to access for those without a computer at home.

Libraries should be modern and provide computer facilities as part of helping the community.

IT is part of a remit of libraries to provide information or to direct people to a source for information.

Interestingly, many respondents who indicated ICT as an add-on service also articulated similar comments, particularly about access for those without their own computers, but some also raised issues concerning the balancing of ICT with traditional services:

The main raison d' être of a library is its collection of books...

Provided it is not at the expense of more traditional methods.

Most people have access to computers outside of the library, but few people have access to such an array of books.

A library is mainly for lending books so anything else is a bonus.

I still feel we need a good range of books. IT services must not take over.

What is interesting about these results is the level of importance placed on ICT provision by library users who, for various reasons, do not actually use those services themselves. Among ICT users, as would be expected, ICT was perceived as vital by the majority (70%, averaged across the 3 authorities, representing the views of 215 ICT users). In Birmingham, this was the view of over three quarters of IT users (79%), and of over half in both Cheshire (57%) and Cumbria (56%). Non-ICT users were also highly supportive of the provision of ICT facilities. Just over half (51%) across all three authorities considered ICT as an add-on service, but a significant number (45%) considered it vital. Again, Birmingham respondents indicated a stronger level of support; a majority of non-users (53%) considered ICT to be vital, compared with less than half in Cheshire (40%) and Cumbria (45%). ICT as an add-on service was the majority opinion in Cheshire and Cumbria (56% and 51% respectively), whilst representing 43% of the non-users in Birmingham. These figures are summarised in tables 5 and 6 below:

	ICT as vital	ICT as add-on	ICT as unnecessary
Birmingham	79	21	0
Cheshire	57	41	2
Cumbria	56	44	0
All 3 authorities	70	30	0

Table 5: views of ICT provision by ICT Users (percentages)

	ICT as vital	ICT as add-on	ICT as unnecessary
Birmingham	53	43	2
Cheshire	40	56	4
Cumbria	45	51	4
All 3 authorities	45	51	4

Table 6: views of ICT provision by ICT non-users (percentages)

Despite the regional differences, the figures indicate a high level of support for ICT facilities in libraries by both users and, significantly, non-users, in line with the findings of the Usherwood and Lilley (2000: 19) who found that 82.5% of their respondents agreed or strongly agreed with the statement “information technology is a challenge that the library world needs to face if it wants to be relevant to the next generation”.

The greater emphasis on, and higher indication of usage of, ICT facilities in Birmingham compared with the two more rural authorities may be a result of a number of factors, including

- Free access to ICT facilities throughout Birmingham libraries;
- The different needs of a multicultural, multi-ethnic urban population;
- The greater representation of younger people, and students in particular, within the Birmingham sample;
- A wider network of educational institutions within the Birmingham area, resulting in a higher concentration of learners and therefore a greater need for access to supporting ICT services.

5.3.6 Reasons for non-use of facilities

Table 7 below illustrates the reasons that ICT non-users do not use the facilities available; the main one being the availability of access elsewhere.

Other respondents indicated they had no interest in using the facilities or did not know how to. Despite this lack of knowledge, very few respondents indicated that a lack of available help was the reason for non-use. In Cheshire and Cumbria, there is evidently a high awareness of the facilities provided by the library, although Birmingham users seemed to be less aware of offered services, with 15% indicating their reason for non-use was not knowing the services were available. There was a very high non-response rate to this particular question in Birmingham; out of 245 non-ICT users, 73 (30%) did not indicate a reason for non-use.

	Didn't know available	No interest	Don't know how	Access elsewhere	No help available	Other
Birmingham	15	20	16	42	4	3
Cheshire	4	28	17	47	1	3
Cumbria	3	31	20	39	2	5
All 3 authorities	7	26	18	43	2	4

Table 7: Reasons for non-use of ICT facilities (percentages)

5.3.7 Use of facilities by ICT users

ICT users were asked to indicate their main use of the facilities, out of a choice of a) to support a course of study, b) leisure/general enjoyment, and c) independent learning/research. Table 8 below presents the results of this question; the figures are in percentages and indicate the totals out of the numbers of respondents who answered the question (some respondents indicated more than one option). A small percentage of replies in each authority fitted into the "other" category. Their main uses were job related (either seeking work or using the facilities for work), and keeping in touch with family and friends (using email).

