

## DOCUMENT RESUME

ED 453 800

IR 020 646

AUTHOR Brack, Verity; Stubley, Peter  
TITLE Electronic Libraries and Collaboration in the UK: The eLib Clump Projects.  
PUB DATE 1999-00-00  
NOTE 7p.; In EUNIS '99: Information Technology Shaping European Universities. Proceedings of the European University Information Systems International Conference (5th, Espoo, Finland, June 7-9, 1999); see IR 020 639.  
AVAILABLE FROM For full text:  
<http://www.hut.fi/events/eunis99/Csession/C21.htm>; Track C:  
<http://www.hut.fi/events/eunis99/TrackC.html>.  
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Academic Libraries; Cooperative Programs; \*Electronic Libraries; Foreign Countries; Higher Education; \*Information Networks; Information Services; Information Sources; Information Systems; Information Technology; \*Library Catalogs; \*Library Cooperation; \*Library Services; Online Catalogs  
IDENTIFIERS United Kingdom

## ABSTRACT

The eLib (Electronic Libraries) Program in United Kingdom higher education began in the spring of 1995, as a result of the Follett Report (Joint Funding Councils' Libraries Review Group, 1993) that emphasized the need for higher education libraries to be involved in the development of information and communication technologies. A "clump" is a term that was coined at the third MODELS (Moving to Distributed Environments for Library Services) Workshop to describe an aggregation of library catalogs. The clump may be physical, in traditional terminology a union catalog, or it may be virtual, being created at the time of searching. The eLib clump projects are utilizing the Z39.50 bibliographic retrieval protocol to build gateways to library OPACs in the UK, creating virtual catalogs of university, national, and public libraries. The technology underlies increased collaborative activities between institutions in the clump consortia, and will open up the resources of the libraries to far greater numbers than at present. The different approaches to the issues of collaboration and cooperation taken by each clump are outlined. (Contains 15 references.) (Author/AEF)

## Electronic Libraries and Collaboration in the UK:

### the eLib Clump Projects

Verity Brack & Peter Stublely

University of Sheffield, UK

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

### Abstract

*The eLib 'clump' projects are utilising the Z39.50 bibliographic retrieval protocol to build gateways to library OPACs in the UK, creating virtual union catalogues of university, national and public libraries. The technology underlies increased collaborative activities between institutions in the Clump consortia, and will open up the resources of the libraries to far greater numbers than at present. The different approaches to the issues of collaboration and co-operation taken by each clump are outlined.*

### The eLib Programme

The eLib (Electronic Libraries) Programme<sup>1</sup> in UK Higher Education (HE) began in the spring of 1995, as a result of the Follett Report<sup>2</sup> (Joint Funding Councils' Libraries Review Group, 1993) which emphasised the need for HE libraries to be involved in the development of Information and Communication Technologies. The projects are funded by the Joint Information Systems Committee (JISC) of the Higher Education Funding Councils and fall into a number of broad areas, such as access to networked resources, electronic journals, on-demand publishing and digitisation.

Phases 1 and 2 of eLib saw the funding of approximately 60 projects, and in 1997 eLib Phase 3 was announced to consolidate the learning of earlier projects by developing four main approaches: hybrid libraries, large scale resource discovery (clumps), digital preservation, and the development of earlier projects into services.

The hybrid library projects aim to integrate access to electronic data with access to existing data held in a traditional manner, e.g. the book stock, whereas the clumps projects are based on the need to aid discovery and increase access to the vast scholarly bibliographic resources available to the Higher Education. The hybrid library projects take a variety of approaches - subject, technical, and user-oriented; there are 5 hybrid library projects<sup>3</sup>: AGORA, BUILDER, MALIBU, HYLIFE and HEADLINE.

### The 'Clumps'

A 'clump' is a term that was coined at the 3rd MODELS (Moving to Distributed Environments for Library Services) Workshop<sup>4</sup> to describe an aggregation of library catalogues. The clump may be 'physical' - in traditional terminology a union catalogue, such as COPAC<sup>5</sup> (the CURL OPAC) or the BLCMP union catalogue - or it may be 'virtual', being created at the time of searching. All the eLib clumps are virtual electronic clumps using Z39.50 technology.

