

The e-Research needs analysis survey report

**CURL/SCONUL
Joint Task Force on e-Research**

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Executive Summary

- *Support for data web developments and development of metadata for primary data research outputs* were infrequently reported as areas of e-research activity within respondents' institutions
- *IR development and management, development of research skills training and advice about open access* were the most widely recognised aspects of existing activity.
- From those institutions already engaging in research skills training, the element of e-research activity most widely recognised was *guidance on deposit in Institutional Repository*.
- Academic Liaisons/Subject Librarians/Information Advisors were most aware of *established IR development and management* but least aware of developments in the other areas of e-Research activity defined by the questionnaire
- Data Librarians/Managers were most aware of *IR development and management*, followed by *collaborative projects sharing dataset within and between institutions*.
- IR Managers were less aware of projects connected with sharing data but indicated that *advice on open access or data curation* were aspects covered within their institutions
- Research Support Librarians were aware of established e-Research activities, especially for *Advice about open access, IR development and Development of metadata for published research outputs*.
- In exploring future training needs, the areas noted as a high priority for inclusion in the workshop were *Research skills development* and *Researcher's views of Library involvement with e-Research*.
- The priority placed on e-Research training varied according to current role; Data Librarians/Managers and Academic Services Managers indicated the highest priority placed on training.
- Data Librarians/Managers were least likely to be present within the respondents Institution.

Introduction

The CURL/SCONUL Task Force on e-Research was established to investigate the impact of e-Research on the academic library sector, including developing training to assist library and information professionals extend their knowledge and skills in relation to this rapidly evolving area.

In order to understand and evaluate current levels of engagement in libraries with e-research development and to explore associated training requirements, a survey tool was developed and sent out to a network of e-research contacts in academic libraries during Autumn 2006.

The questionnaire was designed using the Bristol Online Survey (BOS) and was opened for respondents from 13th October-3rd November. Invitations to complete the survey were sent out using several mailing lists in order to obtain a representative cross section of library and information professionals, especially targeting those involved in academic liaison, support for researchers and/or engaged in preservation and access to research data. In addition returns were sought via DISC-UK, the Data Information Specialists Committee.

The objective was to discover the extent to which respondents' parent institutions had begun to engage with e-Research, to explore Library involvement in these new areas and to better understand the perceptions and expectations of library staff in relation to Library involvement . Respondents were asked about current and/or future plans. Central to this is analysis of respondents understanding of the term 'e-Research' and what this encompasses. In addition the survey explored respondents identification of their own training needs in this area, training already undertaken, and priorities for further training and development.

1 Respondents' roles

Section One investigated the work related roles of survey respondents. 90 respondents completed the survey, and the distribution of their job roles is shown below (fig.1). Almost 60% considered themselves *Academic Liaison\Subject Librarian\Information Advisors*, followed by *Data Librarian/Managers*, *IR Managers* and *Research Support Librarians*. each comprising 11.1% of total respondents:

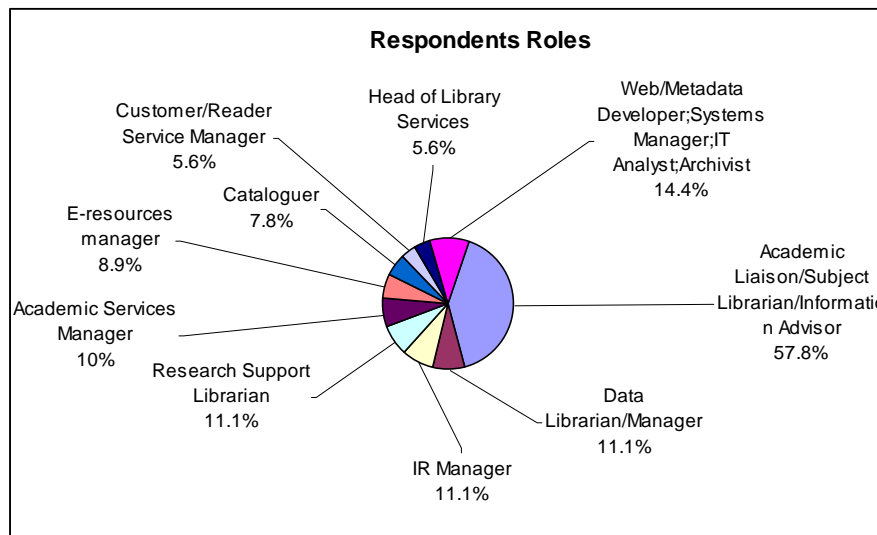


Fig. 1 - Role of survey respondents

2 The e-Research Agenda

Respondents were asked to indicate the extent of development of e-research activity within their institution, together with brief details of library involvement. The graph below (fig 2) shows those activities sorted from most to least established.

Three quarters of respondents indicated *Institutional Repository development and management* as an established area of work or an area of current development or discussion within their institution.

Development of research skills training, and *Advice about open access* were reported by 50% of respondents as areas of established or as current developments.

Support for data web developments/ distributed personal publication of data

Support for the development of metadata associated with primary research data and

Support for the use of grid technologies were not reported to be well established or under development by respondents