	Course of Study	Leisure	Independent Learning and Research	Other
Birmingham	21	19	25	8
Cheshire	17	26	30	7
Cumbria	21	41	24	14
All 3 authorities	20	29	26	10

Table 8: Main use of ICT facilities (percentages)

The majority of ICT users also had access to facilities outside the library (65% in Birmingham and Cheshire, and 55% in Cumbria), mostly at home, although

access was also available at work or at an educational institution. So, although non-users of ICT in the library were most likely to give “access elsewhere” as their reason for non-use, the majority of those using library ICT facilities do so despite having access to ICT at other locations.

5.3.8 Value placed on access to ICT services

When asked to indicate the *value* of having access to ICT facilities in the library, many users gave reasons that had already been picked up in other parts of the questionnaire. These included “only,” “free,” or “most convenient access,” as well as research and general information needs. The question, “How would the withdrawal of computer facilities affect you?” yielded answers which gave greater insights into the value and impact of ICT access for this group of users. Over 80% of ICT users answered this question, and although some indicated that loss of the facilities would not affect them particularly badly, many would be quite negatively affected, either having to find access elsewhere, paying (more) for access, or having to travel to find access. Although most users indicated in fairly straightforward terms that they would have “no other access to computers,” or would “have to find other facilities,” some had more ‘emotional’ responses, such as

This is UNTHINKABLE!!

I would have to give up my course and be devastated.

Others gave reasons relating less to the physical access to the technology, and more concerned with what they were able to do with it:

Harder to look for work.

I would feel isolated and I would no longer be able to communicate with friends easily.

[Would] lose social contact with friends from 20 European countries ... cultural isolation.

As well as affecting people’s ability to access information for reference and study, the comments indicate that the availability of email facilities is very important for social communication as well as for job seeking. Whilst the research by Liff et al. discussed in Section 3.2 above indicated that some librarians are unhappy with use of the Internet for email, it appears to be a popular application with public library users. Although the data for the breakdown of ICT applications used is unavailable for the Birmingham test, results from Cheshire and Cumbria (representing 96 ICT users) showed that 33% had email addresses, and 20% in Cheshire and 26% in Cumbria used email facilities, with 59% and 48% respectively also using the World Wide Web.

5.3.9 Conclusions

The results above illustrate that libraries are becoming increasingly important as locations for accessing ICT to support a range of activities, from formal study to job seeking to building and maintaining social networks using the Internet. Patterns of usage will probably continue to vary across the UK as the needs and priorities of different regions are accounted for. As illustrated by the VITAL test implementation results, support for, and use of, ICT facilities in public libraries may be different in urban and rural areas, where patterns of library use overall reflect the age and occupation of users and, thus, their different priorities. In Birmingham the pattern of a younger, more educationally active library user population emerges, where people associate the library with access to ICT, and use and support these services. Conversely, Cumbria library users reflected a pattern of more traditional use, with higher numbers of older users, giving more significance to book-related services. Further results from the VITAL methodologies (the revised and updated workbook has been distributed to twenty library authorities) may reveal whether the results of the VITAL Project tests are duplicated across the country.

As government initiatives to deliver services and lifelong learning programmes develop and come on stream, and as the roll-out of the People's Network continues, libraries increasingly will be supporting a whole range of users in making the most of these opportunities. Evidence suggests that libraries *are* popular locations for ICT facilities and that support for fulfilling this role is very high amongst public library users, whether or not personal use is made of the services on offer. Public libraries are still in their infancy with regard to providing and developing electronic services and have some significant challenges to face, particularly in the areas of sustainability and widening access to currently excluded groups, but the enthusiasm and vision is certainly there. The evidence from VITAL would suggest that the public library service does have the potential to deliver the key aspects of the government's agenda in tackling social exclusion, in providing ICT facilities within communities, and in supporting learners. Continued evaluation of the use and impact of the services will be an essential component in developing the facilities and support that users require.

5.4 Non-users

In addition to surveying library users, it was agreed by the VITAL team and Advisory Committee that it was important to gauge the views of non-users. A separate methodology was devised to achieve this, using a number of methods of sampling the population as a whole.

5.4.1 Methods

A standard questionnaire for non-users was drafted and agreed with the three partner authorities, and included in the workbook. Guidelines for recording the answers, along with answer sheets, were provided at a later stage after discussion of the questionnaires themselves and the process for administering them. Each authority was asked to attempt to survey 300 non-users, although this proved an ambitious target to reach within the timescale of the test implementations. Different approaches to administering the questionnaire were taken in each authority, reflecting the local circumstances. For example, in Cumbria, it was felt that the "street survey" approach (i.e. a member of staff stopping members of the public at random and asking questions of them) would not be appropriate, as this would be very time consuming and yield poor results, particularly as time was of the essence and many of the streets in Cumbria can be rather quiet. Consequently, the library enlisted the help of the Information and Intelligence Department of the County Council to carry out a telephone survey, using the VITAL questions, and making use of an existing database of non-library users. This proved very successful, and 300 responses were obtained. Using this method also provided a high level of confidence in the sample achieved.