There are four clump projects, all of which commenced at the beginning of 1998; three are regionally based and one is subject based, covering the whole of the UK:

CAIRNS: Co-operative Academic Information Retrieval Network for Scotland

M25 Link (covering the London area)

ED 453 800

IR020646

Music Libraries Online (UK-wide).

RIDING: Z39.50 Gateway to Yorkshire Libraries.

### **Technical Issues**

All four clumps are utilising the Z39.50 information retrieval protocol<sup>6</sup> for their basic virtual catalogue service. In the case of Music Libraries Online and RIDING, software developed by Fretwell-Downing Informatics<sup>7</sup> is being used, while CAIRNS and M25 Link are developing their own solutions.

Z39.50 is a standard protocol for retrieval of data from networked computers; it has been available since 1988, and has been used almost exclusively for bibliographic data, usually MARC catalogue records. It works in the standard client-server manner although the terminology is slightly different (client = 'origin', 'server' = target) as the standard was developed before wide use of client-server technology. Software suppliers of online library catalogues (OPACs) are beginning to include Z39.50 targets as part of their library management systems, and current Z39.50 clients normally support simultaneous searching of multiple targets so that, in theory, it should be possible to conduct a search of several different OPACs at the same time, no matter what library system is used by the target. A user will no longer have to access each OPAC separately and learn a different user interface for each one.

Unfortunately, in practice, interoperability between different library systems is not so easy, despite the use of Z39.50. The standard is 'flexible' and has been interpreted in a number of different ways by software suppliers, so much of the technical efforts of the clump projects are being directed towards obtaining reasonable results for Z-searches of their target OPACs. Use of Z39.50 is fairly new to most of the libraries and their systems teams in the UK, and understanding of the standard varies widely. Full documentation is scarce and even where the Z-target settings are configurable by the library concerned, in general staff do not have appropriate experience or knowledge.

Differing cataloguing practices between libraries are also highlighted by the use of Z-searching, and not all information about an item is actually held in the same fields in MARC records or indeed in the catalogue at all - for instance, availability information (i.e. is an item out on loan) and holdings information (what issues of a journal are held) are not necessarily available to a Z-search - so attempts to use Z39.50 for detailed searches of all OPACs are just not possible at the moment. However, it is very useful to be able to search multiple library catalogues with just one command, so despite a number of drawbacks, Z-searching offers the user a rapid method of locating an item.

### **Service Issues**

Although the technical issues of clumping revolve around use of the Z39.50 protocol and all its attendant problems, there is a great deal more to clumping than at first may meet the eye. All the clumps have aims beyond the immediate building of Z39.50 gateways to their library catalogues.

Service issues are of particular importance and the clumps are encouraging the extension of collaboration between libraries, both academic and public sector institutions. The use of virtual union catalogues of the type that the clump projects are creating, and the accompanying opening up of resources to greater numbers will inevitably lead to increased demand on the libraries themselves. Users will be able to discover material in a much quicker and easier way than in the past, and find out where this material is located. In many cases they may wish to travel to consult the material rather than order by inter-library loan. Clumping projects aim to improve co-operative working between libraries, resulting in new service agreements, and the development of costing models for collaborative options.

Each clump project has a slightly different approach to collaboration, and in all cases it is based on some type of existing arrangement, whether formal or informal. The projects are not only increasing collaboration between existing partners but also involving new partners from academic and public sectors.

## CAIRNS

The CAIRNS Project<sup>8</sup> is able to build on a solid foundation of co-operation and collaboration of libraries within Scotland which have worked together for some years under the auspices of SCURL (the Scottish Confederation of University and Research Libraries); SCURL includes academic libraries and the largest public libraries in Scotland. The SCURL IT Advisory Group has been a focus for SCURL system librarians to discuss a clumps-type approach to SCURL catalogues, and the CAIRNS Project has provided the opportunity to kick-start the process of integrating SCURL catalogues and information services with each other, and with significant resources elsewhere, supporting the SCURL commitment to cost-effectiveness through co-operation and resource sharing.

Collaborative work by CAIRNS operates on several levels, in addition to maximising support for the project from the network of relationships already established within Scottish libraries. The CAIRNS Consortium consists of 16 libraries who provide input to the project via groups of specialist librarians. The project activities have included collaborative work on testing interoperability, the development of a formal evaluation process, and the hosting of Project Awareness sessions to establish a dialogue with a broad section of the library community within Scotland, including the public libraries. An organisation called 'Friends of CAIRNS' has been established to act as a conduit to disseminate project information to bodies external to CAIRNS, and to provide feedback into the project; its membership includes representatives from Colleges of Higher Education and Public Libraries.