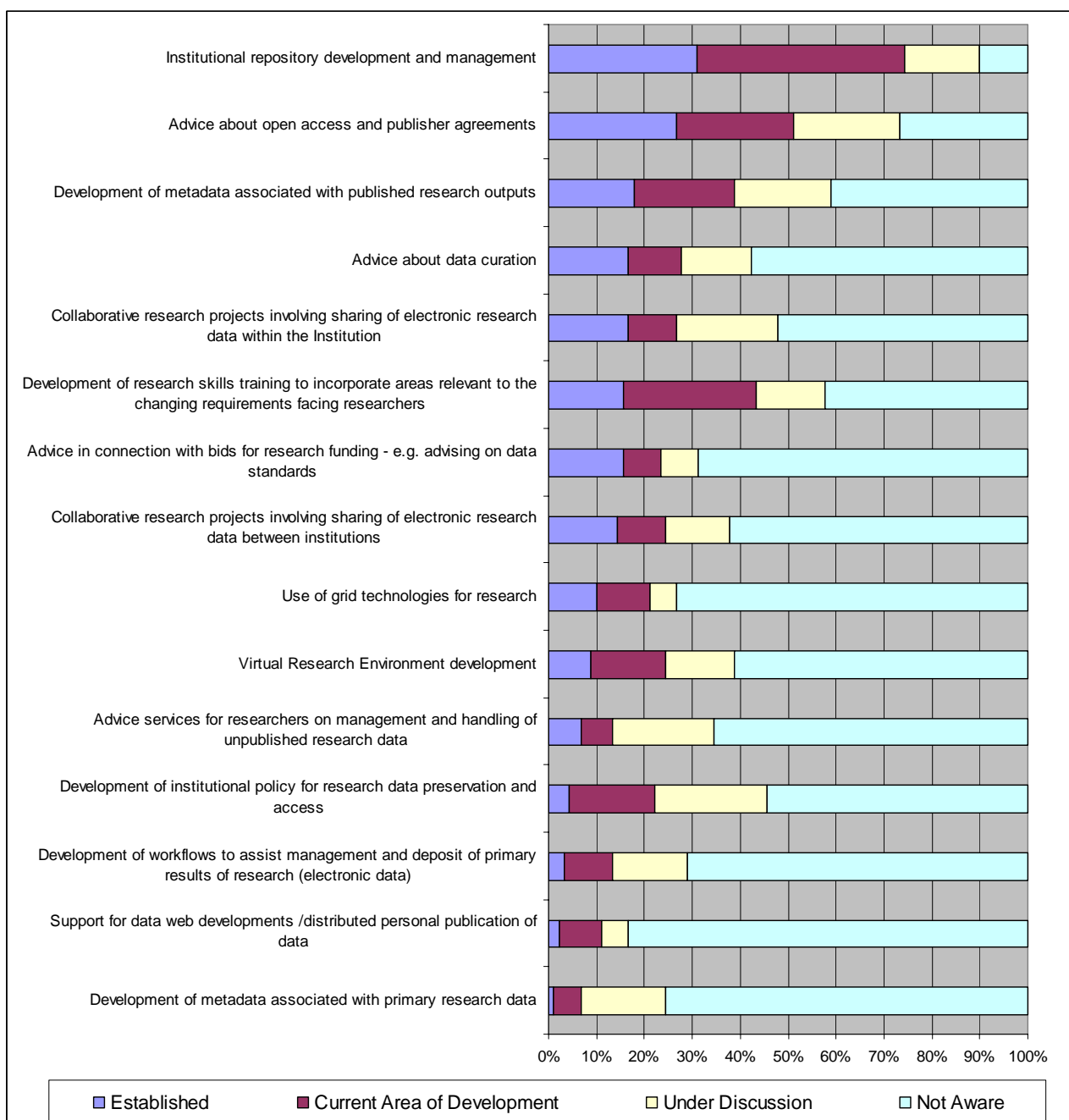


Fig. 2 - Respondents perception of e-Research related activities progress

Respondents were asked to provide details on the specific elements covered in the research training programmes at their institutions, this provided the results shown below :

Elements covered in research training programme	Percentage
Guidance on deposit in Institutional Repository	86.2%
Open access and advantages for researchers	58.6%
Guidance on deposit in subject repositories	27.6%
Guidance on handling and managing other kinds of unpublished research data	17.2%
Information on bodies available to provide guidance, e.g. Digital Curation Centre	24.1%

Table 1- Elements covered in research training programmes

2.1 Elements of e-Research qualitative analysis

This section looks into the free text comments about each of the e-Research areas noted in the questionnaire (see Appendix 1 for more detailed analysis).

Institutional repository development and management

Current IR initiatives were perceived to be led by Library in most cases. With regards to future plans of involvement, libraries will continue/start to lead or provide support and advice. Different roles for libraries were suggested here:

“Advocacy, advisory, technical, meta data, data conversion, instructional, training”

“Library involvement will continue and will be developing policy for content of repository and expansion into other research based material.”

Use of grid technologies for research

Limited Library involvement was recognised indicated. In cases where support for these developments was noted, responsibility appears to rest with IT Services as shown by quotes below:

“Converged library/it service responsible for development and piloting of the system.”

“Library not involved, but Computing side of Information Services is steering”

And planning for library involvement in future is also limited although:

“... it is hoped that the Library can play a role in the delivery of information services within grid-related portal services, alongside grid resources themselves.”

Collaborative research projects involving sharing of electronic research data within the Institution

Libraries have a relatively limited involvement in research projects involving collaborative sharing of data within the institution, in some cases this is noted as being carried out through separate data libraries or national data centres and there is awareness of projects considering this issue:

“data library shares electronic data within institution”

“done through the Data Centre”

“Library involved in a few external projects (e.g. Project StORe) which consider sharing of electronic research data”

Future plans include the creations of repositories of research data.

Collaborative research projects involving sharing of electronic research data between institutions

Library current level of involvement almost none, although some projects considering it. Again project StORe mentioned here.

“the StORe project considers sharing of data with researchers both within and between institutions”

Development of metadata associated with published research outputs

Libraries seemed to be heavily involved in the development of metadata for published research outputs with a view to populating IRs.

Development of metadata associated with primary research data

Some library involvement in the development of metadata for primary research data. Again project StORe gets mentioned here.

Support for data web developments /distributed personal publication of data

Limited current and future involvement .

Virtual Research Environment development

Some current library involvement although there seem to be other departments driving developments :

"The development was driven through the Department of History. Communication about availability of e-resources to deliver through the VRE took place, but subsequent development was entirely driven by the department"

"VLE comes under (recently devolved) IT services, however library has had some input for creation of IL modules and for upload of digitised materials (under CLA scanning licence)."

Advice services for researchers on management and handling of unpublished research data

Some current involvement most often noted by data librarians but little mention of an intention to involve the library in the future.

Advice in connection with bids for research funding - e.g. advising on data standards

Very little current and future involvement of libraries here although happening in other departments :

"Run by staff development unit, no plans for library involvement of which I am aware"

Advice about data curation

Some significant libraries current level of involvement with plans for future development :

"An area for the library, which is actively discussed and will be taken forward in the next few years."

"We will give such advice when asked, which we have been occasionally, but I don't believe there is any formal involvement"

"The Library has a Digital Curator in post."

Advice about open access and publisher agreements

High current level of libraries involvement:

"We have already launched an Open published journal "Methodological Innovations Online" <http://sirius.soc.plymouth.ac.uk/~andyp/> which the library developed for the research group"

"As part of institutional repository developments"

“Advocacy for open access via links with colleagues in Schools.”

Development of institutional policy for research data preservation and access

Some level of involvement from libraries, raised as part of the IR and national co-ordination suggested:

“It has been raised as part of IR developments but not properly discussed”

“My view is that this requires national co-ordination”

Development of workflows to assist management and deposit of primary results of research (electronic data)

Some current Library involvement and STORE project mentioned here again.

Development of research skills training to incorporate areas relevant to the changing requirements facing researchers

High level of current involvement with a number of training programmes being developed or already running.

“‘Getting published’ open programme course offered to all postgraduates and staff free of charge.”

“Library will develop training sessions in postgrad training prog. to cover e-thesis deposit and related questions of file format, 3rd party copyright etc.”

“We have one accredited ‘Research Skills’ module for PhD students, the content for which probably requires updating to include Open access elements.”

2.2 The e-Research agenda by main roles

An alternative and complementing mode to look at the e-Research agenda is to break up the results obtained by the main roles i.e. Academic Liaison, Data Librarian/Manager, IR Manager and Research Support Librarian.

Academic Liaisons\Subject Librarians\Information Advisors

Respondents in this role seemed to be well aware of the establishment of *IR development and management* and *advice on open access* being carried out at their institutions. On the other hand, there was a significant high unawareness of any discussion on many of the other areas specially in *support for data web developments* and *development of metadata associated with primary research data*.