In Cheshire, the "street survey" method was used, with varying degrees of success dependent on the area. In Chester, a busy city with a high number of tourists, workers and shoppers, a relatively high number of responses was achieved. In other areas of the county however, the results were not as high. The researcher in Cheshire found this method difficult to implement by herself, both as it was time consuming and as it was very hard work undertaking it alone. It also has to be admitted that it does not necessarily produce a representative sample of the total population.

Finally, because the number of respondents was low and the task was proving so time-consuming, alternative methods were explored. Thus, in addition to the "street survey" approach, workers within the County Council were contacted via email, and those indicating interest answered the questionnaire via a telephone interview. Again, while this method was acceptable for the experimental purposes of the Project, it would be less so as a systematic survey of the population of non-users as a whole.

In Birmingham, the decision was made not to use the "street survey" approach, partly for reasons of staff safety – which is likely to be a consideration in any large conurbation. There was a lot of emphasis on reaching non-users of library services from particular community groups, and the approach selected reflected this aim. A list of community groups was drawn up, and users from those groups approached and asked to complete questionnaires. The organisations selected included health centres, a Bangladeshi Youth group, community and leisure centres, and centres where different user groups go to access IT facilities. The organisations were contacted by telephone, and permission requested from managers to use the questionnaire with people who visited their centres. All the managers who were contacted were very supportive of the approach and gave their assent

ands cooperation. Again, we note that the sampling was not necessarily representative of the non-user population as a whole.

Despite the different approaches, and the varying degrees of success (in terms of numbers of non-user responses), all three library authorities agreed that this had been an important part of the overall methodology. It had the secondary benefit of enabling them to bring awareness of the library, and in particular ICT services, to non-users, and yielded useful data regarding potential use of ICT services in the library. Although surveying non-users is acknowledged as a difficult, time-consuming and sometimes frustrating process, it is recognised that it can be beneficial in improving and developing both library services and the way services are marketed to different groups within the community served.

5.4.2 Results

Very different results were achieved in the three authorities for this part of the VITAL project. The approach taken by Cumbria proved to be highly successful in terms of reaching the target number. This method was however unavailable for the other two authorities, who struggled to meet the target; Cheshire collected data from 111 non-users, and 134 non-users were interviewed in Birmingham. Due to the different approaches taken to implementing the questionnaire, comparisons of results across the three authorities is problematic. This section therefore describes the results from each authority separately, and also comments on any significant differences or similarities.

5.4.3 Results from the Birmingham non-users

Women represented 65% of the total Birmingham non-user respondents and men 35%. The largest grouping by age was the 16-25 year old category (32%), the smallest being the over 65s (11%). The other respondents were fairly evenly spread across the remaining age categories, although there was only one under-16 respondent.

27% of the respondents were in full-time work, with a further 16% employed part-time, and 4% self-employed. A fifth were retired while students and those unemployed both accounted for 12% of respondents. 10% indicated they had a disability. A majority (52%) were white; almost a quarter (24%) were Black Caribbean; 8% were Bangladeshi; 6% were from Indian backgrounds; a further 6% were from Pakistani backgrounds.

Out of the 134 responses from Birmingham non-users, 56 (42%) were existing IT users, using computers mainly for leisure purposes (36 out of the 56 [20% of the total]), and for educational purposes (32 of the 56 [18%]), but less often for work (26 of the 56 [15%]). The most popular use was word-processing, with 88% indicating that as an application used, followed by spreadsheets and

email (50% indicating email use). Many who didn't currently use the Internet indicated they would like to. The vast majority (three quarters of ICT users) had access to facilities at home, with just over half able to use facilities in an educational establishment. 41% also used computers at work.

All respondents were asked about training needs, and asked to indicate where they would go to get ICT training as well as where they would *ideally* like to have access to training. The most cited place to access training (40 respondents out of 134 [30%]) was a college, followed by a training centre; only three respondents suggested the library. However, when asked about ideal access to training, college and at home were the most popular answers. Just over half of the respondents (54%) were aware that libraries had computer facilities, and 69% indicated they would use those facilities. The main reasons for considering accessing ICT in the library were that provision is free, and that libraries are a convenient site. Others indicated that libraries had better resources than other available access points, including support (both staff and other materials), and that the library is a place they would go to for learning. 41 respondents (31%) indicated they would *not* use ICT facilities in the library; reasons given were that they already had access at home, they had no need or interest in using computers, or that they did not know how to. When asked which services they would like to have available, almost half the respondents (65 of 134 [49%]) indicated basic training, and a further 21 (16%) would like advanced training. Roughly a third would like to see provision of Internet facilities and open learning opportunities.

