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JISC Final Report: APPENDICES

Project Document Cover Sheet

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Digitisation of Special Collections: mapping, assessment, prioritisation

Final Report: APPENDICES

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Appendix I - Online survey of intermediaries

The following Appendix explains in summary the nature of the various fields used in the DiSCmap Online Survey of Intermediaries. A separate explanatory “Guidance” document was also produced and sent to all potential respondents, as well as being made available as a webpage alongside the questionnaire on the project website. The text below is partly based, but elaborates, on the content of the Guidance document.

Institution name

Department/school name

Department/school homepage

These first 3 fields are fairly self-explanatory, asking simply for the name of the respondent's institution, their department or school name and the URL of that department's homepage. There were two reasons why we did not create a drop-down list of institutions (for example, a standardised version the HERO list of UK HEIs) from which respondents could have selected the appropriate name. First; a drop-down list of 196 institutions would have been unwieldy on a standard computer monitor. Second; trying to normalise names would have created an unnecessary administrative burden for the project staff.

We introduced standardisation by asking respondents to supply the full, official name of their institution, without abbreviation.

Contact

Details of the person to contact for further information.

Name

Job title

Telephone

Email

We could not assume that the person responding to the questionnaire was the person whom we had contacted via email. In many cases our “DiSCmap project Request” was forwarded to various other members of the institution or department contacted – for example, when our primary contact was unavailable, too busy to take part, or knew of another member of staff equally, or more qualified, to assist. Therefore, we asked respondents to supply us with their name, job title and basic contact details (destroyed after the project duration), allowing us – if necessary – to contact the correct individual with any additional questions.

The most important pieces of the questionnaire were the “Collection” and “Digitisation” sections, described below. The information gathered here directly contributed to the final project deliverables; primarily, the gathering of intermediary-led/user-focussed prioritisation criteria and a list of nominated Special Collections.

Collection section

Collection title

collection

Collection description

Collection management

- ☒ Library/Special collections
- ☐ Museum
- ☐ Archive
- ☐ Faculty/Department/School

Catalogue URL

- ☒ Library/Special collections
- ☐ Museum
- ☐ Archive
- ☐ Faculty/Department/School

Catalogue URL

We wished respondents to provide Collection names according to their “official” titles – i.e. the *full* title by which a Collection is referred to administratively in catalogues or records held by the library/archive or other department. We sought standardisation by asking that AACRII rules of capitalisation be adhered to (i.e. only the first word and proper nouns were to be capitalised). Abbreviations were not to be used.

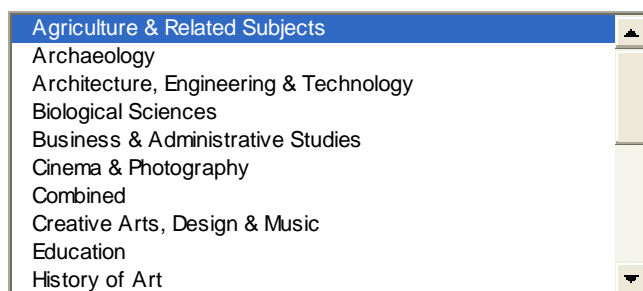
“Description” was by necessity a free text field, asking for a brief summary of some or all of the scope and provenance of the Collection being nominated as well as its current condition. By condition we meant *non-physical* attributes, such as the extent to which the Collection was catalogued, curated and visible to researchers. This was the first field which might allow us to compare and contrast content and context with regard to which Collections were being nominated for digitisation by intermediaries and why. If respondents so wished they might tell us about any “notable” items within the Collection (i.e. items of real rarity or with special significance for the associated subject area or more generally, in socio-cultural terms).

Details on physical condition were to be entered in the “Notes” field (a free text box) at the bottom of the form.

We could not assume that the department of the individual responding to our questionnaire corresponded to the environment in which the nominated Collection was curated. Similarly, the Collection might for some reason be *located* in a different space to the conceptual administrative space in which it was managed. For example, the Lindsay Anderson Collection at Stirling is currently held at Departmental level but remains an Archival Collection in every other sense. Therefore, respondents were to tell us whether nominated Collections were managed as Library/Special Collections, Museum Collections, Archives or within a Faculty, Department or School.

Where an online catalogue record of the Collection existed, we asked respondents to provide the URL; where more than one online catalogue record existed we preferred them to tell us of the one more co-extensive with the Collection (i.e. a specific shelf-list), irrespective of the functionality of the catalogue.

Subject



Item age

- ☐ -1799
- ☐ 1800-1899
- ☐ 1900-1949
- ☐ 1950-1999
- ☐ 2000-

The “Subject” and “Item age” fields were, to some extent, problematic. It was difficult to decide how granular we wished to be in our provision of subject headings, and indeed, which set of subjects we should offer as pre-set drop-down menu options. Clearly we did not need to reflect the fine and subtle distinctions of subject classification because it was not the aim of DiSCmap to consider nominated collections in that amount of depth. In any case, Special Collections tend to be relevant to a subject - or group of subjects – in broader rather than narrower terms, with connections to various aspects of a subject domain. In our professional judgement, it was unlikely that a Special Collection would be catalogued as a collection on “Plutocracy” rather than “Politics”. If it were, it would still be a sub-class of the parent “Politics” collection, justifying our approach while at the same time making it simpler to process the data.

While we did not wish to be pre-emptive, second-guessing the subject areas to which collections nominated corresponded, providing even the 142 “Principal” top-level subjects (as detailed in the HESA JACS Subject coding scheme) or those of similar schemes would have been unnecessary and prohibitive, both for the project team, and respondents expected to select from a huge drop down list. It was decided that we would use a small sub-set of 22 Subjects, using a modification of the HESA scheme. We selected headings corresponding to the most “common” faculties and taught courses within UK HE, and which accommodated within them the broadest range of materials. For example, “Architecture, Engineering and Technology” was used rather than “Architecture”, “Engineering” and “Technology”.

The 22 Subjects which we offered as options were presented alphabetically and are as follows:

Agriculture & Related Subjects
Archaeology
Architecture, Engineering & Technology
Biological Sciences
Business Studies
Cinema & Photography
Combined
Creative Arts, Design & Music
Education
General Humanities
History of Art
History of Science
History, economic & social history

Languages & Literature

Law

Librarianship, Computing & Information Science

Mathematics & Physical Sciences

Medicine, Dentistry & Allied subjects

Philosophy

Social, Economic & Political Studies

Theology & religious studies

Veterinary Sciences

These codes are a combination of high-level HESA codes with some additions. For the list of HESA codes see Appendix III.: It was decided to extend the range from within the existing top level hierarchy of HESA subject codes. The list of 19 top level Subject codes were adapted and expanded to form a list of 22 Subject Headings from which respondents could select to assist collection description. It was agreed that some of the subject headings related to Medicine, Science and Engineering would be conflated in order to allow for the expansion of subject coverage within the Humanities – the domain traditionally making high use of Special Collections.

Medicine & Dentistry and Subjects Allied to Medicine - two distinct subject codes for HESA - were presented in DiSCmap as one, as were Computer Science and Librarianship & Information Science, Physical Science and Mathematical Science, Architecture Building & Planning and Engineering & Technology.

In the opposite direction, whilst the category of General Humanities remained, the range of subjects available from within this hierarchy was extended to include separate options for Archaeology, History (Economic & Social), History of Art, History of Science, Philosophy and Theology. Additionally the HESA subject code *Cinematics* was itself re-titled “Cinema & Photography” for improved clarity and extracted from within its top level classification of “Creative Arts & Design” to reflect an awareness of the growing significance of film and photographic archives for media research. Such modification was felt necessary both to increase the usability of the online form and to accommodate the wide range of collections which DiSCmap anticipated would be nominated related to Humanities subject areas.

Regarding dates; there were similar issues. DiSCmap was not expected to find or analyse in depth the dates of items within Collections nominated for digitisation, and to ask for this information would only have given us data surplus to requirement. For simplicity we devised a set of 5 broad date ranges in order that we could provide JISC with a general picture of the time periods to which nominated Collections belonged. Date ranges referred to date of *production* of the item, rather than any other of the dates associated with Special Collections (such as dates referred to by the item; acquisition date etc.).

The question of date (as with the Subject Headings) might be seen to signpost some of the further work which might usefully be undertaken by JISC, building on that of the DiSCmap team.

Languages (other than English)

We asked respondents to tell us if nominated Collections contained items in languages other than English in order to provide JISC with an illustrative snapshot – given that we could not predict which languages might be relevant, it was simpler that this information be provided to us via a free text box; there was less need to enforce standardisation or normalisation given that most individual languages were likely to be described uniformly by respondents – in *English*, “Hungarian” is always “Hungarian”, and “Welsh” always “Welsh”. Respondents were only to list languages which were applicable to *significant* parts of the Collection.

The role of language in digitisation prioritisation would also be a rich seam for further and deeper analysis.

Collection size

(Enter number only, without punctuation or spaces)

No. of books (volumes)

No. of serials (parts)

No. of manuscripts

No. of maps

No. of images

Size of archive (shelf-meters)

No. of audio recordings

No. of film/video recordings

No. of other items/objects

The final part of the “Collection” section asked for basic information on *extent*. Rather than using any domain-specific terminology (for example, that found in EAD) we simplified this so that it would be generalisable across all respondent groups and provide us with enough basic information to make an informed assessment and comparison. Approximations were acceptable.

Digitisation section

Digitised?

- ☐ Part
- ☐ No
- ☐ Selected

Distributed?

- ☐ Yes
- ☐ No
- ☐ Not known

We wished to know whether pieces of the Collection had already been digitised or at least whether the collection had been *selected* for digitisation as part of a definite or planned future project; clearly this has a bearing on whether or not the rest of the Collection should be prioritised for digitisation (although in what way depends on the specific priorities being taken into consideration). So too does knowing whether or not the Collection was distributed; bringing distributed parts of a Collection together is often part of the case made for digitisation and can represent increased value for money and value to the scholarly community.

Digitisation criteria

- ☐ Increase usage

- ☐ Collaboration
- ☐ Facilitate access
- ☐ Preservation
- ☐ Other

In light of this, we wished to know why the respondent was nominating a Collection for digitisation. Offering some of the common criteria usually advanced as reasons for digitisation allowed us to avoid gathering many non-standardised repetitions of the “obvious”, as well as simplifying the survey for respondents. The choices were derived from a literature review, including the current JISC digitisation strategy and a free text box allowed selections to be elaborated upon, or extended.

Case or additional criteria for digitisation

Teaching impact now

- ☒ Not known
- ☐ None
- ☐ Low
- ☐ High
- ☐ Very high

Research impact now

- ☒ Not known
- ☐ None
- ☐ Low
- ☐ High
- ☐ Very high

Teaching impact if digitised

- ☒ Not known
- ☐ None
- ☐ Low
- ☐ High
- ☐ Very high

Research impact if digitised

- ☒ Not known
- ☐ None
- ☐ Low
- ☐ High
- ☐ Very high

Impact statement

The “Case or additional criteria for digitisation” section of the questionnaire was not intended to be scientific – it asked for the opinion of one person (the respondent) on something qualitative and essentially immeasurable. It was one of the most important parts of the questionnaire, providing us with a basis to compare and contrast Collections in terms of the judgements made about their current impact and their *potential* impact (if digitised) by active professionals in intimate contact with, and possessing knowledge not only of the Collections themselves but the subject areas and the users to which they relate. These impact statements could, in broad terms allow respondents to indicate to us the perceived value of these Collections to their core user groups: i.e. teaching staff and researchers. This will be invaluable in informing JISC about which Collections must move up any given hierarchy with scholarly need as its foundation.