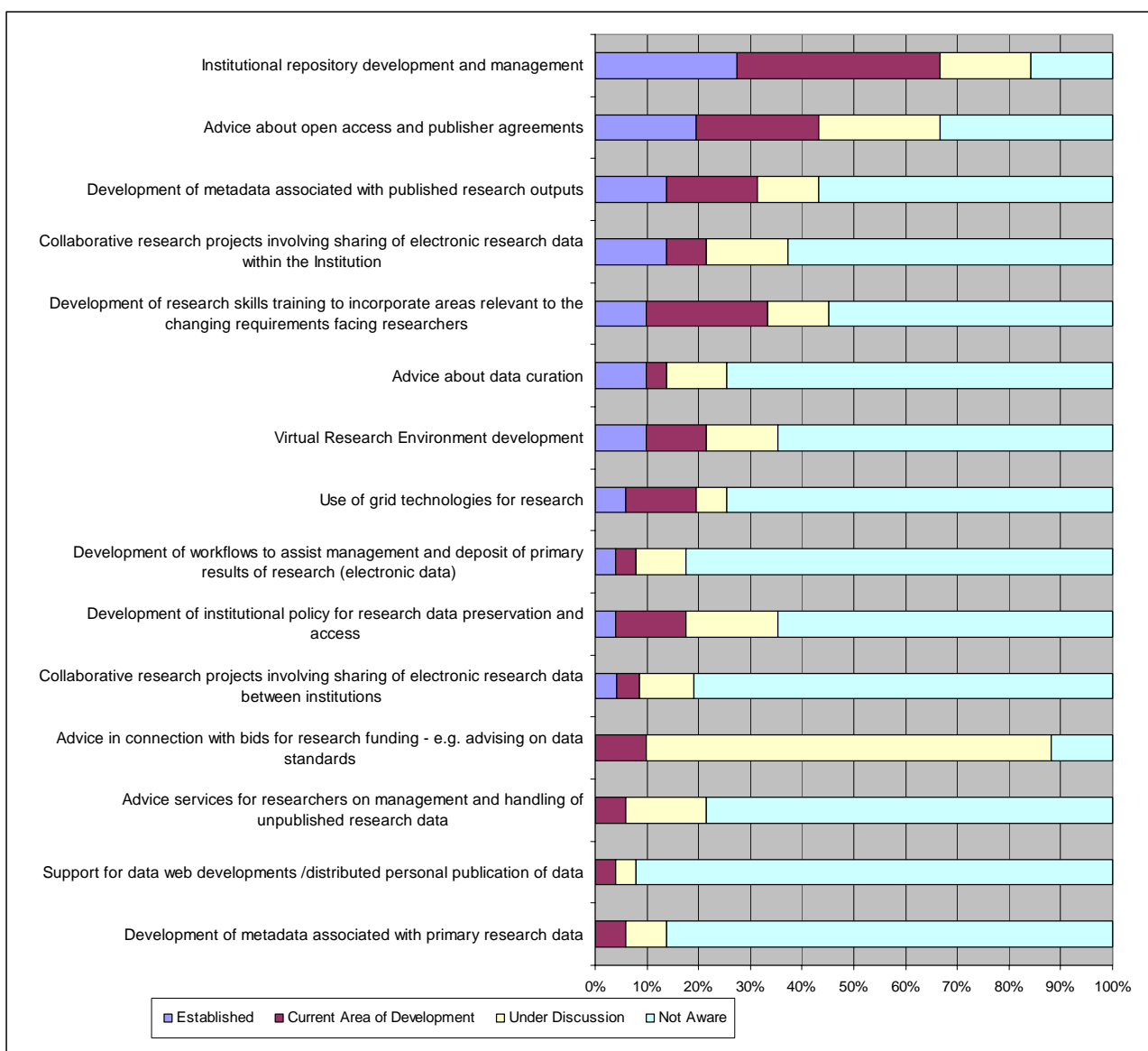


Fig. 3 - Academic Liaison Librarians perception of e-Research related activities progress

Data Librarians/Managers

Data Librarians/Managers were also well aware of the establishment of *IR development and management*, *collaborative projects sharing electronic research data within and outside institutions* and *advice services for management and handling of unpublished research data*.

The areas with high unawareness of discussion were *VRE development* and *development of workflows to assist with the management and deposit of primary research data*.

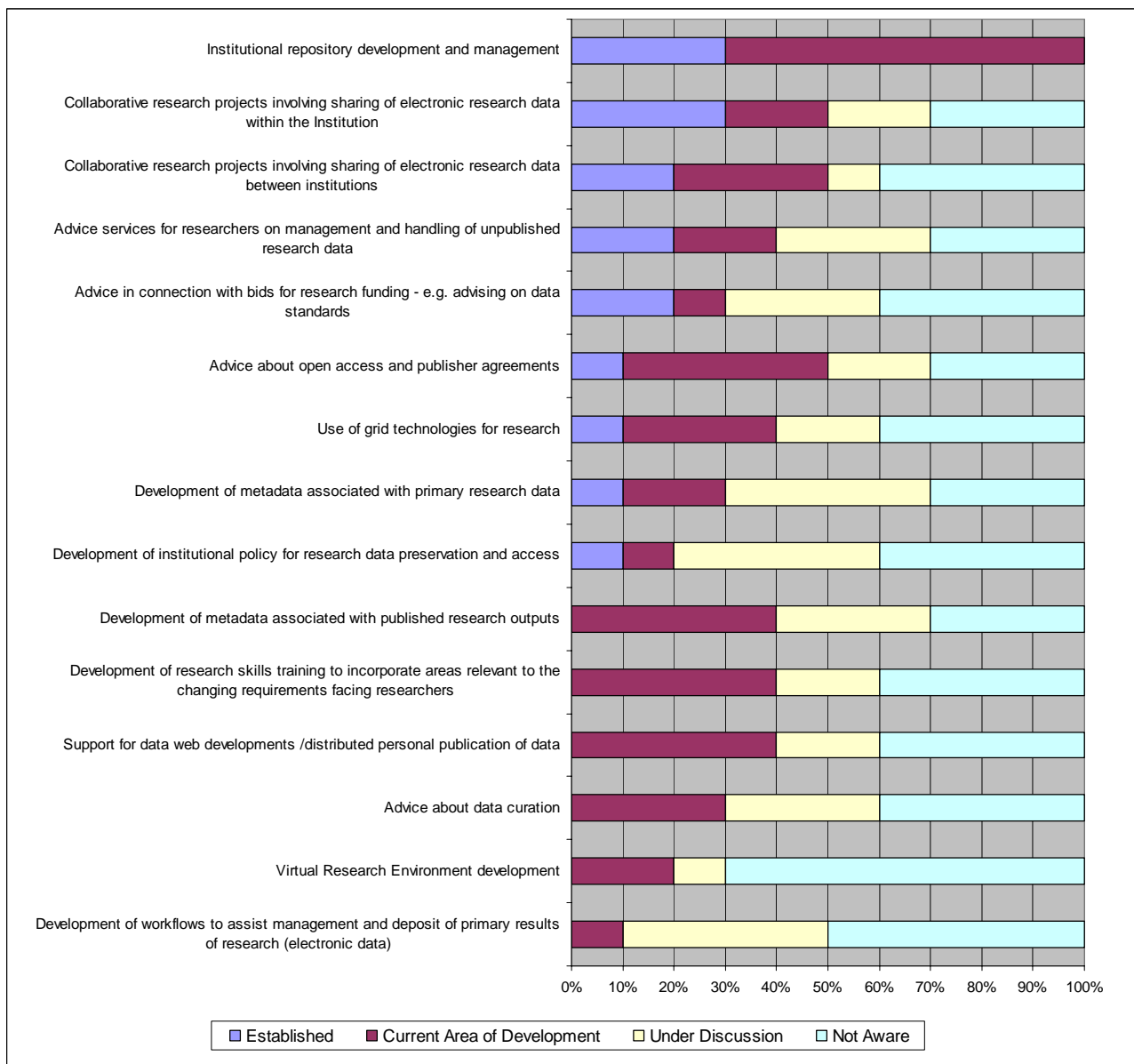


Fig. 4 - Data Librarians/Managers perception of e-Research related activities progress

Institutional Repository Managers

IR Managers apart of being aware of established *repository development and management* as it is to be expected, they seem to perceived a significant level of establishment in activities such as *advice on open access*, *advice on data curation* and *VRE development*.