Comments given by the non-user group suggest that the library is not automatically associated with access to ICT facilities, although comments indicate that people are in need of training and advice:

I would like to learn about computers...

One to one training in the libraries....

Other respondents indicated a need for greater, and targeted, publicity of the services on offer:

Publicity required and advertise in community languages...

One of the additional benefits of this data gathering exercise was to promote the library amongst the groups contacted, thus encouraging better use:

I will use the libraries now....

This was identified as something libraries could well benefit from doing more of:

Come out more to school/playschemes and promote the library service...

The overall picture, then, is of non-use of library ICT services being caused partly by availability of access elsewhere (usually at home), partly by there

being no recognised need on the part of these people for such services and partly by lack of awareness of the facilities available.

5.4.4 Results from the Cheshire non-users

A total of 111 respondents were surveyed in Cheshire, with the breakdown by place and method of approach as follows:

- ◆ 85 in Chester [76%]
- ◆ 1 in Congleton [1%]
- ◆ 8 in Crewe [7%]
- ◆ 13 by phone to Cheshire County Council workers – they could live and work anywhere in the County [12%]
- ◆ 4 at John Moores University – Cheshire residents on courses there [4%]

The overwhelming majority of respondents were white (96%), and there were slightly more women represented than men (57% of the total). A fifth of response were in the 16-25 age brackets, and almost a fifth (19%) in the 35-45 range. The rest of the respondents were distributed fairly equally between the other age ranges, although as in Birmingham, the under 16s were not significantly represented (only two respondents). Over a third of respondents were in full-time employment (35%), with a further 18% in part-time employment, and 4% self employed. More students were represented in Cheshire than in Birmingham (17%), the same percentage (21%) of retired people, but far fewer unemployed (only 3% of the total number). 8% of respondents identified themselves as disabled. Cheshire was the only authority with a significant number of non-residents represented in the non-user survey, the total being 33%.

58 (52%) of the Cheshire respondents were computer users, using them, as in Birmingham, primarily for leisure purposes (71%), closely followed by work (67%) and a half using them for educational purposes. When asked to indicate a main use, a third of respondents indicated work. The same percentage as in Birmingham (88%) indicated they used word-processing; this was again the highest use. Roughly two thirds also used spreadsheets and email, with 55% using the World Wide Web. Other uses included Internet discussion groups, databases, desk-top publishing and one instance of 'home shopping'. Most users again used computers at home (78%), and 67% also used them at work, a higher percentage than in Birmingham. Just over a quarter used PCs at an educational establishment (compared with just over half in Birmingham).

67 respondents (60%) were aware that libraries had computers, and 52% indicated they would use them, indicating a slightly higher awareness, but less

interest in using the library's facilities. Reasons why current non-users would use library ICT facilities included the pragmatic, such as:

Maybe, if the library had something that I didn't have e.g. expensive software package.

Would use library if home computer not available.

Maybe in the future, when I have more time (e.g. when retire).

Others were slightly more resistant to the idea of using computers at all:

Would use if could think of a reason to use computers.

If I were interested in computers I would use them in the library - but I'm not!

As in Birmingham, some respondents indicated that they might like to use the library to learn more about ICTs, showing that there may be an important role here for libraries:

Especially if there were someone available for help, to give advice and assistance.

Maybe, if I were shown how to use them, I might be interested.

Interestingly, only one respondent indicated that the cost of access in Cheshire was a barrier:

I would, if it were free.

Those indicating they would not use the library's facilities cited access elsewhere (mostly at home) as a major reason, but also that they had no interest or did not know how to. A few older people felt that computers were "not for retired people like me", or that they were "too old to learn now". Of the applications Cheshire respondents would like to have available, Internet access was the most popular (71%, compared with roughly a third in Birmingham). Half would like basic training (as in Birmingham), and a further 28% advanced training (compared with 16% of Birmingham non-users). 41% indicated they would like to access open learning facilities.