## M25 Link

The M25 Link Project<sup>9</sup> is an initiative of the M25 Consortium of Higher Education Libraries. The Consortium was established in 1993 to foster co-operation between member institutions in the London region, and it now has 39 members in the area roughly bounded by the M25 motorway. It has undertaken a number of initiatives, including:

**M25 Web Guide:** This is an award winning guide to information on the libraries of the M25 Consortium; it provides three categories of library information: geographical (location, contact details, travel directions); subject (in which the library has sizeable or important collections); and access (opening hours, term dates etc.). Users can search for libraries having their chosen subject in a particular area of London and then link directly to the OPACs to continue a detailed search.

**M25 Access Scheme:** In 1996 the M25 Consortium agreed an M25-wide scheme to give free reference access to permanent academic and research staff. This replaced a number of more local agreements and has recently been extended to include research students. The scheme operates with its own ID card, and full details are on the Web Guide.

**Staff Development:** The M25 Consortium set up a Staff Development Group in 1996, which organises a number of events throughout the year aimed at encouraging library staff to receive training and to discuss issues. Examples include disaster planning, CD-ROM networking, the London Metropolitan Area Network, and the Dearing Report. A number of ad hoc working parties have met to investigate and report on topics identified by the M25 Consortium as important and worth addressing on a co-operative basis. An example of this has been the negotiation of special deals with suppliers for serials and CD-ROMs.

The M25 Link Project is building on the success of the Web Guide and is creating a dynamic virtual union catalogue of five of the M25 libraries' OPACs, with the long-term aim of including all M25 institutions in the service.

## Music Libraries Online

Music Libraries Online<sup>10</sup> involves nine music conservatoire libraries across the UK, plus representatives of the Performing Arts Data Service, EARL (the UK consortium for public library networking), and

university music department libraries. All nine conservatoires, and other members of the Project's Steering Group, are active members of the International Association of Music Libraries (IAML), and have been for many years. Collaboration on both formal and informal bases is an essential part of the work of the libraries, and they have always formed a close-knit professional team. Prior to the establishment of the MLO Project, they met formally once a year and informal smaller special interest groups met more frequently. Many of the Music Libraries Online Project members have a history of previous successful collaboration on projects, including the Music LIP (Library and Information Plan) and the SIRSI Music Users+ Group UK.

The MLO Project conservatoire libraries hold an incomparable set of resources for both performance and research, and there is currently no national database fulfilling the need for rapid tracing of music resources. Among the Project's early priorities are agreements over the use of MARC and AACR2 for cataloguing music resources, and the establishment of core information for display and searching of such information. Part of this activity has been the creation of a set of bibliographic attributes specifically for music that the Z39.50 Implementors Group<sup>11</sup> has formally accepted as an addition to the standard.

## RIDING

The RIDING Project<sup>12</sup> consortium covers the Yorkshire and Humberside region in the north of England, with nine university libraries, one public library, and the British Library Document Supply Centre as consortium members. In 1993 the vice-chancellors of the Yorkshire and Humberside universities set up the Yorkshire and Humberside Universities' Association<sup>13</sup> (YHUA) to promote and extend the universities' contribution to regional development, and this organisation, through its Information Systems and Services Committee, supports the RIDING Project.

As well as regional co-operation between the Yorkshire and Humberside universities generally, university libraries have traditionally collaborated in a number of spheres. There are local, regional and 'area' reciprocal access and borrowing agreements between libraries, involving all types of libraries: academic, public, government, and commercial. For example, the Sheffield area has one of the oldest co-operative schemes in the country - SINTO<sup>14</sup> - which dates back to the 1932. The 'new' universities (former polytechnics) in Yorkshire and Humberside have their own co-operative borrowing and access scheme, and the majority of the 'old' universities in the region have a similar scheme, as well as local agreements with specific institutions.

However, the proliferation of such schemes and local agreements is complicated and confusing for library users, particularly as the operation of the schemes varies considerably. RIDING aims to work towards replacing and augmenting these schemes by a general reciprocal agreement that covers *all* the RIDING members, thus harmonising the situation. The RIDING Access Policy provides free access to staff and accredited researchers and provides entitlement to borrowing in all academic libraries of the consortium, with special arrangements for borrowing by public library members.