The highest levels of areas of unawareness of any discussion for this group were in areas like *support of data web developments*, *use of grid technologies for research* and *collaborative projects sharing research data between institutions*.

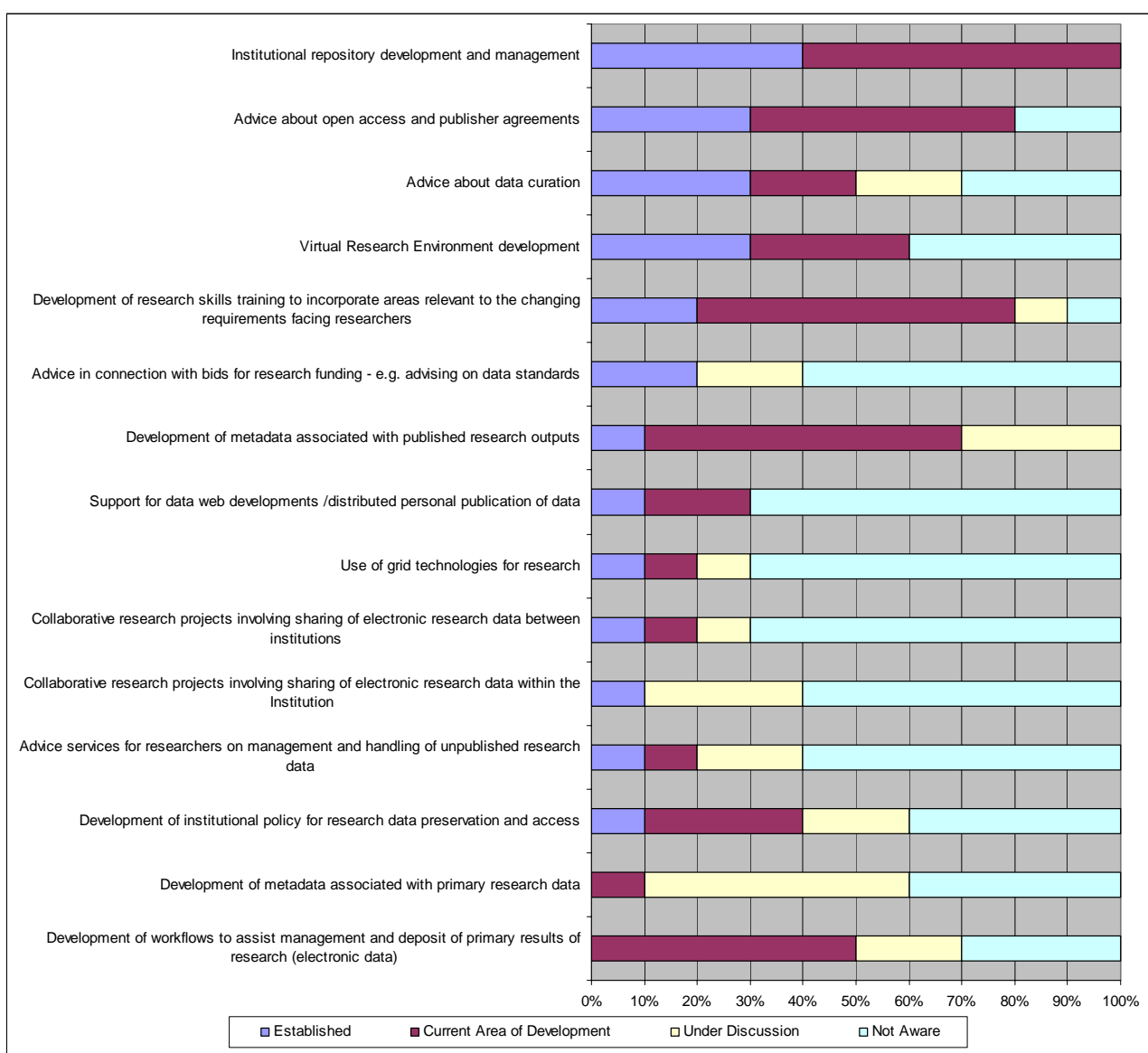


Fig. 5 - IR Managers perception of e-Research related activities progress

Research Support Librarians

Respondents of this group showed the highest level awareness of establishment for different areas of e-Research specially in *advice about open access, IR development and management* and *development of metadata associated with published research outputs*.

On the other hand Research Support Librarians showed high levels of unawareness of any discussion in many other areas like *support for data web developments* and *development of metadata associated with primary research data*.