5.4.5 Results from the Cumbria non-users

A total of 300 non-users were interviewed by telephone, using an existing database held by the County Council to randomise the sample. A majority (57%) of respondents were women, and the age group 26-35 represented almost a quarter of all respondents. The other respondents were evenly spread between the other age brackets, except (as with Birmingham and Cheshire) the under 16s; only one respondent fell into this age group. 44% were in full-time employment, with a further 11% part-time employed, and 4%

self-employed (the same figure as for Birmingham and Cheshire). A slightly higher proportion than in Birmingham and Cheshire (28%) were retired, and only 1% were students (compared with 12% and 17% in Birmingham and Cheshire respectively). Almost a fifth of respondents (19%) indicated they had a disability.

Ninety-four of the 300 respondents were computer users, a lower percentage (31%) than in Birmingham or Cheshire. Over two-thirds (69%) used PCs for work, with over half (57%) also using them for leisure purposes, and roughly a quarter (26%) for educational activities. The main use was for work (53%). As with Birmingham and Cheshire respondents, word-processing was the most used application (77%), with over half (56%) using spreadsheets and email (54%). Other uses people indicated they would like to make of information technology included using the Internet, personal banking, and home education. Two-thirds of respondents used PCs at home, and a similar number (64%) at work. Unlike Birmingham and Cheshire, very few respondents (4%) accessed facilities in educational establishments. Cumbria respondents indicated they would learn more about using computers at work or night school, although home and college would be ideal locations. Over half the respondents (56%) were aware that libraries had computer facilities, although under half (43%) indicated they would use PCs in the library. The main reasons for using library would be if access at work or home were not available, convenience, and the additional information available in a library setting. Those who wouldn't use the library already had access elsewhere, had no interest in using PCs or cited inconvenient opening times. A third of respondents would like to have basic training available in libraries (a lower percentage than in Birmingham and Cheshire), just under a quarter would like to have the Internet available, and 21% would like to see open learning facilities.

5.5 Conclusions

While it is necessary to be extremely careful about the conclusions which should be drawn from what were limited exercises, designed primarily to test methodologies, the results reported in this chapter provide indications of the value and impact of providing IT access in public libraries. These indicative results might be summarised as:

- ◆ Between an eighth and a third of public library users make some kind of use of IT-based services, excluding the OPAC, in libraries where such facilities are available.
- ◆ Non-use of IT-based services by library users is caused by a mix of:
 - availability of facilities elsewhere
 - lack of interest in using IT
 - lack of knowledge of and skill in IT use

although there is no significant antagonism to the provision of such services in public libraries by those who do not use them.

- ◆ Nearly all public library users support the provision of end-user IT facilities in the library and a significant percentage (overall half of those surveyed) go further and state that such services are a vital part of the public library services they would like to see made available.
- ◆ A significant proportion of the actual and potential use of IT facilities by library users is focussed on standard, mainstream applications such as word processing, searching the Internet and email. This last is worth special note given that there is evidence that some library professionals are opposed to providing email facilities. A noteworthy issue here is the finding that some users rely on the library as their access point to a communications medium which helps them keep in touch with friends and relatives in distant regions and countries.
- ◆ Those who do make use of the IT-based facilities are often horrified at any suggestion that such services could be withdrawn – this ‘negative’ questioning suggests that such users place very real value on the services they are using.
- ◆ Non-users of libraries do not automatically associate the public library with IT access, although a significant proportion are aware that such services are offered. There are a mix of reasons for non-use among this sample, including:
 - the availability of access elsewhere, often at home
 - lack of skills and knowledge, and the time to acquire them
 - lack of interest
 - for a minority, inconvenient opening times.

6. Conclusions and Recommendations

6.1 General

The VITAL Project achieved its aims through its programme of work and with the help and commitment of very many people: the project team, including the seconded library authority staff; the Advisory Committee; librarians and researchers who commented on interim methodologies and results; members of the public who participated in the surveys. As a result we have been able to develop a methodology which is suitable for widespread adaptation and have gathered sufficient indicative evidence from three very different library authorities to draw at least tentative conclusions on the value and impact of end-user IT-based services in public libraries.

The VITAL methodologies fit well with other work in the field: with the CIPFA PLUS approach; with the new public library standards; with international work in the EQUINOX and various US-based research and development programmes, and with the wider agenda and procedures associated with 'Best Value'. This battery of approaches can help to further elucidate questions of value and impact and guide strategic and tactical planning and service delivery. We comment below on the further work which we believe is still required in this area.

6.2 VITAL Methodologies

The methodologies developed and tested during the Project have been documented in the *Workbook* and provide a basis for any public library authority to assess the value and impact of the end-user IT-based services it is providing, and to identify which services in particular would be valued by users and potential users.