Initially we – and the DiSCmap Advisory Board – had some misgivings, wondering if respondents might – sensing the dangling carrot of potential funding, or through excessive regard for the fate of a Collection close to them – select “High” or “Very High” for each of the impact questions, regardless of actualities. However, our decision to trust in the intermediaries' professionalism, honesty and lack of bias bore fruit as this skewing of data did not in fact occur; selections were made across the board.

We provided a free-text box to counter-act the limitations involved in offering only pre-set “scales” on impact, giving intermediaries valuable space to tell us about specific reasons why the digitisation of their nomination would be of “high” or “low” impact for teachers and researchers within their own or other institutions; for example, we were able to gather information on which taught courses within respondents' institutions these Collections – if digitised – would benefit, something which would be very time-consuming to try and discern otherwise.

Copyright

- ☐ None
- ☒ Held by institution
- ☐ Held by another party
- ☐ Not known

Current conservation?

- ☐ Yes

- ☒ No

Additional information

Notes

Because any digitisation activities must comply to Copyright and other IPR rules and regulations it was common sense that we ask respondents to tell us whether it was their or another institution who held the Copyright of the Collections they were proposing be digitised. If another party was in possession, respondents could tell us about them in the “Additional information” field.

We felt it would be useful to know whether a conservation policy was currently being enacted on the nominated Collection, indicating whether or not items might need special treatment if undergoing the digitisation process.

The DiSCmap questionnaire was an essential tool in the achievement of our stated project aims and objects; because of the high and detailed responses provided by intermediaries, it also allowed our analysis to go beyond the limitations of *requirement*, giving ourselves and JISC an invaluable amount of qualitative and quantitative information from which to understand better, via the stated and implied knowledge and opinions of intermediaries curating and caring for the Special Collections of HE, not only which Collections might be treated as digitisation priorities, but the wider context in which those Collections and the teachers and researchers who use them, exist.

Appendix II - Direct user survey

Work here has followed a lifecycle model which started with identification of assessment criteria followed by identification of participants which has been informed by discussions with JISC and the Advisory board at the meeting 5th December 2008. Collection of responses has been undertaken through direct and indirect methods. As such, definition of initial criteria was developed through analysis of the literature and related studies informal discussions with Intermediaries at the RLUK conference and results from the Intermediary survey described in Appendix I.

Five Intermediary participants were interviewed from a range of institutions across the UK HE community. It was initially hoped that engagement with Intermediaries would occur through a variety of methods but it was found that the most successful was via interview. Social networking was explored but at this stage is not used with sufficient consistency to form the main data collection approach. A Facebook Group has been set up (24 members to date), with links to the Discussion Forum at Strathclyde, and it is hoped that this will continue to develop. It remains to be seen if Intermediaries use this to discuss issues regarding digitisation of Special Collections, and to which directed questions can be debated and resources discussed. Results of these interviews identified: 1) digitisation criteria important to Intermediaries, 2) criteria thought to be important to end users and 3) views on the impact on teaching and research of the digitisation of Special Collections. The interview schedule used can be seen in Appendix IIb.

Initially Direct-users of digitised materials were going to respond to a preliminary list of potential priority collections (as identified by the Intermediaries) and asked to refine the final selection of collections according to the needs of their own research area and agenda. However, it became apparent early on in the project that this approach may restrict Direct users and as such the decision was made to allow users to identify the Special Collections they use for their research, studies or teaching and to identify if they wish these collections to be digitised (if not already).

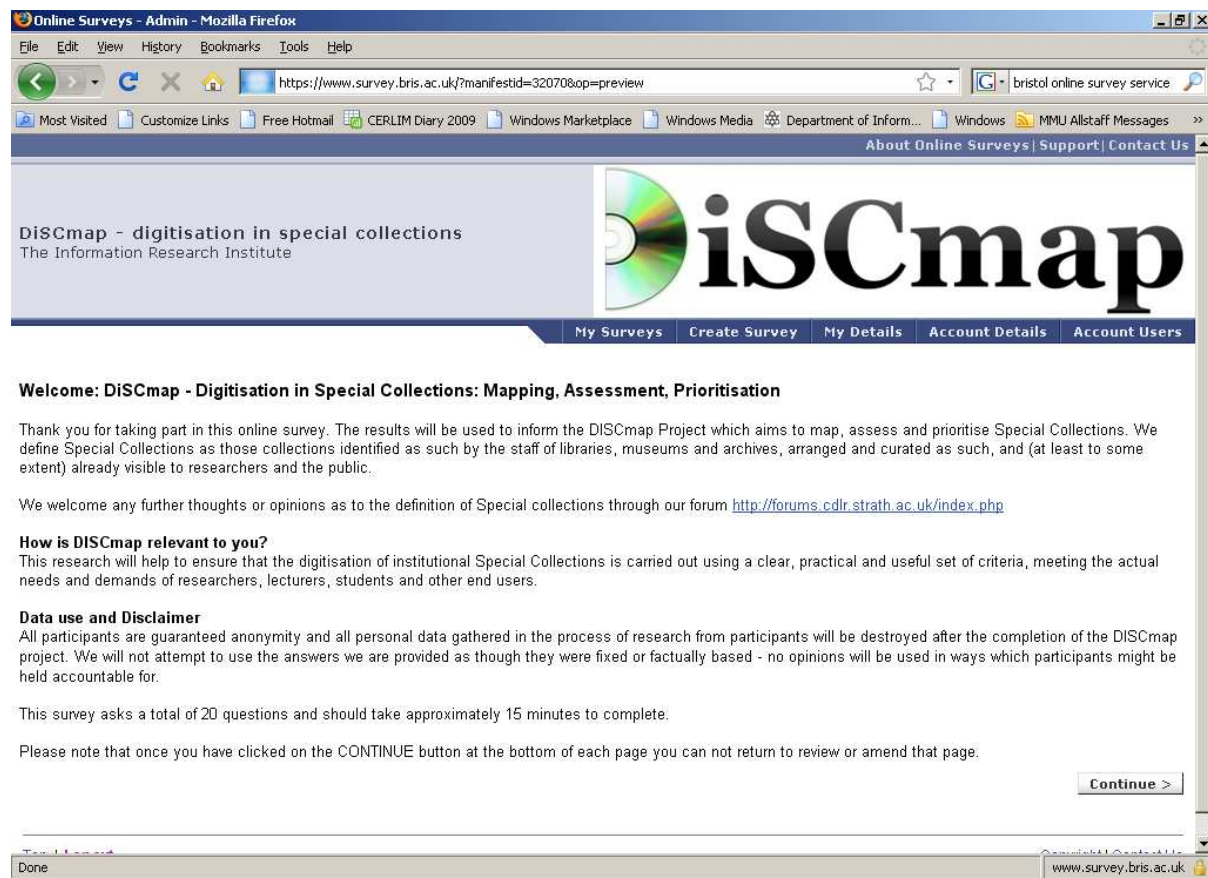
Consultation with Direct-users has been undertaken by online questionnaire and focus group and interview. The online survey was informed by: 1) the results of the Intermediary survey described in Section 4.2.1 of the DiSCmap project report) the findings of the interviews with Intermediaries and 3) critical evaluation of related studies. This enabled the development of a list of criteria for digitisation of Special Collections from which end users could select, and add their own. Further to this, advice was taken from the members of the Advisory Board meeting of December 2008 on additional areas of investigation to include. A pilot questionnaire was tested with colleagues in CERLIM and CDLR and, following final adjustments, the survey released for one month from end of January until end of February 2009. This survey can be seen in Appendix IIa.

Utilising the database of mass contacts compiled for the Intermediaries' survey which contained an identified Intermediary from each higher education library was emailed with a request to distribute an invitation to staff and students of their institution to participate in the online survey. In total 196 universities were contacted. In addition, related professional bodies were also invited to participate and postings were made on the DiSCmap Facebook group, other related groups on Facebook (12 in total) and on the Project website and Discussion forum. Results of this online survey are presented in the following series of charts, tables and graphs, with additional detailed analysis being provided in Appendix VI.

It was agreed with the Advisory Board in December 2008 that the subjects to be included for the workshop/focus groups would be the Biological Life Sciences, History and Sociology. Two focus groups were to be held in Manchester (History and Sociology) and one in Glasgow (Biological Life Sciences). To this end participants from universities located within a reasonable travelling distance were invited to attend and in total 221 Historians were invited to participate; 159 Sociologists and 214 Biological Life Scientists. However, efforts to recruit participants to these focus groups were largely unsuccessful, with only one focus group taking place for Historians (plus one interview for a participant who was unable to attend the focus group but wished to participate). One participant accepted the invitation for Biological Life Sciences and was subsequently interviewed. No academics accepted the invitation for Sociology. The Focus Group/Interview schedule used can be seen in Appendix IIb and IIc. Comments from the focus group and interview are interspersed with the survey findings below.

This questionnaire was delivered online using Bristol Online Survey Service. The following presents this questionnaire in a Word format, as a result some of the formatting does not appear as it did in the online version. Some screen shots have been included to show the original version.

Appendix IIa- Direct user survey – online questionnaire



Welcome: DiSCmap - Digitisation in Special Collections: Mapping, Assessment, Prioritisation

Thank you for taking part in this online survey. The results will be used to inform the DiSCmap Project which aims to map, assess and prioritise Special Collections. We define Special Collections as those collections identified as such by the staff of libraries, museums and archives, arranged and curated as such, and (at least to some extent) already visible to researchers and the public.

We welcome any further thoughts or opinions as to the definition of Special collections through our forum <http://forums.cdrl.strath.ac.uk/index.php>

How is DiSCmap relevant to you?

This research will help to ensure that the digitisation of institutional Special Collections is carried out using a clear, practical and useful set of criteria, meeting the actual needs and demands of researchers, lecturers, students and other end users.

Data use and Disclaimer

All participants are guaranteed anonymity and all personal data gathered in the process of research from participants will be destroyed after the completion of the DiSCmap project. We will not attempt to use the answers we are provided as though they were fixed or factually based - no opinions will be used in ways which participants might be held accountable for.

This survey asks a total of 20 questions and should take approximately 15 minutes to complete.

Please note that once you have clicked on the CONTINUE button at the bottom of each page you can not return to review or amend that page.

A little about you

This first section asks for some brief details about you. This information will be kept confidential and data will be used anonymously.

1. Please select the description which most closely matches your role, or roles, within your institution.
(select all that apply)

- ☐ Academic Lecturer
- ☐ Academic Researcher
- ☐ Academic Research Associate
- ☐ Academic Research Fellow
- ☐ Academic Senior Research Fellow
- ☐ Academic Reader
- ☐ Academic Professor
- ☐ Undergraduate Student
- ☐ Post Graduate Student
- ☐ Research Student
- ☐ Special Collections Manager
- ☐ Archivist
- ☐ Librarian
- ☐ Other (*please specify*):

2. Please tell us the name of your institution:

Please tell us the name of your Department/School:

3. If you would be willing to participate in a focus group please provide us with your name and email address. These details will be held securely and will only be used for the purpose of contacting you

regarding this project.