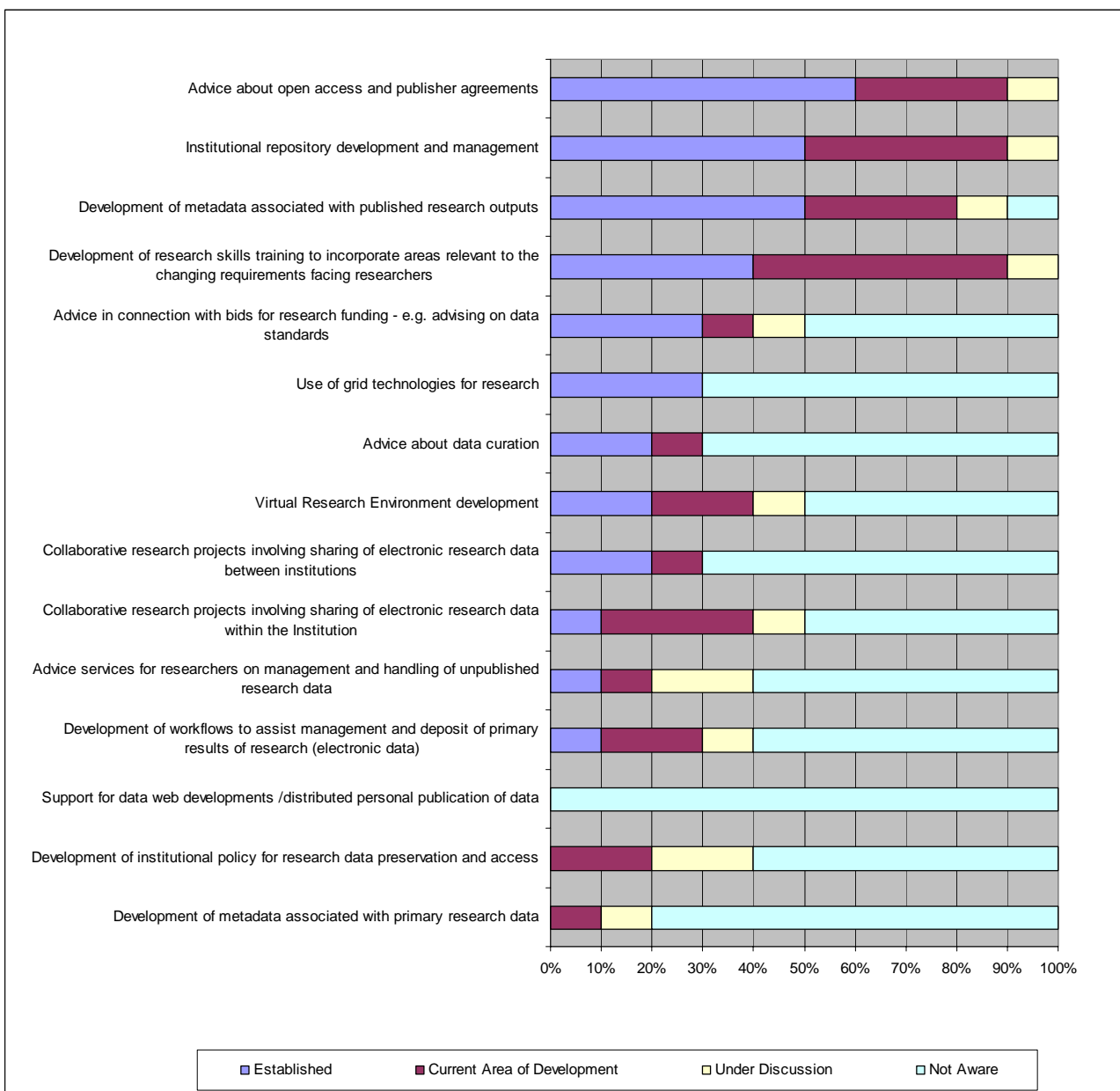


Fig. 6 - Research Support Librarians perception of e-Research related activities progress

3 Roles present at institutions

Section 4 of the survey asked respondents to indicate which of the roles in question 1 were based in libraries, present at the institution but not based in the Library or not present at all.

The table below shows how *Academic Liaison/Subject Librarian/Information Advisor*, *Cataloguer/Indexer*, *E-resources Manager* and *Customer/Reader Services Manager* were the roles with the highest presence in libraries. The roles with the highest presence at institutions without being based in libraries were *Web Developer* and *IT Analyst*. Finally, it is revealing seeing that the role with the second biggest number of respondents of this survey, *Data Librarians/Managers*, is the one with the lowest presence at the institutions, followed by the *Research Support Librarian and Metadata Developers*.

Roles	Present at institution but not		
	Based in Library	based in Library	Not present at institution
Academic Liaison /Subject Librarian/ Information Advisor	87.8 %	10.0 %	2.2 %
Cataloguer/Indexer	74.4 %	7.8 %	17.8 %
E-resources Manager	64.4 %	4.4 %	31.1 %
Customer/Reader Services Manager	63.3 %	4.4 %	32.2 %
Institutional Repository Manager	48.9 %	8.9 %	42.2 %
Archivist / Records Manager	47.8 %	23.3 %	28.9 %
Systems Manager	37.8 %	37.8 %	24.4 %
Academic Services Manager	35.6 %	16.7 %	47.8 %
Web Developer	34.4 %	46.7 %	18.9 %
Research Support Librarian	32.2 %	2.2 %	65.6 %
Metadata Developer	30.0 %	10.0 %	60.0 %
Data Manager/Data Librarian	17.8 %	14.4 %	67.8 %
IT Analyst	12.2 %	38.9 %	48.9 %
Research Administrator	4.4 %	45.6 %	50.0 %

Table 5 – Roles presence at respondents' institutions

4 Areas to be covered by workshops

The next section of the survey asked about particular aspects of e-Research to be included in the training programme. High priority is given to *Research skills development in relation to e-research and how address this*, and *Researchers' views of Library involvement in e-research*

e-Research Activities	Average priority - 1 Very useful to 5 of limited interest
Research skills development in relation to e-research and how to address this	1.81
Researchers' views of Library involvement in e-research	1.88
Background information	2
Librarians' views of involvement in e-research	2.04
Institution level developments (and associated library support) -- case studies	2.12
Preservation and access to e-research data	2.19
Impact of VRE development	2.21
Data curation issues and advice	2.42
Metadata standards	2.49
Technical standards in support of e-research data management and handling	2.66
Technical e-infrastructure development	2.73

Table 2 - e-Research activities to be added to training programme sorted by priority

4.1 Areas to be covered by workshops by respondents' role

Table 3 shows the top three areas of e-Research to be covered in training by role sorted by average priority. While *research skills development* seems to be present in all four roles, there are other areas that were specific to the different groups such as *advice on data curation* for Data Librarians/Managers, *Librarians' views of Library involvement in e-research* for Academic Liaison/ Subject Librarian/Information Advisor, *metadata standards* for IR Managers, *researchers' views of Library involvement in e-research* for Research Support Librarians and *institutional level developments (case studies)* for Academic Services Managers.

Roles	Workshop	Average priority - 1 very useful to 5 of limited interest
Academic Liaison/Subject Librarian/Information Advisor	Research skills development in relation to e-research and how to address this	1.8
	Researchers' views of Library involvement in e-research	1.9
	Librarians' views of involvement in e-research	1.9
Data Librarian/Manager	Metadata standards	1.3
	Technical standards in support of e-research data management and handling	1.5
	Data curation issues and advice	1.7

	Research skills development in relation to e-research and how to address this	1.7
IR Manager	Research skills development in relation to e-research and how to address this	1.8
	Researchers' views of Library involvement in e-research	2
	Metadata standards	2
Research Support Librarian	Research skills development in relation to e-research and how to address this	1.4
	Researchers' views of Library involvement in e-research	1.5
	Institution level developments (and associated library support) -- case studies	1.6
Academic Services Manager	Research skills development in relation to e-research and how to address this	1.4
	Researchers' views of Library involvement in e-research	1.6
	Institution level developments (and associated library support) -- case studies	1.6

Table 3 – Areas to be covered by workshops by role and sorted by average priority

When getting the average of the different priorities for all the e-Research areas by role, we see how some roles have more interest in training than others. Like this, Data Librarians/Managers and Academic Services Managers would be at the top of the list (see table 4 below).