In developing these methodologies we have been aware of the very limited resources available to authorities and the need to engage in monitoring and evaluative activities which themselves offer value for money. We have also been aware that many authorities will need to gather data as part of their mainstream activities and will not be in a position to appoint specialists to undertake this work for them. We have therefore produced an approach which is capable of application by trained librarians who are not, however, trained statisticians or market researchers. Where such expertise is available, however, we would urge that it should be used.

6.3 Evidence of Value and Impact

By testing the VITAL methodologies in three library authorities we were able to gather direct indicative evidence of the value and impact of providing end-user IT-based services. The results of this work are reported in Chapter 5 above and will not be repeated here. However, we can summarise these

findings by stating that they *indicate* that where such services are available they are valued by their users, by public library users who do not happen, for whatever reason, to use those particular services *and* by citizens who do not themselves make use of the public library. While we are not in a position to comment on the value for money of the investment that has taken place, it is to date on such a modest scale that it would *appear* that investments are generating a significant value. Whether such value could have been generated had the investment been made elsewhere, we are not in a position to comment.

6.4 Recommendations

6.4.1 Implementation

We would wish to encourage wide implementation of the VITAL methodology and would suggest that DCMS/Resource might consider how incentives can be developed to encourage authorities to undertake such studies. Discussions have taken place with IPF in which the project team have indicated that they would have no objection to VITAL methodologies being adapted for incorporation in CIPFA-PLUS work.

6.4.2 Comparative findings

We make no claims for comparability of the results of VITAL studies between authorities at the present stage, since there are very many variables involved (such as different charging policies, different availability of facilities and so on). Where we have drawn comparisons we have stressed that these must be regarded as only indicative. It follows that more work is needed to establish the basis for comparative findings between authorities.

6.4.3 Longitudinal findings

Within the scope of VITAL it was not possible to undertake repeat studies in order to build up reliable time series results. We look to EARL's *Longitude* project to provide methodologies to achieve this and to establish the robustness of VITAL methodologies over time. At the time of writing we note that one useful mechanism may be to use a 'rotating' focus group or interview group, such that membership changes slowly over time. This would provide continuity while helping to ensure that familiarity with the reasons for undertaking these exercises, and with the questions, did not bias the participants' responses.

6.4.4 Narrower focus

We have not explicitly attempted to make in-authority comparisons within the scope of the Project, although there are suggestions from the results that the populations served by different branches may have very different characteristics *vis-à-vis* IT use and the attractiveness of the public library as

an access point for this type of service. It would be useful to explore this narrower focus in some sample authorities.

6.4.5 Broader focus – networked services

Evaluating the provision of access to networked services will increasingly require evaluation of services provided regionally, nationally and internationally as well as those which are under the direct control of the library authority itself. A parallel can be drawn with the experience of the academic library sector, where the development of the Distributed National Electronic Resource (DNER), including the Resource Discovery Network (RDN), means that the quality of service received by any one end-user is dependent on a range of service providers to a much greater extent than was the case in the past. For the local library authority this means, among other considerations:

- ◆ that the service must be managed as a ‘hybrid library’ through which end-user services are treated as an integrated whole. Library managers must seek to move away from the idea that there are ‘IT-based’ and ‘traditional’ services to a seamless approach to meeting their users’ information needs;
- ◆ that services developed locally must interoperate with services available regionally and nationally. This puts the onus on the library manager to ensure that appropriate standards and protocols are being observed;
- ◆ that all local services must be planned within these broader contexts, and that the sustainability and scalability of services must be considered from the broader and not purely local perspective from the start;
- ◆ that local library authorities must seek to influence the provision of networked services, through the People’s Network Team and other mechanisms;
- ◆ that cross-sectoral library provision (i.e. involving public, academic, national and other library services) must be considered. For example, the current feasibility study into the provision of a UK National Union Catalogue could have far-reaching consequences for public library service provision.

Mechanisms need to be found to allow the public library sector to address all of these issues effectively. Clearly Resource has a major role to play in co-ordinating such discussions. The lack of a body which can parallel the work of the academic sector’s Joint Information Systems Committee (JISC) must not be allowed to diminish the services which public libraries are able to offer to their users.