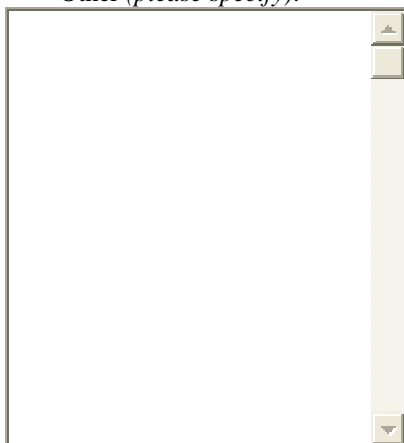


YOUR reasons for digitisation of a Special Collection


4. What would be YOUR OWN reasons or criteria for a Special Collection to be digitised?

(select all that apply)

- ☐ Because the collection is rare or valuable
- ☐ Because it would enable me to use it more frequently
- ☐ Because it would improve my access to the collection
- ☐ Because it would allow me to work collaboratively with other people
- ☐ Because it would help with the preservation and conservation of the collection
- ☐ Because it would have a positive impact on my teaching of a subject
- ☐ Because it would have a positive impact on my research or studies
- ☐ Because there is little in my subject area which is currently digitised
- ☐ Because there is little in the chronological timeline I am interested in which is currently digitised
- ☐ Because there is little in the format I am need in which is currently digitised
- ☐ Because it would bring distributed parts of a collection together allowing me to access it more easily and improving intellectual coherence
- ☐ Other *(please specify)*:



a. If you feel that there is little in your subject area which is currently digitised please state what this subject is:

A rectangular text box with a thin black border. On the right side, there is a vertical toolbar with three icons: a small square, a rectangle, and a triangle.

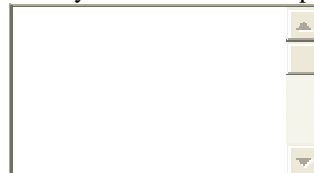
b. If you feel that there is little in the chronological timeline you are interested in which is currently digitised please state what this timeline is:

A rectangular text box with a thin black border. On the right side, there is a vertical toolbar with three icons: a small square, a rectangle, and a triangle.

c. If you feel that there is little in the format which is currently digitised please state what this format is:

A rectangular text box with a thin black border. On the right side, there is a vertical toolbar with three icons: a small square, a rectangle, and a triangle.

d. Any other criteria/issue/point you wish to raise:

A rectangular text box with a thin black border. On the right side, there is a vertical toolbar with three icons: a small square, a rectangle, and a triangle.

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Most Visited Customize Links Free Hotmail CERLIM Diary 2009 Windows Marketplace Windows Media Department of Inform... Windows MMU Allstaff Messages

Special Collections and your RESEARCH or your STUDIES

Use of Special Collections and your RESEARCH or your STUDIES

5. Do you use Special Collections for your **research** or **studies**? If you answer **Yes** to this please answer question 6. If you answer **No**, **Don't know**, or **Not applicable** please go to question 7.

☐ Yes
☐ No
☐ Don't know
☐ Not applicable

6. Which Special Collections do you need to use for your **research** or **studies**?

	Name of the Collection	Into which subject area does this Collection fall?	To what extent (to your knowledge) are they digitised?				Do you want or need them to be digitised?		
			NOT digitised	PART digitised	Digitised	Don't know	Yes	No	Don't know
a. 1		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. 2		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. 3		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. 4		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. 5		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Done

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Special Collections and your RESEARCH or your STUDIES

Use of Special Collections and your RESEARCH or your STUDIES

5. Do you use Special Collections for your research or studies? If you answer Yes to this please answer question 6. If you answer Don't know, or Not applicable please go to question 7.

- ☐ Yes
☐ No
☐ Don't know
☐ Not applicable

6. Which Special Collections do you need to use for your **research** or **studies**?

Name of the Collection

Into which subject area does this Collection fall?

To what extent (to your knowledge) are they digitised?

NOT digitised PART digitised Digitised Don't know Yes No

Figure 1 displays five horizontal bar charts, labeled a through e, each showing the percentage of correct responses for a specific condition. The y-axis for each chart is labeled with a letter and a number (a. 1, b. 2, c. 3, d. 4, e. 5). The x-axis represents the percentage of correct responses, ranging from 0 to 100. Each chart contains a single horizontal bar with a value of approximately 75%. To the right of each bar, there are several small circular icons, some of which are filled with a black dot, representing different conditions or trials.

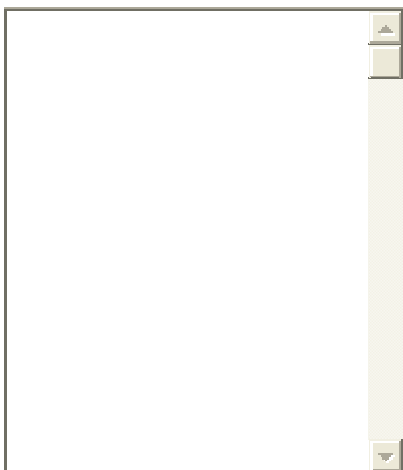
7. What is the level of impact of the **non-digitised** Special Collections you use on your **research** or **studies**?

- ☐ None
☐ Low
☐ High
☐ Very high
☐ Not applicable

a. If none or low, what are the current factors preventing non-digitised Special Collection materials impacting on your research or studies?

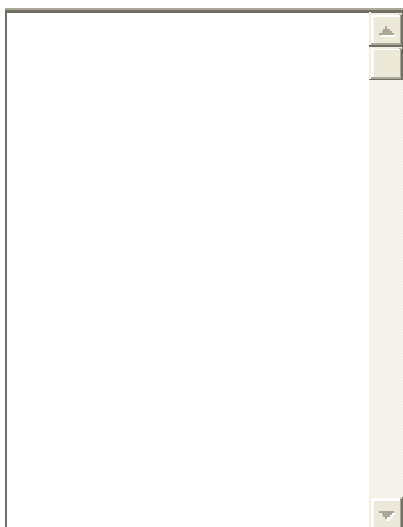
(select all that apply)

- ☐ Time
- ☐ Access
- ☐ Cost
- ☐ Travel
- ☐ Material types
- ☐ Other (*please specify*):



b. If high or very high, how do non-digitised Special Collection materials impact on your research or studies?
(select all that apply)

- ☐ Increase subject knowledge
- ☐ Further interdisciplinary research
- ☐ Further collaborative research
- ☐ Enable research or rare and unique materials
- ☐ Aid formation of research networks
- ☐ Other (please specify):



8. Please speculate as to level of the potential impact of digitised Special Collections on your research or studies

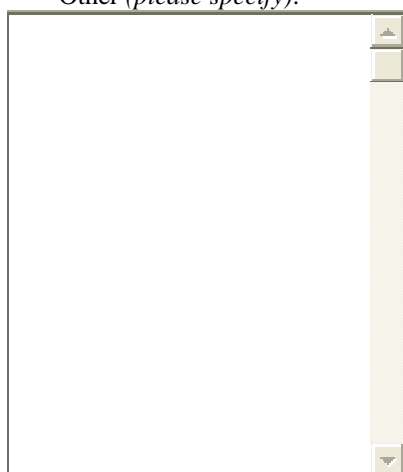
- ☐ None
- ☐ Low
- ☐ High

- ☐ Very high
☐ Not applicable

If **high** or **very high**, how would **digitised** Special Collection materials impact on your **research** or **studies**?

(select all that apply)

- ☐ Increase subject knowledge
☐ Further interdisciplinary research
☐ Further collaborative research
☐ Enable research on rare and unique materials
☐ Aid formation of research networks
☐ Other *(please specify)*:



9. Do you feel that there is a lack of **digitised** Special Collections available to assist you in your **research** or **studies**?

- ☐ Yes
☐ No
☐ Don't know
☐ Not applicable

If **yes**, does the lack of **digitised** collections hinder your **research** or **studies**?

- ☐ Yes
☐ No
☐ Don't know

If **yes**, please explain how:

If **no**, please explain why not:

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Special Collections and your TEACHING

Use of Special Collections and your TEACHING

10. Do you use Special Collections for your **teaching**? If you answer **Yes** to this please answer question 11. If you answer **No**, **Don't know**, or **Not applicable** please go to question 12.

☐ Yes
☐ No
☐ Don't know

11. Which Special Collections do you need to use for your **teaching**?

	Name of the Collection	Into which subject area does this Collection fall?	To what extent (to your knowledge) are they digitised?				Do you want or need them to be digitised?		
			NOT digitised	PART digitised	Digitised	Don't know	Yes	No	Don't know
a. 1		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. 2		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. 3		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. 4		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. 5		Select an answer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Done

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Special Collections and your TEACHING

Use of Special Collections and your TEACHING

10. Do you use Special Collections for your **teaching**? If you answer **Yes** to this please answer question 11. If you answer **No**, **Don't know**, or **Not applicable** please go to question 12.

- ☐ Yes
☐ No
☐ Don't know

11. Which Special Collections do you need to use for your **teaching**?

Name of the Collection	Into which subject area does this Collection fall?	To what extent (to your knowledge) are they digitised?	Do you want or need them to be digitised?					
			NOT digitised	PART digitised	Digitised	Don't know	Yes	No
a. 1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. 2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. 3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. 4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. 5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. What is the impact of the **non-digitised** Special Collections you use on your **teaching**?

- ☐ None

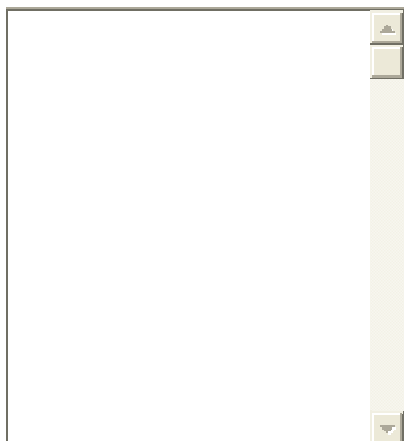
- ☐ Low
- ☐ High
- ☐ Very high
- ☐ Not applicable

a. If **none** or **low**, what are the current factors preventing the impact of **non-digitised** Special Collection materials on your **teaching**?
(select all that apply)

- ☐ Time
- ☐ Access
- ☐ Cost
- ☐ Travel
- ☐ Material types
- ☐ Other (please specify):

b. If **high** or **very high**, how do **non-digitised** Special Collection materials impact on your **teaching**?
(select all that apply)

- ☐ Preparation of teaching materials
- ☐ Cite Collections as references for students
- ☐ Other (please specify):

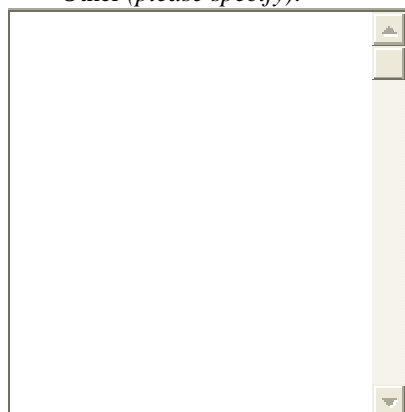


13. Please speculate as to the **potential** impact of **digitised** Special Collections on your **teaching**?

- ☐ None
- ☐ Low
- ☐ High
- ☐ Very high
- ☐ Not applicable

If **high** or **very high**, how would **digitised** Special Collection materials impact on your **teaching**?
(select all that apply)

- ☐ Preparation of teaching materials
- ☐ Cite as references for students
- ☐ Other (please specify):



14. Do you feel that there is a lack of **digitised** Special Collections available to assist you in your **teaching**?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Not applicable

a. If **Yes**, does the lack of **digitised** collections hinder your **teaching**? Please explain how:

b. If **No** please explain why not:

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Your views on digitisation at a broader level

15. Would **digitisation** of a Special Collection affect your use of that Collection?

☐ Yes

☐ No

☐ Don't know

a. If **yes**, please explain how:

b. If **no**, please explain why not:

16. Do you find it difficult to find **digitised** Special Collections?

☐ Yes

☐ No

☐ Don't know

a. If **yes**, please explain why:

b. If **no**, please explain why not:

17. How do you usually find out about a **digitised** Special Collection?
(select all that apply)

Done www.survey.bris.ac.uk

Your views on digitisation at a broader level

15. Would digitisation of a Special Collection affect your use of that Collection?



Yes

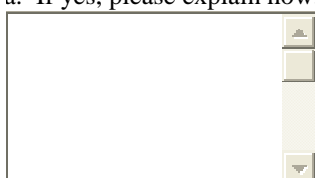


No

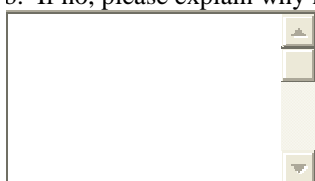


Don't know

a. If yes, please explain how:

A rectangular text input area with a light beige background and a thin black border. On the right side, there are three small, stacked buttons: a top button with an upward-pointing triangle, a middle button with a horizontal line, and a bottom button with a downward-pointing triangle.

b. If no, please explain why not:

A rectangular text input area with a light beige background and a thin black border. On the right side, there are three small, stacked buttons: a top button with an upward-pointing triangle, a middle button with a horizontal line, and a bottom button with a downward-pointing triangle.