Roles	Total training average priority 1 very useful to 5 of limited interest
Data Librarian/Manager	1.9
Academic Services Manager	1.9
Research Support Librarian	2
Academic Liaison/Subject Librarian/Information Advisor	2.3
IR Manager	2.3

Table 4 – Total training average priority by role

Respondents were asked to indicate other aspects they would like the training programme to cover, the following answers were given :

“How to persuade researchers that librarians have skills they can make use of! “

“Personal research records management and "uk researcher profile / personal development portfolio" records issues “

When respondents were asked whether they had already attended any training or development connected with e-Research, 80% said no. The rest 20% mentioned the following events :

“Bielefeld conference touched on this in Feb 2006 “

“cyber infrastructure workshop in geosciences “

“ICPSR Summer training programme, IASSIST workshops, DLI workshops”

“JOINT CURL/SCONUL TASK FORCE ON E-RESEARCH Workshop held at The King's Fund 12th December 2005”

“Variety of IR related events and training courses.”

“number of Digital Curation seminars/workshops; various e-Social Science events Repository related”

“VRE meetings, Grid portals conference, research portals seminar”

“Workshops on developing IL materials for research (UC&R)”

Appendix 1 - e-Research Training Needs Survey – Qualitative Analysis

1. Institutional repository development and management

a. Library current level of involvement

Response	Frequency	Percentage
Library led-initiative	30	76.9%
Significant Library involvement	8	20.5%
Library has little or no involvement	1	2.6%
TOTAL	39	

- *Aware of various projects and IRs run by colleagues (GRADE, STORE, ERA, LORE etc)*
- *The Library is involved in a working group feeding into and advising the development of the repository, being led by the e-Services Integration Group. It has no current direct responsibility in its development, though, at the moment.*

b. Future plans for library involvement

Response	Frequency	Percentage
Continue to lead	5	35.7%
Start to lead	2	14.3%
Support and advice	4	28.6%
Populate	1	7.1%
Curator role	1	7.1%
Developing policy for content	1	7.1%
TOTAL	14	

- *High. Advocacy, advisory, technical, meta data, data conversion, instructional, training*
- *Library involvement will continue and will be developing policy for content of repository and expansion into other research based material.*
- *Library will be lead department but hopefully involving others*
- *Working with academics to identify permissions, finding pdf versions of documents and uploading them as an initial phase of activity.*
Continued training and advocacy work to facilitate self archiving. Promotional work and seminars/training to publicise across the university.

2. Use of grid technologies for research

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	1	7.1%
Library and IT responsibility	1	7.1%
Small Library involvement	3	21.4%
Library has no involvement	9	64.3%
TOTAL	14	

- *Converged library/it service responsible for development and piloting of the system.*
- *Library not involved, but Computing side of Information Services is steering*

b. Future plans for library involvement

Response	Frequency	Percentage
Small Library involvement	2	33.3%
Library has no involvement	4	66.6%

TOTAL	6
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- *Not a great deal of involvement from "pure" library types. But converged service will continue to develop the service and to push the envelope.*
- *Uncertain, though it is hoped that the Library can play a role in the delivery of information services within grid-related portal services, alongside grid resources themselves.*

3. Collaborative research projects involving sharing of electronic research data within the Institution

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	1	8.3%
Small Library involvement	5	41.7%
Library has no involvement	6	50%
TOTAL	12	

- *data library shares electronic data within institution*
- *done through the Data Centre*
- *Informal discussion with IT staff who are involved in advising/facilitating storage of shared research data.*
- *Library involved in a few external projects (e.g. Project StORe) which consider sharing of electronic research data*

b. Future plans for library involvement

Response	Frequency	Percentage
Library full involvement	3	33.3%
Library has no involvement	6	66.6%
TOTAL	9	

- *May in future relate to content policy for institutional repository*
- *plans for institutional repository for research data*

4. Collaborative research projects involving sharing of electronic research data between institutions

a. Library current level of involvement

Response	Frequency	Percentage
Small Library involvement	2	33.3%
Library has no involvement	4	66.7%
TOTAL	6	

- *the StORe project considers sharing of data with researchers both within and between institutions*
- *We've applied (and not received) funding to do this, but will continue to look for opportunities to do this.*

b. Future plans for library involvement

Response	Frequency	Percentage
Future Library involvement	1	25%
None	1	25%
Not aware	2	50%
TOTAL	4	

- *investigating possible funding opportunities from JISC as part of support group (DISC-UK)*

5. Development of metadata associated with published research outputs

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	17	89.5%
Library and IT responsibility	2	10.5%
TOTAL	19	

- *Creation of metadata for library catalogue and institutional repository - currently considering metadata standards for the repository*
- *This is a task that the working group is going to be considering and the Library will be involved through this. In addition the Library is currently exploring opportunities for metadata training and awareness to enable its role in supporting the management of digital content in general.*
- *With a view to populating the IR with publications there are discussions surrounding mediated deposit, whereby library/IT staff may have to help with metadata side of things in order to facilitate deposit in the IR. Alternatively we may stay with self-archiving policy.*

b. Future plans for library involvement

Response	Frequency	Percentage
Library full involvement	2	66.6%
Not sure	1	33.3%
TOTAL	3	

- *Want to adopt standard metadata and plan to continue to standardize our data. But difficult to find authoritative standards to follow to guarantee interoperability.*

6. Development of metadata associated with primary research data

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	2	25%
Small Library involvement	3	37.5%
Library has no involvement	3	37.5%
TOTAL	8	

- *Informal discussions with IT staff who are involved in advising/facilitating storage of primary research data. Some brief discussions of metadata standards that could be used.*
- *Library is involved with a JISC digital repositories programme project STORE which is looking at this question*
- *We created metadata for the databanks produced by intergovernmental agencies to a number of standards. At the moment, this is a very time consuming process done by hand.*

b. Future plans for library involvement

Response	Frequency	Percentage
Library full involvement	1	16.7%
Small Library involvement	5	83.3%
TOTAL	6	

- *collaboration with other universities and the national statistics office*
- *We have an interest in the SDMX project that will create a DDI type standard for aggregate data. SDMX is a project lead by the intergovernmental agencies.*

7. Support for data web developments /distributed personal publication of data

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	1	20%
Library and IT responsibility	1	20%
Small Library involvement	2	40%
Library has no involvement	1	20%
TOTAL	5	

- *Research profiles and associated personal publication of data has involvement from Library (storage of full text in Inst. Repository) and from Research Expertise Database development (IT based and mandate to build research profiles and publication lists).*

b. Future plans for library involvement

Response	Frequency	Percentage
Library full involvement	1	25%
Small Library involvement	2	50%
Library has no involvement	1	25%
TOTAL	4	

- *Potential facility to self publish is issue we need to address for content of Inst. Repos. eg in house electronic journal type pubs.*

8. Virtual Research Environment development

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	1	10%
Library and IT responsibility	3	30%
Small Library involvement	6	60%
TOTAL	10	

- *Low. The development was driven through the Department of History. Communication about availability of e-resources to deliver through the VRE took place, but subsequent development was entirely driven by the department*
- *VLE comes under (recently devolved) IT services, however library has had some input for creation of IL modules and for upload of digitised materials (under CLA scanning licence).*

b. Future plans for library involvement

Response	Frequency	Percentage
IT responsibility	1	33%
Small Library involvement	1	33%
Library has no involvement	1	33%
TOTAL	3	

- *I would hope the Library could play a more pro-active role in supporting VREs, though resource is not easily available for this*
- *Stay within IT.*