The RIDING Gateway software includes an inter-library loan system, so users are able to search for items using the Z-searching facility and order them (through mediation by library staff) via the same web interface. This promotes inter-lending between RIDING members for items not available from the British Library Document Supply Service. Some restricted access databases, e.g. Inside Information, will be made available at the Gateway for use by RIDING members only. Access to the RIDING Gateway and its search facilities is free but value-added services such as inter-library loan are available only to RIDING members, and authentication is required at this point.

Finally, the RIDING Project has developed a scheme for describing collections of materials in a standard manner, to aid searching of our target databases and to open up the region's library resources in general. RIDING libraries hold some collections of regional and national importance, such as the Porton Collection of items of Jewish history held by Leeds Library and Information Service, and the National Fairground Archive at the University of Sheffield. This scheme is based on the work of a national



working group on Collection Description<sup>15</sup>, and is drawing on the expertise of RIDING members as well as other eLib projects.

## **Conclusion**

As well as supporting and promoting collaboration between their member institutions, clumps undertake a great deal of collaborative activity between themselves, an example of which is this paper. Meetings and events with other clumps personnel, other eLib projects and similar international projects take place regularly, and the clumps will be testing Z39.50 interoperability between themselves when their services are fully operational.

So, in conclusion it can be seen that the clumps projects are driving forward existing co-operation between libraries in the academic and non-academic sectors in the UK, as well as developing new scenarios for collaboration. The technical basis of the clumps services is acting as a catalyst for wider collaboration which will lead to changes in organisational and working practices. This mirrors other developments in UK higher education, such as the increase of distance learning courses and the promotion of life-long learning, that are opening up access to more and different sections of the population. The inclusion of public sector libraries in these projects is an additional exciting opportunity to make our resources more widely available.

## **References**

eLib(Electronic Libraries) Programme: <http://www.ukoln.ac.uk/services/elib/>

Follett Report (Joint Funding Councils' Libraries Review Group, 1993):  
<http://www.ukoln.ac.uk/services/papers/follett/report/>

Hybrid Libraries: <http://www.ukoln.ac.uk/services/elib/projects/>

MODELS: <http://www.ukoln.ac.uk/services/elib/projects/models/>

COPAC: <http://copac.ac.uk/copac/>

Z39.50: <http://www.ukoln.ac.uk/dlis/z3950/resources/>

Fretwell-Downing Informatics: <http://www.fdgrouop.co.uk/main/fdi/welcome/>

CAIRNS: <http://cairns.lib.gla.ac.uk/> and <http://www.cairns.lib.strath.ac.uk/>

M25 Link: <http://www.M25lib.ac.uk/M25link/> and [http://www.M25lib.ac.uk/M25link/in\\_progress.html](http://www.M25lib.ac.uk/M25link/in_progress.html)

Music Libraries Online: <http://www.ukoln.ac.uk/services/elib/projects/music/>

Z39.50 Implementors' Group: <http://lcweb.loc.gov/z3950/agency/zig/zig.html>

RIDING: <http://www.shef.ac.uk/~riding/> and <http://www.riding.ac.uk/>

Yorkshire and Humberside Universities' Association: <http://www.yhua.ac.uk/>

SINTO: <http://www.shu.ac.uk/services/lc/sinto/index.html>

Collection Description Working Group: <http://www.ukoln.ac.uk/metadata/cld/>

## **Acknowledgements**

We would like to acknowledge the contributions to this paper from members of the M25 Link Project,

CAIRNS and Music Online.

**Address**

Dr. Verity Brack

RIDING Project Manager

St. George's Library,

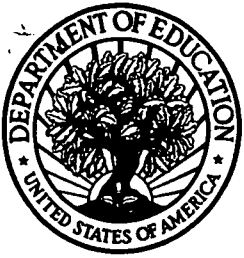
University of Sheffield

Mappin Street,

Sheffield S1 4DT

tel: 0114 222 1143

e-mail: [v.brack@shef.ac.uk](mailto:v.brack@shef.ac.uk)



**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



## **NOTICE**

### **REPRODUCTION BASIS**



This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").