16. Do you find it difficult to find digitised Special Collections?



Yes

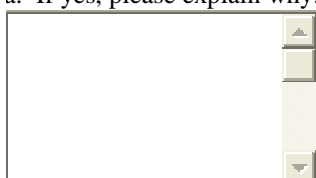


No



Don't know

a. If yes, please explain why:

A rectangular text input area with a light beige background and a thin black border. On the right side, there are three small, stacked buttons: a top button with an upward-pointing triangle, a middle button with a horizontal line, and a bottom button with a downward-pointing triangle.

b. If no, please explain why not:

17. How do you usually find out about a digitised Special Collection?
(select all that apply)

- ☐ Library
- ☐ Librarian
- ☐ Searching the university catalogue
- ☐ Searching using a search engine
- ☐ Searching using COPAC
- ☐ Searching using Intute
- ☐ Searching using INFORM25
- ☐ Searching using the Archives Hub
- ☐ Searching using other academic resource
- ☐ Word of mouth from colleagues
- ☐ References in articles/newsletters etc
- ☐ Other *(please specify)*:

18. Do you think any of the Special Collections you use have relationships or links with other separate Collections? If you answer Yes to this please answer question 19. If you answer No or Don't know please go to question 20.

- ☐ Yes
- ☐ No
- ☐ Don't know

19. What are these Collections?

Collection names:	Linked to Collections overseas?				If yes, please explain which these are and what is the link:
	UK	USA	Europe	Other <i>(please specify)</i>	

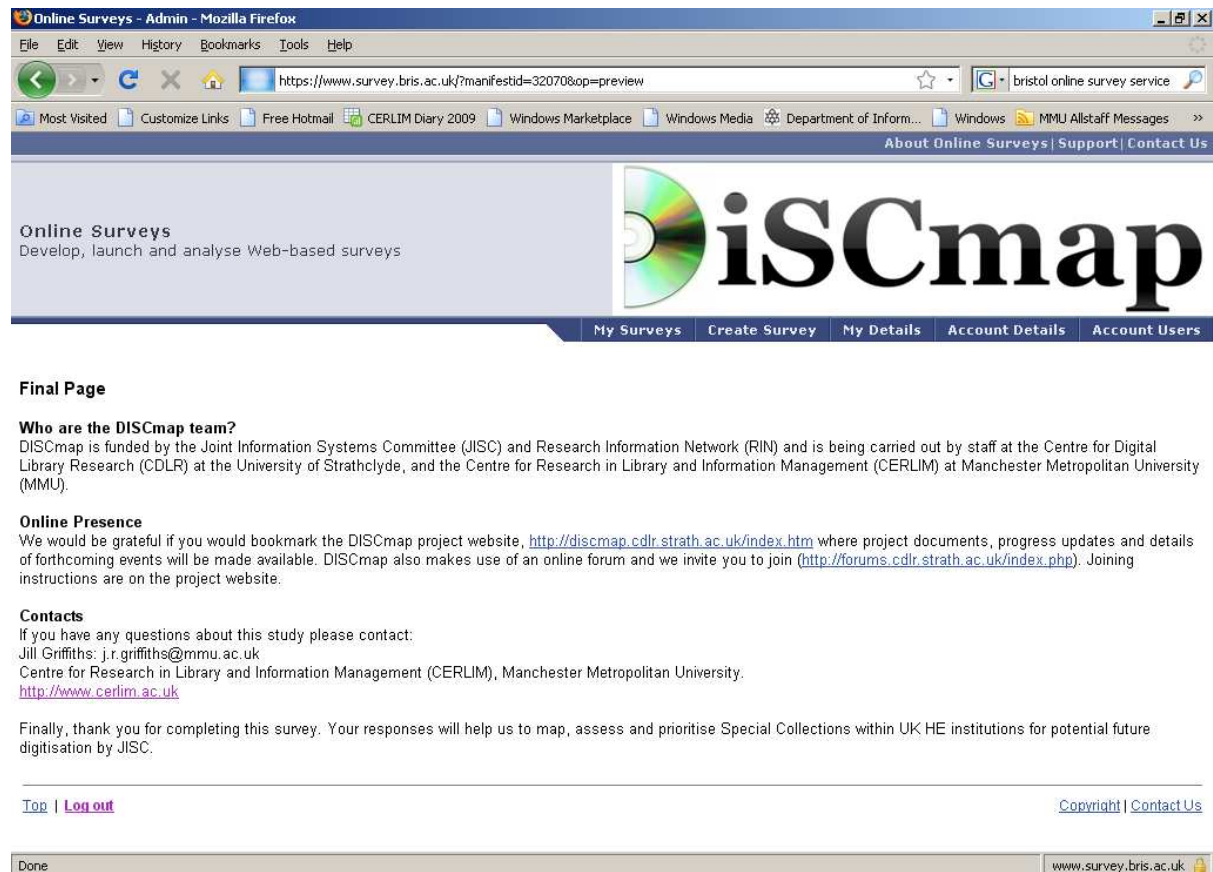
a. 1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
------	--	--------------------------	--------------------------	--------------------------	--------------------------	--	--	--

b. 2						
c. 3						
d. 4						
e. 5						

20. In order for us to understand the digitisation priorities of academic students, researchers and lecturers it would be helpful if you could tell us your own individual priorities as:

Your priorities in terms of, for example, career/contribution to knowledge/excellence in teaching/publication and dissemination of work/success in studies, etc

a. As a researcher	
b. As a lecturer	
c. As a student	



Final Page

Who are the DiSCmap team?

DiSCmap is funded by the Joint Information Systems Committee (JISC) and Research Information Network (RIN) and is being carried out by staff at the Centre for Digital Library Research (CDLR) at the University of Strathclyde, and the Centre for Research in Library and Information Management (CERLIM) at Manchester Metropolitan University (MMU).

Online Presence

We would be grateful if you would bookmark the DiSCmap project website, <http://discmap.cdlr.strath.ac.uk/index.htm> where project documents, progress updates and details of forthcoming events will be made available. DiSCmap also makes use of an online forum and we invite you to join (<http://forums.cdlr.strath.ac.uk/index.php>). Joining instructions are on the project website.

Contacts

If you have any questions about this study please contact:

Jill Griffiths: j.r.griffiths@mmu.ac.uk

Centre for Research in Library and Information Management (CERLIM), Manchester Metropolitan University.

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

Finally, thank you for completing this survey. Your responses will help us to map, assess and prioritise Special Collections within UK HE institutions for potential future digitisation by JISC.

Appendix IIb- Direct user survey – Intermediary schedule.

Interview schedule DISCMAP – 5 areas we wish to ask about, plus one free text question for any additional thoughts

Interview with:

Role: _____

Prompts/suggestions

√

Archivist

Collections Manager

Prompts/suggestions

√

Librarian

Institution: _____

Any other observations: _____

1.1) What are YOUR CRITERIA for prioritising collections for digitisation?

Prompts/suggestions

√

Importance (unique)

Importance (rare)

Potential users

Consultation required
(internal/external)

Copyright (needing
clearance)

Fundraising possibilities

Response to funding calls

Prompts/suggestions

√

Number of volumes

Number of pages

Preservation needs

Access (any restrictions)

Added value from
digitisation

User driven requests

High level of potential
users

1.2) Do relationships or links exist between a nominated collection with other collections? Does this affect your prioritisation?

2.1) Do you have a PRESERVATION strategy or do you build on known examples of good practice?

2.2) Are there strategies to work with other institutions in the preservation of collections?

2.3) Do you have any view on the preservation medium needed for Special Collections?

2.4) Is digital or microfilm preferred?

3) Do you have a view on how END USERS may prioritise digitisation of collections?

Prompts/suggestions	√	Prompts/suggestions	√
Own research needs		Own teaching needs	
Access (restrictions)		Importance (unique)	
Importance (rare)		Full collections	
Specific items			
THE FOLLOWING ARE		NEW CRITERIA	
Because the collection is rare or valuable		Because it would enable them to use it more frequently	
Because it would improve their access to the collection		Because it would allow them to work collaboratively with other	

Because it would help with the preservation and conservation of the collection

Because it would have a positive impact on their **research** or **studies**

Because there is little in the chronological timeline they are interested in which is currently digitised

Please state what this chronological timeline may be _____

people

Because it would have a positive impact on their **teaching** of a subject

Because there is little in their subject area which is currently digitised

Please state what this subject may be _____

Because there is little in the format they need which is currently digitised

Please state what this format may be _____

4) What are your views on levels of current USAGE of collections and what do you think the IMPACT would be if these collections were digitised?

4.1) IMPACT in terms of USE of collections:

4.1.1) What are the current levels of use of non-digitised collections?

4.1.2) Impact in terms of increase in use - Do you think that the level of use and demand of collections would increase after digitisation?

4.1.3) Is the digitised material you've got used? And if not being used, why not?

4.1.4) Do you have any evidence of usage on collections (statistics/ requests for analogue and digital collections)? And if yes, may we see these or have an anecdotal report of them?

4.2) IMPACT ON TEACHING

4.2.1) Is it possible to see differences in the behaviour of LECTURERS once a collection has been digitised? _____

4.3) IMPACT ON RESEARCH

4.3.1) Is it possible to see differences in the behaviour of RESEARCHERS once a collection has been digitised? _____

5) Which subject disciplines/user communities are most likely to engage with discussions on the digitisation of collections? And what might be the best way to encourage them to participate? _____

6) Do you use social networking tools/sites/groups to keep in contact with other colleagues and/or users? _____

Prompts/suggestions

√

Email lists

Facebook

LinkedIn

Wiki

Prompts/suggestions

√

Social networking sties

MySpace

Blogs

7) Any other issues they would like to raise? _____

Appendix IIc- Direct user survey – end user focus group schedule (also used as a basis for two interviews).