9. Advice services for researchers on management and handling of unpublished research data

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	5	33.3%
Library and IT responsibility	1	6.7%
Small Library involvement	5	33.3%
Library has no involvement	4	26.7%
TOTAL	15	

- *actively pursue deposit of data in Data Centre*
- *I believe that is part of training for new PhD students, but library is not really involved*
- *We have answered around 850 queries since the start of the service. We keep a database of all queries asked and their solutions.*

b. Future plans for library involvement

Response	Frequency	Percentage
Library full involvement	1	33.3%
Small Library involvement	2	66.6%
TOTAL	3	

- *Possible. This will follow wherever management of the institutional repository eventually lies.*
- *We want to develop training for researchers, although this wouldn't be the first area we went into*

10. Advice in connection with bids for research funding - e.g. advising on data standards

a. Library current level of involvement

Response	Frequency	Percentage
Small Library involvement	3	30%
Library has no involvement	7	70%
TOTAL	10	

- *Electronic Resources Development team are now main source of "technical appendix" type areas of bids. Have completed three in the last 4 months*
- *Minor involvement on issues of data availability. We worked with the ESRC on developing the data portfolio in line with their future plans for UK social Science.*
- *Run by staff development unit, no plans for library involvement of which I am aware*
- *We're starting to do this with selected researchers, on a trial basis. We have contributed to a few research proposals, identifying the library as a partner in the process.*

b. Future plans for library involvement

Response	Frequency	Percentage
Library has no involvement	2	100%
TOTAL	2	

- *None. This role is fulfilled through the e-Services Integration Group where requested.*

11. Advice about data curation

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	2	15.4%
Library and IT responsibility	1	7.7%
Small Library involvement	8	61.5%
Library has no involvement	2	15.4%
TOTAL	13	

- *A huge area for the library, which is actively discussed and will be taken forward in the next few years.*
- *located in Data Centre*
- *We will give such advice when asked, which we have been occasionally, but I don't believe there is any formal involvement*
- *The Library has a Digital Curator in post.*

b. Future plans for library involvement

Response	Frequency	Percentage
Library and IT responsibility	1	33.3%
Small Library involvement	2	66.6%
TOTAL	3	

- *Potential, to be decided. There is also the possibility that the University Archives may become involved here.*
- *This may be undertaken in the Computing Side of Information Services, but I am not aware of any plans for involving the library*
- *Will continue to maintain local standards, follow good practice and provide advice.*

12. Advice about open access and publisher agreements

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	19	73.1%
Small Library involvement	6	23.1%
Library has no involvement	1	3.8%
TOTAL	26	

- *We have already launched an Open published journal "Methodological Innovations Online" <http://sirius.soc.plymouth.ac.uk/~andyp/> which the library developed for the research group*
- *As part of institutional repository developments*
- *Advocacy for open access via links with colleagues in Schools.*

b. Future plans for library involvement

Response	Frequency	Percentage
Library full involvement	4	80%
Small Library involvement	1	20%
TOTAL	5	

- *High potential, as part of repository advocacy. To be decided.*

- *To continue to provide advice and support as required*

13. Development of institutional policy for research data preservation and access

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	6	66.6%
Small Library involvement	2	22.2%
Library has no involvement	1	11.1%
TOTAL	9	

- *It has been raised as part of IR developments but not properly discussed*
- *My view is that this requires national co-ordination*
- *Part of the policies around the Institutional Repository*

b. Future plans for library involvement

Response	Frequency	Percentage
Library has no involvement	2	100%
TOTAL	2	

- *Uncertain. There has been no discussion of such a policy at this time.*

14. Development of workflows to assist management and deposit of primary results of research (electronic data)

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	5	62.5%
Small Library involvement	2	25%
Library has no involvement	1	12.5%
TOTAL	8	

- *Library involved as this relates to IR, not involved for other data*
- *Project StORe touched briefly on this aspect.*

b. Future plans for library involvement

Response	Frequency	Percentage
Small Library involvement	2	100%
TOTAL	2	

- *not sure, but this may become clear once the StORe project is complete.*

15. Development of research skills training to incorporate areas relevant to the changing requirements facing researchers

a. Library current level of involvement

Response	Frequency	Percentage
Library full involvement	15	68.2%
Small Library involvement	6	27.3%

Library has no involvement	1	4.5%
TOTAL	22	

- *Data Centre to develop workshops in research skills and use of statistical software*
- *"Getting published" open programme course offered to all postgraduates and staff free of charge.*
- *Library will develop training sessions in postgrad training prog. to cover e-thesis deposit and related questions of file format, 3rd party copyright etc.*
- *We are looking to do more of this, currently mostly on one-to-one basis where requested, we have offered a few sessions for wider groups and want to do more of this in future*
- *We have one accredited 'Research Skills' module for PhD students, the content for which probably requires updating to include Open access elements.*

b. Future plans for library involvement

Response	Frequency	Percentage
Library full involvement	3	60%
Small Library involvement	2	40%
TOTAL	5	

- *Development of parallel training/advocacy to academic staff to deposit content and make use of content in IR's and related services. Eg retaining copies of pre publication versions of papers, process and advantages of self archiving*
- *The training offered by the Library will be adapted to meet requirements over time.*

16. Please indicate any other aspects of library involvement and support for e-research which you would like covered by the training programme.
















- *How to persuade researchers that librarians have skills they can make use of!*
- *Personal research records management and "uk researcher profile / personal development portfolio" records issues*
- *Role of national data services*

17. Have you attended any training or development connected with e-research. If yes please give details





- *Bielefeld conference touched on this in Feb 2006*
- *cyber infrastructure workshop in geosciences*
- *ICPSR Summer training programme, IASSIST workshops, DLI workshops*
- *JOINT CURL/SCONUL TASK FORCE ON E-RESEARCH Workshop held at The King's Fund 12th December 2005*
- *Variety of IR related events and training courses.*
- *number of Digital Curation seminars/workshops; various e-Social Science events Repository related Some awareness from JISC conference*
- *VRE meetings, Grid portals conference, research portals seminar*
- *Workshops on developing IL materials for research (UC&R)*





Appendix 2 - Bristol Online Survey Analysis





Primary Roles





1. Please indicate your primary role in relation to support for researchers or research data			
Academic Liaison /Subject Librarian/ Information Advisor:		n/a	52
Data Manager/Data Librarian:		n/a	10
Cataloguer/Indexer:		n/a	7
Metadata Developer:		n/a	3
Web Developer:		n/a	4
E-resources Manager:		n/a	8
Archivist / Records Manager:		n/a	1
Institutional Repository Manager:		n/a	10
Research Support Librarian:		n/a	10
Research Administrator:		n/a	0
IT Analyst:		n/a	2
Systems Manager:		n/a	3
Academic Services Manager:		n/a	9
Customer/Reader Services Manager:		n/a	5
Other (please specify):		n/a	13





The eResearch Agenda

2. Institutional repository development and management			
Established:		31.1%	28
Current area of development:		43.3%	39
Under discussion/consideration:		15.6%	14
Not aware of any current discussion:		10.0%	9