6.4.6 Broader focus – memory institutions

Given that there is increasing interest in bringing together, at least in planning terms, the various ‘memory institutions’ (libraries, museums, archives, galleries etc.), it would seem useful to explore public perceptions of IT-based services in general, and Internet access in particular, through such institutions. While it is undoubtedly the case that all such institutions will increasingly use ICTs to display surrogates of their collections and will use the Web to promote and deliver their services, there must be a question mark over the appropriateness of providing general Internet access through every such service point. This perhaps reinforces the point, made earlier in this report in respect of public libraries, that greater clarity of purpose (which includes a clear understanding of what will not be done as well as what will) would be hugely beneficial.

6.4.7 Value for money

VITAL was not designed to discover the value for money or cost-benefit of investments in IT services. This is a major issue which would require expert input from economists and others. There are no recent, reliable studies of the value for money of library investment in general, although Best Value moves us in this direction. We would suggest that this issue might best be explored through examining the linkages between Best Value studies, Annual Library Plans and available measures of service delivery and user satisfaction, the last including work based on VITAL.

6.5 Final Observations

The overall impression which the VITAL Project team gained from these studies was that citizens, whether active users of the public library or not, value IT-based services as an appropriate, and many would say, essential part of the portfolio of services which are offered by public libraries. This suggests that continued and indeed increased investment in such services should be considered by all library authorities as a high priority. At the same time, they should gather evidence which will help them justify and plan such services and demonstrate to policy makers and the public at large their value and impact.

References

- Audit Commission (1997) *Due for renewal: a report on the library service*. London: Audit Commission.
- Batt, C. & Kirby, H. (1996), *CLIP: Croydon Libraries Internet Project*, British Library Research & Innovation Report 13. London: British Library Research & Innovation Centre.
- Batt, C. (1998) *Information technology in public libraries*. 6th ed. London: Library Association.
- Blair, T. (1996), *New Britain: My Vision of a Young Country*. London: Labour Party.
- Brophy, P. (2001a) Performance indicators for the electronic library. *SCONUL Newsletter*. Spring. (In the press)
- Brophy, P. (2001b) Networked learning. *Journal of Documentation*, 57(1), pp. 130-156.
- Brophy, P. et al. (1996), *Open distance learning in public libraries*. Luxembourg: Official Publications of the European Commission.
- Brophy, P., Craven, J. and Fisher, S. (1998), *The development of UK academic library services in the context of lifelong learning*. London: LITC.
- Brophy, P., Craven, J. and Fisher, S. (1999), *Extremism and the Internet (British Library research & Innovation Report 145)*. Manchester: CERLIM, The Manchester Metropolitan University.
- Cabinet Office (1999), *Modernising Government*. London: The Stationery Office, available at: <http://www.citu.gov.uk/moderngov/whitepaper/4310.htm>.
- Cabinet Office (2000), *Modernising Government: 1st Annual Report*. London: The Stationery Office, available at <http://www.cabinet-office.gov.uk/moderngov/anreport/index.htm>.
- Central Office of Information (1998), *Our Information Age*. London: Central Office of Information.
- Coles, C. (1998) 'IT in public libraries: seeking out the user's perspective'. *Library and Information Research News (LIRN)*, 22 (70), pp.35-42.
- Comedia (1993), *Borrowed Time?: the future of public libraries in the UK*. Bournes Green: Comedia.
- Dempsey, L. (1998) 'Soul and song: New Library: the People's Network', *Ariadne*, Issue 12, available at: <http://www.ariadne.ac.uk/issue12/public-libraries/intro.html>.

Department for Culture, Media and Sport (1998), *“New Library: the People’s Network”: The Government’s Response*. London: DCMS, available at: http://www.culture.gov.uk/heritage/new_library.html.

Department for Culture, Media and Sport (1999), *Libraries for all: social inclusion in public libraries*. London: DCMS, available at: www.culture.gov.uk/heritage/search_frame.asp?Name=/heritage/lib1.html.

Department for Culture, Media and Sport (2000), *Comprehensive and Efficient Standards for Modern Public Libraries: A Consultation Paper*. London: DCMS, available at: http://www.culture.gov.uk/heritage/library_standards.html.

Department for Culture, Media and Sport (2001), *Comprehensive, Efficient and Modern Public Libraries – Standards and Assessment*. London: DCMS, available at: http://www.culture.gov.uk/heritage/libraries_papers.html.

Department for Education & Employment (1997), *Connecting the Learning Society: National Grid for Learning*. London: DfEE, available at: <http://www.dfes.gov.uk/grid/consult/index.htm>.

Department for Education & Employment (1998), *The Learning Age: a new renaissance for a new Britain*. London: DfEE, available at: <http://www.lifelonglearning.co.uk/greenpaper/index.htm>.