DiSCmap Focus Group script

*Note to facilitators: Instructions for facilitators are in standard text. Areas for discussion - to be read out - are in **bold** text. Smaller text to be used as prompts/probes where necessary.*

Suggested timings are provided by each section.

*Where appropriate, the most important questions in each area are **highlighted in yellow**.*

11.00 Start

The purpose of the focus group is to gather the views and opinions of prioritisation of the digitisation of Special Collections in UK higher education.

Read out the statement on confidentiality:

Opinions expressed will be treated in confidence among project staff for the purpose of the DiSCmap Project. All responses will remain anonymous.

Check that there are no objections to the use of the audio recorder.

Start off by reiterating the purpose of the meeting, e.g.:

I am very grateful to you all for sparing time for this focus group session. The session should last for around 1 ½ hours, please help yourself to refreshments at any time.

Before we start, does anyone have any questions?

In the short space of time we have for this focus group, we would like to explore the following areas, which were also covered in recent survey undertaken for the project:

- 1. Your own criteria for prioritisation of digitisation of a collection**
- 2. Special collections and your research**
- 3. Special collections and your teaching**
- 4. Your views on digitisation at a broader level**

To get the conversation going go around the table getting people to introduce themselves:

Please could you say who you are, where you work, and very briefly describe your area of research or teaching.

11.15: 1. Your OWN criteria for prioritisation of digitisation of a collection .

What would be YOUR OWN reasons or criteria for a Special Collection to be digitised?

(select all that apply)

- ☐ Because the collection is rare or valuable
- ☐ Because it would enable me to use it more frequently
- ☐ Because it would improve my access to the collection
- ☐ Because it would allow me to work collaboratively with other people
- ☐ Because it would help with the preservation and conservation of the collection
- ☐ Because it would have a positive impact on my teaching of a subject
- ☐ Because it would have a positive impact on my research or studies
- ☐ Because there is little in my subject area which is currently digitised
- ☐ Because there is little in the chronological timeline I am interested in which is currently digitised
- ☐ Because there is little in the format I am need in which is currently digitised
- ☐ Because it would bring distributed parts of a collection together allowing me to access it more easily and improving intellectual coherence
- ☐ Other (please specify):

If you feel that there is little in your subject area which is currently digitised please state what this subject is:

If you feel that there is little in the chronological timeline you are interested in which is currently digitised please state what this timeline is:


If you feel that there is little in the format which is currently digitised please state what this format is:

11.35: 2. Special collections and your RESEARCH:


Do you use Special Collections for your research or studies?

Yes

Yes:  61.8% 55

No:  21.3% 19

Don't know:  9.0% 8

Not applicable:  7.9% 7


Please speculate as to level of the potential impact of digitised Special Collections on your research or studies

None:  3.4% 3


Low:  11.2% 10


High:  49.4% 44


Very high:  31.5% 28

Not applicable:  4.5% 4

How would digitised Special Collection materials impact on your research or studies?

Preparation of teaching materials:  n/a 35

Cite as references for students:  n/a 31

Other (*please specify*):  n/a 13

11.55: 3. Special collections and your TEACHING:

Do you use Special Collections for your teaching?

Yes:  26.5% 22

No:  62.7% 52


Don't know:  10.8% 9

Please speculate as to level of the potential impact of digitised Special Collections on your teaching

None:  8.4% 7


Low:  18.1% 15


High:  30.1% 25

Very high:  14.5% 12

Not applicable:  28.9% 24

How would digitised Special Collection materials impact on your teaching?

Preparation of teaching materials:  n/a 35

Cite as references for students:  n/a 31

Other (*please specify*):  n/a 13

12.15: 4. Your views on digitisation at a broader level

Would digitisation of a Special Collection affect your use of that Collection?


Yes:  88.2% 67

No:  5.3% 4

Don't know:  6.6% 5

How do you find digitised Special Collections?


Library:  n/a 32

Librarian:  n/a 20

Searching the university catalogue:  n/a 33

Searching using a search engine:  n/a 44

Searching using COPAC:  n/a 15

Searching using Intute:  n/a 6

Searching using INFORM25:  n/a 4

Searching using the Archives Hub:  n/a 15

Searching using other academic resource: [redacted] n/a 20

Word of mouth from colleagues: [redacted] n/a 39

References in articles/newsletters etc: [redacted] n/a 29

Other (*please specify*): [redacted] n/a 11

Advert/info from independent provider

Archive to Archive at National Archives website

Athens data archive

google

Google

HE colleagues

through AIM25, M25 etc

It is very difficult to get any info other than by word of mouth.

Knowledge of collecting history etc.

posters specialist literature, scholarly articles and conference papers

Could tell us your own individual priorities as:

Researcher - Your priorities in terms of, for example, career/contribution to knowledge/excellence in teaching/publication and dissemination of work/success in studies

Lecturer - Your priorities in terms of, for example, career/contribution to knowledge/excellence in teaching/publication and dissemination of work/success in studies

Student - Your priorities in terms of, for example, career/contribution to knowledge/excellence in teaching/publication and dissemination of work/success in studies

Finally thank the group for their time.

12.30: Finish

Appendix III - HESA Subject codes used and expanded list of codes¹

The List of 22 Subject Codes revised from available HESA Subject Codes was used in the surveys with the intermediaries and the end users. All Subject headings appeared alphabetically on the web form.

- (1) Medicine, Dentistry & Allied subjects
- (2) Biological Sciences
- (3) Veterinary Sciences
- (4) Agriculture & Related Subjects
- (5) Mathematics & Physical Sciences
- (6) Architecture, Engineering & Technology
- (7) Social, Economic & Political Studies
- (8) Business Studies
- (9) Law
- (10) Librarianship, Computing & Information Science
- (11) Languages & Literature
- (12) General Humanities
- (13) History, economic & social history
- (14) Archaeology
- (15) History of Art
- (16) History of Science
- (17) Philosophy
- (18) Theology & religious studies
- (19) Creative Arts, Design & Music
- (20) Cinema & Photography
- (21) Education
- (22) Combined

Table 1 presents the detailed list of HESA subject codes.

SUBJECT GROUP	SUBJECT
(1) Medicine & Dentistry	(A1) Pre-clinical medicine (A2) Pre-clinical dentistry (A3) Clinical medicine (A4) Clinical dentistry (AZ) Balanced combination
(2) Subjects Allied to Medicine	(B1) Anatomy & Physiology (B2) Pharmacology (B3) Pharmacy (B4) Nutrition (B5) Ophthalmics (B6) Audiology (B7) Nursing (B8) Medical technology

¹ Taken from <http://www.hesa.ac.uk/index.php/content/view/102/143/1/2/> [Accessed 27th April, 2009].

	(B9) Other medical subjects (BZ) Balanced combination
(3) Biological Sciences	(C1) Biology (C2) Botany (C3) Zoology (C4) Genetics (C5) Microbiology (C6) Molecular biology & biophysics (C7) Biochemistry (C8) Psychology (not solely as social science) (C9) Other biological sciences (CZ) Balanced combination
(4) Veterinary Sciences	(D1) Veterinary sciences
(5) Agriculture & Related Subjects	(D2) Agriculture (D3) Forestry (D4) Food science (D8) Agricultural sciences (D9) Other agricultural subjects (DZ) Balanced combination
(6) Physical Science	(F1) Chemistry (F2) Materials science (F3) Physics (F4) Archaeology as a physical science (F5) Astronomy (F6) Geology (F7) Oceanography (F8) Geography studies as a science (F9) Environmental science & other physical sciences (FZ) Balanced combination
(7) Mathematical Science	(G1) Mathematics (G4) Statistics (G9) Other mathematical sciences (GZ) Balanced combination
(8) Computer Science	(G5) Computing science
(9) Engineering & Technology	(H1) General engineering (H2) Civil engineering (H3) Mechanical engineering (H4) Aeronautical engineering (H5) Electrical engineering (H6) Electronic engineering (H7) Production engineering (H8) Chemical engineering (H9) Other engineering (HZ) Balanced combinations (J1) Minerals technology (J2) Metallurgy (J3) Ceramics & glasses (J4) Polymers & textiles (J5) Other materials technology (J6) Maritime technology (J8) Biotechnology (J9) Other technologies
(A) Architecture, Building & Planning	(K1) Architecture (K2) Building

	(K3) Environmental technologies (K4) Town & country planning (K9) Other architectural studies (KZ) Balanced combination
(B) Social, Economic & Political Studies	(L1) Economics (L3) Sociology (L4) Social policy & administration (L5) Social work (L6) Anthropology (L7) Psychology (without significant element of biological science) (L8) Geography (unless solely as a physical science) (LZ) Balanced combination (M1) Politics (M9) Other social studies
(C) Business & Administrative Studies	(N1) Business & management studies (N2) Operational research (N3) Financial management (N4) Accountancy (N5) Marketing & market research (N6) Industrial relations (N7) Catering & institutional management (N8) Land & property management (N9) Transport, other business & administrative studies (NZ) Balanced combination
(D) Law	(M3) Law
(E) Librarianship & Information Science	(P1) Librarianship (P2) Information science (P3) Communication studies (P4) Media studies (P5) Publishing (P6) Journalism (PZ) Balanced combination
(F) Languages	(Q1) Linguistics (Q2) Comparative literature (Q3) English (Q4) American studies (Q5) Celtic languages, literature & culture (Q6) Latin language & literature (Q7) Ancient Greek language & literature (Q8) Classics (Q9) Other ancient languages & related studies (QZ) Balanced combination (R1) French language, literature & culture (R2) German language, literature & culture (R3) Italian language, literature & culture (R4) Spanish language, literature & culture (R5) Portuguese language, literature & culture (R6) Latin American languages, literature & culture (R7) Scandinavian languages, literature & culture (R8) Russian languages, literature & culture (T1) Slavonic & East European languages, literature & culture (T2) Other European languages, literature & culture (T3) Chinese languages, literature & culture (T4) Japanese languages, literature & culture (T5) Other Asian languages, literature & culture

	(T6) Modern Middle Eastern languages, literature & culture (T7) African languages, literature & culture (T8) Other language studies (T9) Other or unspecified modern languages
(G) Humanities	(V1) History (V3) Economic & social history (V4) History of art (V5) History & philosophy of science (V6) Archaeology (V7) Philosophy (V8) Theology & religious studies (V9) Other humanities (VZ) Balanced combination
(H) Creative Arts & Design	(W1) Fine art (W2) Design studies (W3) Music (W4) Drama (W5) Cinematics (W6) Crafts (W8) Beauty & hairdressing (W9) Art & design other (WZ) Balanced combinations
(I) Education	(X1) Teacher training (X2) Physical education (X3) Academic studies in education (X4) Techniques in teaching children (X5) Techniques in teaching adults (X6) Education for those with special needs (X7) Technology in education (X8) Management & organisation of education (X9) Other topics in education (XZ) Balanced combination
(J) Combined	(Y1) Combined or general science (Y2) Combined or general social science (Y3) Combined or general arts (Y4) Other combined or general courses/modular courses (Y5) Combined general & leisure courses not elsewhere specified (Y6) Research methods (YZ) Balanced combinations across different subject areas

Appendix IV – Intermediary survey and analysis

Breakdown of responses by region and age

Given that the methodology employed for the creation of the Intermediary Survey considered both the location and age/type of any given HEI, it is interesting to examine how region and type were reflected in the response rate.