3. Use of grid technologies for research			
Established:		10.0%	9
Current area of development:		11.1%	10
Under discussion/consideration:		5.6%	5
Not aware of any current discussion:		73.3%	66

4. Collaborative research projects involving sharing of electronic research data within the Institution			
Established:		16.7%	15
Current area of development:		10.0%	9
Under discussion/consideration:		21.1%	19
Not aware of any current discussion:		52.2%	47

5. Collaborative research projects involving sharing of electronic research data between institutions			
Established:		14.4%	13
Current area of development:		10.0%	9
Under discussion/consideration:		13.3%	12
Not aware of any current discussion:		62.2%	56

6. Development of metadata associated with published research outputs			
Established:		17.8%	16
Current area of development:		21.1%	19
Under discussion/consideration:		20.0%	18
Not aware of any current discussion:		41.1%	37

7. Development of metadata associated with primary research data			
Established:		1.1%	1
Current area of development:		5.6%	5
Under discussion/consideration:		17.8%	16
Not aware of any current discussion:		75.6%	68

8. Support for data web developments /distributed personal publication of data			
Established:		2.2%	2
Current area of development:		8.9%	8
Under discussion/consideration:		5.6%	5
Not aware of any current discussion:		83.3%	75

9. Virtual Research Environment development			
Established:		8.9%	8
Current area of development:		15.6%	14
Under discussion/consideration:		14.4%	13
Not aware of any current discussion:		61.1%	55

10. Advice services for researchers on management and handling of unpublished research data			
Established role:		6.7%	6
Current area of development:		6.7%	6
Under discussion/consideration:		21.1%	19
Not aware of any current discussion:		65.6%	59

11. Advice in connection with bids for research funding - e.g. advising on data standards			
Established role:		15.6%	14
Current area of development:		7.8%	7
Under discussion/consideration:		7.8%	7
Not aware of any current discussion:		68.9%	62

12. Advice about data curation			
Established role:		16.7%	15
Current area of development:		11.1%	10
Under discussion/consideration:		14.4%	13
Not aware of any current discussion:		57.8%	52

13. Advice about open access and publisher agreements			
Established role:		26.7%	24
Current area of development:		24.4%	22
Under discussion/consideration:		22.2%	20
Not aware of any current discussion:		26.7%	24

14. Development of institutional policy for research data preservation and access			
Established:		4.4%	4
Current area of development:		17.8%	16
Under discussion/consideration:		23.3%	21
Not aware of any current discussion:		54.4%	49

15. Development of workflows to assist management and deposit of primary results of research (electronic data)			
Established:		3.3%	3
Current area of development:		10.0%	9
Under discussion/consideration:		15.6%	14
Not aware of any current discussion:		71.1%	64

16. Development of research skills training to incorporate areas relevant to the changing requirements facing researchers			
Established programme:		15.6%	14
Current area of development:		27.8%	25
Under discussion/consideration:		14.4%	13
Not aware of any current discussion:		42.2%	38

17. Which of the following elements are covered in researcher training programme			
Open access and advantages for researchers:		n/a	17
Guidance on deposit in Institutional Repository:		n/a	25
Guidance on deposit in subject repositories:		n/a	8
Guidance on handling and managing other kinds of unpublished research data:		n/a	5
Information on bodies available to provide guidance, e.g. Digital Curation Centre:		n/a	7





















Roles present at the institutions

18. Please indicate which of the following roles are present in your institution and which have (or may have in future) responsibility for supporting researchers engaged in e-research. Please indicate which are based in the Library:			
18.a. Academic Liaison /Subject Librarian/ Information Advisor			
Role present in my institution:		10.2%	9
Based in the Library:		89.8%	79
18.b. Data Manager/Data Librarian			
Role present in my institution:		44.8%	13
Based in the Library:		55.2%	16
18.c. Cataloguer/Indexer			
Role present in my institution:		9.5%	7
Based in the Library:		90.5%	67
18.d. Metadata Developer			
Role present in my institution:		25.0%	9
Based in the Library:		75.0%	27
18.e. Web Developer			
Role present in my institution:		57.5%	42
Based in the Library:		42.5%	31
18.f. E-resources Manager			
Role present in my institution:		6.5%	4
Based in the Library:		93.5%	58

18.g. Archivist / Records Manager			
Role present in my institution:		32.8%	21
Based in the Library:		67.2%	43
18.h. Institutional Repository Manager			
Role present in my institution:		15.4%	8
Based in the Library:		84.6%	44
18.i. Research Support Librarian			
Role present in my institution:		6.5%	2
Based in the Library:		93.5%	29
18.j. Research Administrator			
Role present in my institution:		91.1%	41
Based in the Library:		8.9%	4
18.k. IT Analyst			
Role present in my institution:		76.1%	35
Based in the Library:		23.9%	11
18.l. Systems Manager			
Role present in my institution:		50.0%	34
Based in the Library:		50.0%	34
18.m. Academic Services Manager			
Role present in my institution:		31.9%	15
Based in the Library:		68.1%	32
18.n. Customer/Reader Services Manager			
Role present in my institution:		6.6%	4
Based in the Library:		93.4%	57

Areas to be covered by workshops

19. The intention is to develop one or more workshops to provide information and exchange of experience in developing library support for e-research. Are there specific aspects from the list below which you would like included in the training programme. Please prioritise 1-5 from 1 Very useful to 5 of limited interest.			
19.a. Background information (giving explanation and examples of e-research developments)			
1:		51.2%	44
2:		22.1%	19
3:		10.5%	9
4:		10.5%	9
5:		5.8%	5
19.b. Technical e-infrastructure development (grid technology standards)			
1:		21.4%	18
2:		27.4%	23
3:		16.7%	14
4:		23.8%	20
5:		10.7%	9
19.c. Preservation and access to e-research data			
1:		35.3%	30
2:		32.9%	28
3:		16.5%	14
4:		9.4%	8
5:		5.9%	5

19.d. Technical standards in support of e-research data management and handling			
1:		22.8%	18
2:		24.1%	19
3:		24.1%	19
4:		20.3%	16
5:		8.9%	7
19.e. Metadata standards			
1:		27.7%	23
2:		27.7%	23
3:		22.9%	19
4:		10.8%	9
5:		10.8%	9
19.f. Data curation issues and advice			
1:		30.9%	25
2:		25.9%	21
3:		23.5%	19
4:		11.1%	9
5:		8.6%	7
19.g. Institution level developments (and associated library support) -- case studies			
1:		44.0%	37
2:		22.6%	19
3:		19.0%	16
4:		8.3%	7
5:		6.0%	5
19.h. Impact of VRE development			
1:		38.0%	30
2:		29.1%	23
3:		17.7%	14
4:		8.9%	7
5:		6.3%	5
19.i. Researchers' views of Library involvement in e-research			
1:		51.9%	42
2:		27.2%	22
3:		13.6%	11
4:		2.5%	2
5:		4.9%	4
19.k. Research skills development in relation to e-research and how to address this			
1:		58.1%	50
2:		22.1%	19
3:		10.5%	9
4:		2.3%	2
5:		7.0%	6
21. Have you attended any training or development connected with e-research			
Yes:		17.9%	15
No:		82.1%	69