Department for Education & Employment (1999), *Learning to Succeed: a new framework for post-16 learning*. London: DfEE, available at: <http://www.dfes.gov.uk/post16>.

Department of National Heritage (1997), *Reading the Future*. London: DNH.

Department of the Environment, Transport and the Regions (1999), *Best Value and Audit Commission Performance Indicators for 2000/2001: Volume One: the performance indicators*. London: DETR, available at: <http://www.local-regions.detr.gov.uk/bestvalue/indicators/bvaudit/index.htm>.

Dyke G. (1999), *The Spectator Lecture: An Education Vision for the BBC*, 18 November 1999, available at: <http://www.bbc.co.uk/info/speech/index.shtml>.

Eve, J., (2000), *Croydon Online Research Project: Final Report*, British Library Research & Innovation Report 163. London: Library and Information Commission.

INSINC: the National Working Party on Social Inclusion (1997), *The Net Result: Social Inclusion in the Information Society*. London: IBM, available at: <http://www-5.ibm.com/uk/community/uk117.html>.

International Standards Organisation (1998), *Information and documentation – library performance indicators ISO 11620*. London, British Standards Organisation.

Kinnell, M. and Sturges, P (1996), Introduction. In: Kinnell, M. and Sturges, P. eds. *Continuity and innovation in the public library: the development of a social institution* London: Library Association Publishing.

Library and Information Commission (1997), *New Library: The People's Network*. London: LIC, available at:
<http://www.lic.gov.uk/publications/policyreports/building/index.html>.

Library and Information Commission (1998), *Building the New Library Network*. London: LIC, available at:
<http://www.ukoln.ac.uk/services/lic/newlibrary/>.

Library and Information Commission (1999), *Libraries - the lifeforce for learning*. London: LIC, available at:
<http://www.lic.gov.uk/publications/policyreports/llpop.html>.

Library and Information Commission (2000a), *Libraries: the essence of inclusion*. London: LIC, available at:
<http://www.lic.gov.uk/publications/policyreports/inclusion.html>.

Library and Information Commission (2000b) *Empowering the Learning Community*. London: LIC, available at:
<http://www.lic.gov.uk/publications/policyreports/empower/>

Library Association Record (2000), "Libraries change lives", *Library Association Record*, 102 (7). London: Library Association.

Liddle, D. (1999), "Best value – the impact on libraries: practical steps in demonstrating best value", *Library Management*, 20 (4), pp.206-212.

Liff, S., Steward, F. & Watts, P. (1999), 'Public access to the Internet: new approaches from Inter cafés and community technology centres and their implications for libraries', *New Review of Information Networking*, Vol. 5, pp. 27-41.

Lilley, E. & Usherwood B. (2000), "Wanting it all: the relationship between expectations and the public's perceptions of public library services", *Library Management*, 21 (1), pp. 13-24.

Line, M.B. (1997) 'The public library in the future: a British reaction', *Library Trends* 46 (1), pp.68-82.

MORI (2000), *Internet Use Gathering Pace in London and South East*, at:
<http://www.mori.com/polls/2000/nationwide.htm>.

Muddiman, D. et al. (2000), *Open to All? The Public Library and Social Exclusion. Volume 1: Overview and Conclusions*. Library and Information Commission Research Report 84. London: Resource.

Ormes, S. and Dempsey, L. (1995), *Library and Information Commission public library Internet survey*. London: Library and Information Commission, 1995. Available at: <http://www.ukoln.ac.uk/publib/lic.html>

People's Network Team (2000), *Summary Indicators*, at: <http://www.peoplesnetwork.gov.uk/netbase/summary/index.html>

People's Network Team (2001), *Summary Indicators*, at: <http://www.peoplesnetwork.gov.uk/netbase/uk/index.html>

Policy Action Team 15 (2000), *Closing the digital divide: information and communication technologies in deprived areas*. London: Department of Trade and Industry.

PubliCA (1999), *Copenhagen Declaration*, available at: <http://www.aakb.dk/invitation/declaration.html>.

Roach, P. & Morrison, M. (1998), *Public Libraries, Ethnic Diversity and Citizenship*. British Library Research and Innovation Report 76. London: British Library.

UNESCO (1994), *Public Library Manifesto*, available at: <http://www.unesco.org/webworld/libraries/manifestos/libraman.html>.

Walters, S. (1998), *Re: Internet access and free e-mail*. Posting to the lis-pub-libs e-mail discussion list, 8 Oct 1998, available at: <http://www.mailbase.ac.uk/lists/lis-pub-libs/1998-10/0025.html>.