Responses by region

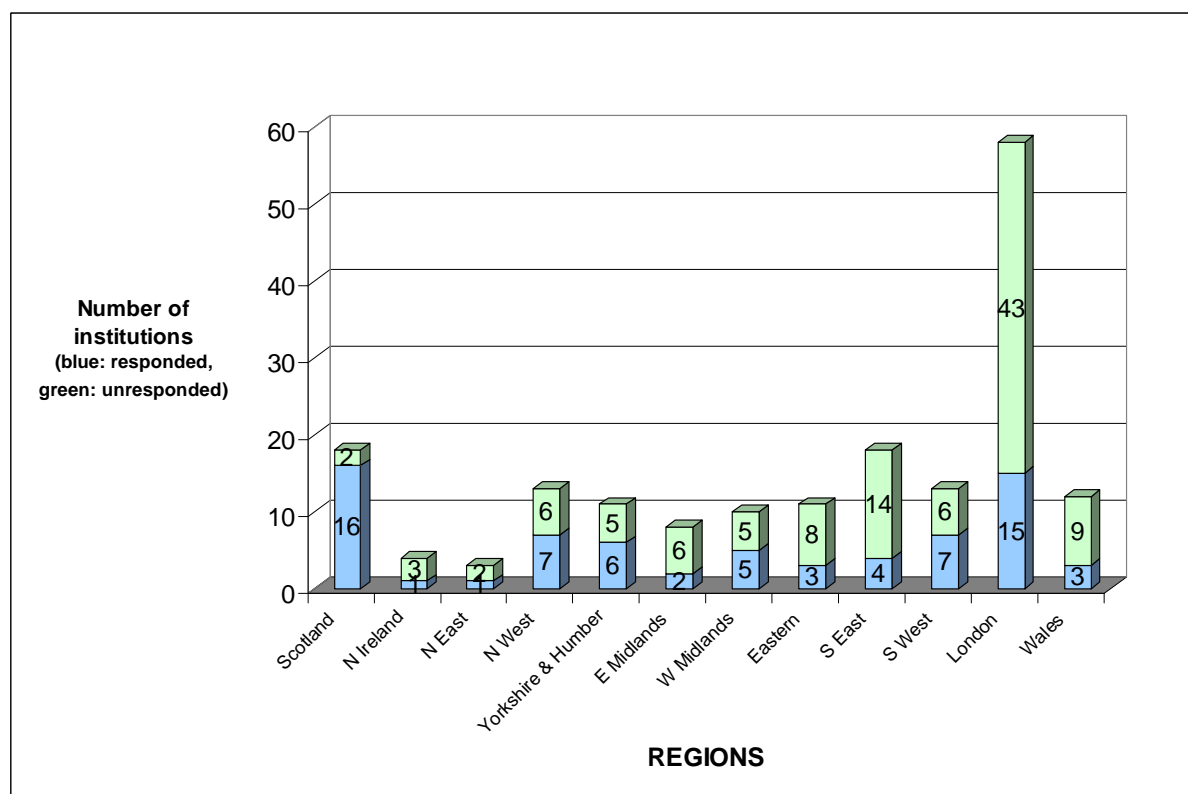


Figure 1. Breakdown of actual and potential respondents to DiSCmap survey by region

Just under half of the regions gave a 50% or above response rate. The highest regional response rate came from Scotland, with 88% of those contacted participating. This figure includes 2 RLUK member institutions (the Universities of Aberdeen and Glasgow) who responded to DiSCmap without being approached directly by the project team.

In total, the survey had a **46%** response rate. However, after eventual confirmation from the RLUK survey team, February saw the inclusion of HEIs and RIs associated with RLUK member institute the University of London, its School of Advanced Study and its associated Research Institutes, which increased the overall survey group from 153 to 173 HEIs, thereby reducing the rate of response accordingly to approximately **40%**.

The figures indicated below the waterline in blue are the number of HEIs which responded per region, whilst figures above refer to the quantity of HEIs that could potentially come into the scope of any future mapping or assessment.

Region	Number of HEIs	Number of HEIs in RLUK	Total contacted by DiSCmap	Percentage/Number Responding
Scotland	21	3	18	88 (16)
Northern	4	0	4	25 (1)

Ireland				
North East	5	2	3	33 (1)
North West	15	2	13	54 (7)
Yorkshire & Humber	13	2	11	55 (6)
East Midlands	9	1	8	25 (2)
West Midlands	12	2	10	50 (5)
Easter	12	1	11	27 (3)
South East	20	2	18	22 (4)
South West	14	1	13	54 (7)
London	58	6	32	47 (15)
Wales	13	1	12	25 (3)
			Total = 153 (78%)	Total = 70 (45.7 %)

Table 1. Total number of HEIs surveyed in January 2009, by region.

Respondents by type of institution

Of the “Pre-1960s” Universities which responded to the mass survey, 16 were located in England 6 in Scotland and 3 in Wales. This gave a total of 25, approx. 36 % of participating HEIs. An equivalent rate of response of 36% was received from the “Post 1992” institutions, 19 from England, 6 from Scotland (non from N. Ireland or Wales) again with a total of 25 HEIs. A total of 20 “Post Robbins” Universities, 15 from England, 4 from Scotland and 1 from N. Ireland (again none from Wales) responded giving them 28% coverage.

Although numbering fewer HEIs within the overall response to DiSCmap, if we examine the rate of response by institutional type as a percentage of their UK total, (illustrated below in Figure 2) it becomes clear that “Post Robbins” universities form the most pro-active group in advancing their priorities for digitization - 20 out of 36 having responded to the survey.

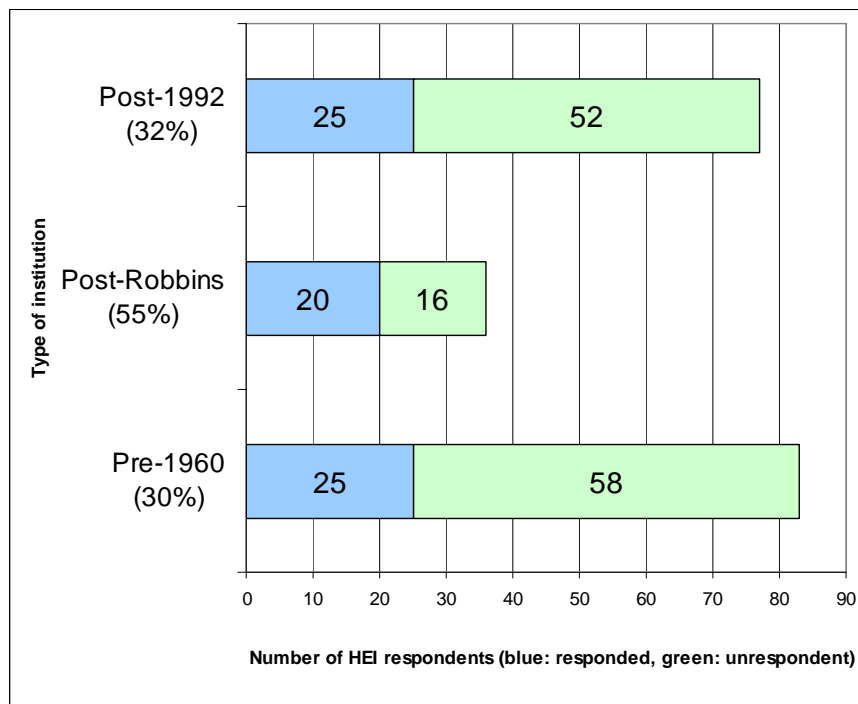


Figure 2. Response by classification of University as percentage of their UK Total

The typology of digitisation criteria to emerge from the mass survey of Intermediaries

The following list of 24 separate criteria is an inclusive one discerned from extensive analysis of the DiSCmap survey response. (Note: because some of these are broadly similar, they were latterly conflated when preparing the final framework). No attempt has been made to establish a ranking in order of priorities or in the order in which intermediaries or end users advanced them – nor was the user-related criteria solely advanced by end users in the survey.

Below are provided some elaboration on how/why these criteria were discerned.

1. User orientated criteria
2. Collection level criteria
3. Physical / Environmental factors
4. Institutional concerns
5. Wider cultural issues

User orientated criteria

- to improve/facilitate access
- to meet evidence of user demand
- to enhance teaching of undergraduate and taught masters course
- to enhance teaching of networked courses for distance learners
- to support ongoing research
- support research in multiple disciplines (interdisciplinarity)
- a means of furthering collaborative research projects
- potential to create a new subject area for research
- create / support research and teaching using new media
- potential impact for users beyond the boundaries of HE

Collection level criteria

- collections pertaining to significant individual/s
- regional importance
- iconic collections of national importance
- collections with international scope/ impact
- uniqueness and/or rarity of the collection and its materials
- comprehensiveness of the collection (i.e. its range, mixture, representativeness, critical mass of materials)
- linkage to other related/distributed collections and digitisation projects
- materials suitable for digitisation (e.g. papers - less time/effort involved)
- no or few IPR restrictions

Physical / Environmental factors

- considerations of space/storage
- a means of preservation (to prevent deterioration of original)

Institutional concerns

- to increase/attract/promote greater usage
- college/university has strong open access policy
- potential source of income for the institution (this comment came from a SUSCAG member in discussion about priorities – not from the survey data)

Wider cultural issues

- pertaining to topical contemporary issues of the day (e.g. collections pertaining to gender, class, ethnicity) a “topical collection”
- will not be digitised as part of “Google books” project (record 241)

Reasons for nomination of Collections for Digitisation given by pilot survey group

A means to increase or attract usage

Anderson Collection (University of Stirling)

“The letters written by L Anderson (approx 5,000) provide an insight into the filmmaking process for researchers of British cinema history.”

Papers of James David Forbes (St Andrews University)

“The Forbes correspondence, journals and other papers present a superb cross-section of scientific life, and include valuable correspondence with most of the pre-eminent scientists of his day [...] A collection of very great research potential. Regular enquiries (of international scope) - and the possibility of a great deal more.”

To serve ongoing research

Mass Observation Archive (University of Sussex)

“Whilst the physical collection is available for research at the University of Sussex Library the collection has the capability of attracting a much wider audience of academics who specialise in the social and cultural history of Britain. [...] For those who currently use the collection in person the lack of metadata and cross searchability is a constant frustration. By digitising the collection these functionalities would be possible and very much appreciated by a wide range of academic researchers.”

Furthering collaborative research projects

James Hogg Manuscripts (University of Stirling)

“Material of international research importance. Digitisation of manuscripts would provide additional resource for University of Stirling / South Carolina Hogg project which is publishing new editions of Hogg's works.”

Norman McLaren Archive (University of Stirling)

“An opportunity to digitise the entire collection (small but important) of material relating to an internationally important filmmaker (and Oscar winner) born in Stirling. Possibilities of collaboration with Canadian repositories on a larger digitisation project.”

Records of the Ecclesiastical Courts of York (University of York)

“These records are the subject of a current cataloguing project funded by the Andrew W. Mellon Foundation, which will create online detailed catalogues but without digital images. Digitising the records would be a useful complement to this.”

Tithe Maps & awards of the Diocese of York (University of York)

“These maps are frequently requested for research, but can be difficult to use, some of them being very large. Digitisation would also connect with a similar project for digitisation of the maps in parish record deposits at West Yorkshire Archive Service.”

Preservation issues

Music Preserved Archive (University of York)

“Performance history is a relatively new discipline [...] only recordings of live performances allow scholarly investigation in this new area [...]. Magnetic tape is a fragile and impermanent material, which deteriorates [...]. High quality digitisation is the only known method that will allow the audio signal to be preserved in perpetuity, and only through digitisation can scholars access the recordings: the tape is too fragile to permit it to be used as an access medium. Digitisation will simultaneously enable access and ensure long term preservation, while also helping to create the critical mass of resource materials necessary to enable this new and exciting research area to grow and flourish.”

Concert Programme Collection (Royal College of Music, London)

“This type of ephemeral material has been difficult to access because it has proved difficult to satisfactorily catalogue it within existing schemas, and has therefore often been ignored by libraries and archives. A digitisation project incorporating intelligent software that could OCR and parse the information would provide for the first time item-level access to a rich research resource.”

User orientated criteria supplied by intermediaries

User orientated criteria 1 – to improve / facilitate access

The South Wales Coalfield Collection (Swansea)

“Digitisation (...) will allow greater access to important historical records which will support research and teaching.”

Historic Scientific Instruments (University of St Andrews, Museum)

“This is an important collection of scientific instruments and would benefit greatly from digitisation to assist with access for research and teaching as well as display and interpretation within MUSA (the Museum of the University of St Andrews).”

The Walter Greenwood Collection (University of Salford)

“The Greenwood Collection is an invaluable but relatively inaccessible resource for academics working on working class and regional writers.”

User orientated criteria 2 – to meet evidence of user demand

The Closed Access Book Collection (Courtauld Institute)

“During the first term, material from the closed access collection was used by 177 users, 148 from the Courtauld. Tutors refer students to this material in their teaching (...) Digitisation would aid access to those heavily-used titles (...) and allow greater comparison between editions.”

The Stanley Houghton Collection (University of Salford)

“Accessing performance material such as unpublished plays is of enormous importance to performance historians (...) in the UK – and perhaps more importantly in the US where there are relatively more British theatre historians; a community which is increasingly expecting – and relying on – online access to resources.”

User orientated criteria 3 – to enhance teaching of undergraduate and taught Masters courses

Doris Lessing Archive Series – Whitehorn Letters (East Anglia)

“The collection supports UEA's pioneering Creative Writing course offered by the School of Literature and Creative Writing.”

The Bill Douglas Centre for the History of Cinema (Exeter)

“The main criterion for digitisation is demand for teaching.”

The UNHCR Audio-Visual Archive (University of East London)

“The UEL runs a postgraduate MA Course in Refugee Studies and also a productive Refugee Research Centre. The digitisation of these collections would represent a significant impact (...) on teaching, learning and research.”

User orientated criteria 4 – to enhance teaching of networked courses for remote users and distance learners

The Celtica Collection (Sabhal Mor Ostaig)

“An increase in the number of distance learners, and online course delivery, means that the teaching impact of the collection would be increased if it was digitised. Sabhal Mor Ostaig is a partner within the UHI [University of the Highlands and Islands] Millennium Institute [and] digitisation would facilitate the teaching of networked courses between distributed institutions across the Highlands.”

User orientated criteria 5 – to support ongoing research

The Phil May & Leo Cheney Collection (Salford)

"The digitisation of this important collection would allow scholars to bring together the many elements that comprise a full overview of his career and writing."

The Gallagher Memorial Library – Pamphlet Collection (Glasgow Caledonian University)

"The Pamphlets make up a very important part of the GML [which is] extensively used by local, national and international researchers across the whole spectrum of life long learning. Digitisation would be a huge help to researchers situated outwith the west of Scotland."

User orientated criteria 6 – support research in multiple disciplines – interdisciplinary research

The Herbert Read Archive (University for the Creative Arts)

"The collection is of high interest to researchers of (...) Surrealism, Modernism, cultural studies, poetry and literary criticism, anarchism, humanism, aesthetic philosophy and theories of art education."

The Bill Douglas Centre for the History of Cinema (Exeter)

"Has a wide interdisciplinary appeal for Film Studies, English, History of Science and media and cultural studies. (...) The interdisciplinary nature of the collections creates a good case for digitisation."

User orientated criteria 7 – furthering collaborative research / digitisation projects

The Laura (Riding) Jackson Collection (Nottingham Trent University)

"Digitisation would enhance existing research and facilitate collaboration on a national and international basis with holders of related collections (Leicester). The collection has generated interest from America (...) and digitisation would aid collaboration with these academics."

The Bowen Collection (University of Bath)

"The collection also supports University of Bath collaboration with researchers based in Germany, Japan, New Zealand, France and Israel."

User orientated criteria 8 – to create or support research in new subject areas (SSIs)

The Bourdon Collection (Glasgow School of Art)

"One of the most comprehensive collections of Beaux-Arts drawings of the period [1890s]. This collection has already attracted interest as the basis of future research, including a first-ever exhibition."

Central School of Speech and Drama Archives (CSSD)

"As a small specialist institution [SSI] with an emergent research culture (...) Digitisation of the archive would have a positive impact on a number of the School's taught programmes as well as potentially stimulating our nascent PhD research activity."

User orientated criteria 9 – to create or support research using new media

The Keith Foley Photographic Archive (Liverpool John Moores)

"The Liverpool Screen School Journalism Department intends to use the images in teaching (...) and for research purposes staff in the iMedia Department hope to use the archive as the basis of a digital exhibition to explore the potential of current web technologies (...) Another planned project will explore ideas around collective memory and regional identities using web technologies, image and podcasts."

User orientated criteria 10 – impact for users beyond the boundaries of HE

The Josephine Butler Society Library (The Women's Library, London Metropolitan University)

"Covers contentious topics that remain at the forefront of UK political discussion: sex, sexuality, prostitution, people trafficking, birth control, marriage (...). This is an important collection for academic and popular research."

The Library Planning Archive (University of Aberystwyth)

"A resource relevant to cultural and social history (...). Although categorised as a Librarianship resource [it has] much wider relevance and importance."

Feedback from the University of Stirling test group

Provided below is the feedback received from the staff at Stirling University who tested the web survey for us:

The Collection field

1. “By “Special Collections” do you mean collections of book and other print-based published materials which may form a part of archival and museum holdings, or, as suggested by the “collection size” part of the questionnaire, are the whole contents of an archive (including manuscript and other non-print materials) to be included within the term Special Collection?”
2. “Do you need to list all the “approved” online sources containing collection-level information? They all record different amounts of information, some more/better than others.”
3. “On the questionnaire, could you please let us know what is meant by the term “Distributed”?”
4. “I took the “information environment” in which the collection is managed to be an intellectual rather than physical environment – i.e. in Stirling we have the Lindsay Anderson Collection which has been catalogued using archival standards (I therefore selected “Archive”) and the Hogg manuscripts which were catalogued by librarians item-by-item (I selected “Library/Special Collections” for this material) – both collections are however physically and administratively in the same place.”

The Digitisation field

1. “Do you want to know what has already been digitised in a collection? How useful is this field without more information? What if you only want part of a collection digitised?”
2. “When moving to the digitisation section and suggesting only part of a collection for digitisation is it then taken for read that all the questions in the digitisation section relate only to the selected part of the collection?”

The question of Intellectual Property Rights

1. “Do we need to take account of any possible rights issues at this point in the process?”

The timescale for completion

1. “We are frantically busy at the moment with students starting dissertations, etc., but we will make every effort to send in completed forms by the 28th, or, at the latest by the middle of the following week. Is that acceptable?”

Appendix V – Departmental Case Studies

An uncured “Hidden” Special Collection

“The unprocessed materials in Special Collections are already hidden from view and ironically enough even the processed materials aren’t really finable on the surface of the web, again due to those silos. So in a way they might as well all be hidden.”²

The Hidden Collections agenda, since the Association of Research Libraries (ARL) “Exposing Hidden Collections” conference at the Library of Congress in 2003³, has become central to the debate on the future of Special Collections. To address the challenge of providing access to the backlogs of uncatalogued and unprocessed materials, Alice Prochaska’s advocates “the lean, effective description of collections that until now have been hidden altogether from scholarly enquiry”⁴.

One of the tasks of DiSCmap was to gain some insight into the way in which Special Collections held at departmental level (or elsewhere within an HEI) might be “hidden” from view – un-cured, un-catalogued and essentially “undiscoverable” and inaccessible to the ordinary researcher. Two illustrative snapshots of collections held at departmental level are provided below: the first of just such an *unprocessed* collection; and the second, to provide illuminating contrast, of a Special Collection currently being *processed*, i.e. curated, catalogued and used within a University department and which raises the issue of the role of the academic department as opposed to the role of the library or archive in the management of Special Collections. One collection which we identified in the course of direct contact with intermediaries was located within the Department of Biomedical and Life Sciences at the University of Glasgow. A semi-structured interview with a lecturer from the Division of Integrated Biology, revealed a range of “special” materials held by the department but not gathered officially into a “Collection” in any technical sense and not held by or known to the library or any other curatorial environment within the University. These materials were:

- Historic film footage (for example, cinéfilm from the early 20th century showing the dissection of a live dog’s heart, carried out by Dr. Ernest Starling at the Sorbonne Institute in Paris).
- Departmental theses and papers.
- Anatomy specimens.
- Microscope slides of pathological samples, including slides prepared by Camillo Golgi. This collection includes modern 35mm and large format lantern slides (with slide projector).
- Student records and photographs.

Interestingly, the microscope slides are being catalogued on a voluntary basis by a retired member of staff from within the department, with the remaining collections sitting in storage.

Such collections could be relevant to a range of users not necessarily restricted to within the Biology and Life Sciences faculty, and for a variety of purposes. For example, the cinéfilm footage might be of interest to students of cinematography and film-making, veterinary science, fashion, social and cultural history, architecture or the history of science. Similarly, student records and photographs could be useful for a variety of purposes – records relating to the earliest female students at the University, for example, might be useful to students interested in gender issues or in the history of education.

² Erway, Rickey and Schaffner, Jennifer (2008) OCLC and RLG Programs Webinar on March 11, 2008. *Out of the Stacks and onto the Desktop: Rethinking Assumptions about Access and Digitization*. Online on: <http://www.oclc.org/programs/ourwork/collectivecoll/harmonization/specialcollections.htm>

³ ARL (2003) *Exposing Hidden Collections: 2003 Conference Summary* Online on: http://www.arl.org/rtl/speccoll/EHC_conference_summary.shtml

⁴ Prochaska, Alice. (2008) *Digital Special Collections: the big picture* (p. 14) Online on: <http://www.library.yale.edu/about/librarian/DigitalSpecialCollections.pdf>

The digitisation of the anatomy collection would be considered a priority for teaching while the departmental collection is the site of links to professional societies such as the Royal College of Surgeons, with whom the University collaborate. As the lecturer pointed out, digitisation might be a possible means to raise funds from alumni.

However, issues involved in digitising some of these materials include: the fact that some old microscope slides are made with hand-cut glass of irregular size, making automated processing difficult; legal and legislative issues relating to making personal details available (e.g. through the digitisation of pathological samples derived from known individuals); IPR issues; the commercial sensitivity of certain materials; the terms and conditions under which items were originally donated to the University.

An Archival Collection re-located within a new environment: Lindsay Anderson Collection at the University of Stirling

The Context of Change

“For every reader his (or her) book; for every book, its reader” S. R. Ranganathan

Having recently celebrated its 40th anniversary, the University of Stirling is currently undertaking a £13.5m Library renovation project to provide the University with a modernised Information Service. The 2008 Research Assessment Exercise ranked Stirling top in Scotland for Communications and Media, 12th in the UK, providing an example of the high level of expectation and demand from the scholarly community of its Library, Archive and Art Collections.

Stirling is understandably keen to exploit its Art and Special Collections which include rare editions of Walter Scott, James Hogg manuscripts, paintings by J D Fergusson and the Media Archive which includes the archives of the Stirling-born filmmakers John Grierson and Norman McLaren as well as the personal and working papers of Scottish film and theatre director Lindsay Anderson. The library re-fit has seen the University's Special Collections, totalling 327 linear metres of archives and manuscripts, being temporarily re-housed. The Information Services Planning Statement (available online at <http://www.is.stir.ac.uk/documentation.php>) tasks Librarians, Archivists and Curators with providing a research information environment which is capable of meeting the University's strategic research agenda even under such shifting contexts for provision.

The decant project for Special Collections

“Books are for use.” - S. R. Ranganathan

The accommodation of Special Collections was a key issue for Stirling's decant project. For any Special Collections being decanted, an assurance of suitable storage conditions was required. All the material in the archives and Special Collections stores had to be moved out in January 2009 in advance of the first phase of building work. Fig. 3 shows Level 1 of the Library and Archive, pictured during the current building phase.



Figure 3. The Special Collections building in construction

For more images / info see:

<http://www.facebook.com/pages/University-of-Stirling-New-Library-Project/52701324641>

The John Grierson and Norman McLaren archives were re-housed by the archive services at Stirling Council, whilst the Lindsay Anderson Collection⁵ (hereafter LA Collection) the focus of a 3 year AHRC funded research and cataloguing project *The Cinema Authorship of Lindsay Anderson*, is currently being temporarily curated within the Department of Film, Media & Journalism (<http://www.fmj.stir.ac.uk>) – (hereafter referred to as FMJ).

⁵<http://www.is.stir.ac.uk/libraries/collections/anderson/>



Figure 4. Images from the Lindsay Anderson Collection, University of Stirling

The materials curated within the department extend to:

- Lindsay Anderson's personal library
- Video and DVDs of films and documentary material relating to Anderson
- Diaries and correspondence
- Photographic film stills
- Theatrical scripts, directors notes and screenplays
- Newspaper cuttings

The Interim Service Project for the Lindsay Anderson Collection

“Save the time of the reader.”
 S. R. Ranganathan

A pro-active and innovative approach to service provision from within the FMJ department is being deployed, forging a more collaborative approach to collection management between archive and institution. However, whilst the Archive's aim is the promotion of wider access to the collection, the FMJ department is primarily interested in its own use and exploitation of the material for the benefit of funded research projects.

The University Archivist explains that the physical use of an archive still has to be different and far more controlled than in a library. Access must necessarily be restricted and supervised, especially for undergraduate and postgraduate students. In the handling of archive materials, the need is to provide supervised consultation rooms for researchers to reduce risk to the collection. There are, therefore, significant drawbacks to the way the service is currently operated within the FMJ department:

- access to collection for users more difficult
- The lack of a supervised reading room for the archive separate to the collection
- The lack of appropriate storage conditions
- security not up to library/archive standard

Access is very difficult for users (outside of the AHRC project team) at present so additional digitisation would improve access. Some thought has already been given to what parts of the collection should be prioritised for digitisation. The Archivist and Research Assistant on the project offered additional digitisation priorities with respect to the collection's new departmental curatorial environment, “As the collection is currently in my office I would digitise material on the basis of demand i.e. if someone asks for something I will digitise it. In terms of prioritising I would like to concentrate on digitising some of the advertising images and photographs from the sets of films and plays i.e. material not available elsewhere.’

Two key advantages of the move were given as:

- improved access/use of collection by AHRC project team;
- raised awareness of collection (and archives in general) within FMJ department

The Archive's staff agree that the move to FMJ department has raised the profile, both of the LA Collection and of the University Archives in general. Since the relocation, materials found in the Archive on Anderson's documentaries *O Dreamland!*, *Every Day Except Christmas* and the Oscar winning *Thursday's Children* have been incorporated into the teaching curriculum, on the undergraduate course “John Grierson and documentary

analysis". A FMJ professor also notes plans for the use of the collection in the future research of their departmental colleagues who had previously been unaware of the extent of the collection's coverage.

The move out of the archive and into the department therefore seems to have improved the collection's current research and teaching impact.

Whilst the 3 year research and cataloguing project incorporates the digitisation of research outputs and the creation of digital surrogates to illustrate the cataloguing process, the project team are still left with the problem of determining what material to digitise, and in what order, to better support teaching and research needs.

In order to improve current access for the research team the priority would be to digitise Anderson's diaries, correspondence and film stills, yet the importance of maintaining their context is signalled, "The value of the correspondence in the collection lies in its context within the file. Individual letters lose their context and importance once they are considered in isolation. However, there is a different emphasis for the photographs – where a single image of a particular person might be sufficient for an end user."

An argument has also been made for concentrating on visual material such as the promotional/advertising images for films rather than the correspondence, as a great deal of information about the correspondence has already been made available on the item-level catalogue. Any digitisation carried out by AHRC project itself, will only be illustrative - i.e. of images that can be added to CALM catalogue entries. Additionally, where online access is provided to digitised images from the archive, it would be most beneficial, "if the hierarchical arrangement of the collection could be illustrated to provide the context of the individual document (within the file, series, collection)".

The archivists demonstrate their method for doing so. Existing digital resources are kept in subject files that match the structure of the LA Collection. When digitising archival materials, their original context is ensured by stating which file the item is in and how it relates to other records in the collection. This simple and effective strategy was further explained, "The plan is that when we digitise documents from the collection (letters, photographs, drawings etc) these digitised images will be linked to the catalogue entry for the item in the CALM cataloguing system, thereby ensuring the context is maintained."

The project is being undertaken as part of the activities of the Stirling Media Research Institute⁶ which also hosts the University's research cluster in Digital Cultures which organizes its research into media, culture and communication, articulated as "Arts, Histories and Cultures" around the sub-themes of archives, creativity and participation. It is argued, that the digitisation of the collection would facilitate its use by this research cluster and enable a resource, currently held at departmental level, to be integrated into the strategic goals of the University as a whole.

An expanded role for Special Collections

"A Library is a growing organism."

S. R. Ranganathan

Stirling's first principle Tom Cottrell had a vision of the eventual integration of the University's Art and Heritage collections within key areas of the institution, in order to provide an aesthetically stimulating environment for learning, teaching and research. The plans for an expanded role within the new information environment for the University's Archives and Special Collections are intended to reflect and fulfil this ambition.

Practical considerations of cost, equipment and copyright aside the ideal digital version of the LA Collection, the AHRC project team advocate, would have:

- all of the correspondence digitised and linked to the CALM item-level catalogue
- a full digital photographic archive
- "tutorials" created by FMJ staff for teaching – online courses for undergraduate students using digitised archives
- clips from all of Anderson's films

Upon completion of the main library's renovation, due in September 2010, the context and curatorial environment of the LA Collection will change yet again. It appears, therefore, that digitisation has a fundamental role to play in providing workable solution to the problems of continuity of access to such "nomadic collections" and that any prioritisation framework can be both informed by such progressions and help direct their future allocation of resources.

⁶ <http://www.fmj.stir.ac.uk/research/index.php>

Appendix VI - End User Study

Institutions, schools and departments represented

Provided below is a profile of the sample of Institutions contacted during the survey of Intermediaries, as well as detailed responses given in answer to the questions listed in Section 4.2 of this report.

A total of 57 institutions were represented from across the whole of the UK and beyond.

Institution	Number of occurrences
Anglia Ruskin University	2
Bangor University	1
Birkbeck College	1
Bishop Grosseteste University College	14
Cambridge	2
Courtauld Institute of Art	13
Croydex Ltd	1
De Montfort University	9
Edinburgh College of Art	1
Glasgow Caledonian University	1
Heythrop College University of London	1
Institution of Civil Engineers	1
IWM	1
Keele University	3
Liverpool John Moores University	1
Manchester Metropolitan University	8
Middlesex University	1
NorthCentral University	1
Queen's University Belfast	1
Queens' College	1
Royal Holloway	1
Royal Northern College of Music	2
Royal Veterinary College	1
Rutgers University	1
Sheffield Hallam University	1
Southampton University	1
The University of Birmingham	1
The Warburg Institute	1
The Women's Library	1
TRINITY LABAN	1
University of Central Lancaster	1
University of Glasgow	2

University of Arts London	1
University of Bath	2
University of Bedfordshire	2
University of Bristol	6
University of Buckingham	1
University of Dundee	3
University of East Anglia	9
University of Exeter	2
University of Greenwich	1
University of Hertfordshire	6
University of Liverpool	13
University of London	1
University of Manchester	4
University of Nottingham	1
University of Oxford	3
University of Plymouth	1
University of Reading	3
University of Salford	7
University of Sheffield	3
University of Ulster	1
University of Wales Lampeter	4
University of Warwick	4
University of York	2
Warburg Institute	2
Wellcome Library	1

Table 2. Affiliation of respondents to the end user survey

168 Schools/Departments were represented

Schools/Departments	Number of occurrences
Academic Services	2
Academic Studies	1
Academic Support & Development	1
Archaeology & Anthropology	7
Art & Design	11
Art History	2
Arts, Histories and Cultures	1
Book Library	1
Borthwick Institute	1
Business School	1
Centre for Atmospheric & Instrumentation Research	1
Centre for Manx Studies, School of Archaeology, Classics and Egyptology	1
Centre for Research in Primary and Community Care	1

CETL	1
Computer Science	2
Courtauld Institute of Art	13
Department of English	16
Department of History	28
Design	2
Early Childhood	1
Education Studies and Science	4
Environmental Sciences	2
ESPaCH	2
Faculty of Technology	1
Geography	1
Heritage Department	3
Humanities	3
Hunterian Museum and Art Gallery	1
Information and Learning Services (ILS)	5
Institute for Social Change	2
Institute of Creative Technologies	1
International Centre for Sports History and Culture	1
Knowledge Transfer	1
Law School	2
Library and Special Collections	23
Llyfrgell Gymreig a Casgliadau Arbennig	1
Mathematical Sciences	1
MIRIAD (Textiles/Fashion)	1
MTI	1
Museum of English Rural Life	1
Psychology	1
Roderic Bowen Library and Archives	1
SACE	3
School of Chemical Sciences and Pharmacy	2
School of Culture, Innovation and Education	1
School of Nursing	1
School of Teacher Development	1
School of World Art Studies	2
School of printing and publishing	1
Science	2
Textiles (Knit, Weave & Mixed Media)	1
Theology and Religious Studies	1

Table 3. Schools represented in the end user survey responses

Responses given to survey of End Users

Factors preventing impact of non-digitised Special Collections on research/studies

As a Curator, my interest is primarily concerned with supporting research and teaching. Increased digitisation would have a high impact in further integrating Special Collections into the curriculum.

Awareness (I do not know of many Special Collections in my subject area).

Impact of non-digitised Special Collections on research/studies

Enable object-based research that cannot easily be captured by digitisation (seeing back and front, reading faint inscriptions, accurate assessment of colour, etc.)

Physical specimens essential in most forms of geological, biological and archaeological science.

The “Feminist Academy” is increasingly fractured through gender mainstreaming and interdisciplinary approaches. Online resources are a key tool in creating online communities across formal subject structures to support academics working in the same subject area

The impact is mostly negative: it makes my research more cumbersome and more expensive to undertake

They provide the backbone of research in Tudor ecclesiastical history, all of which materials are available in archives with practically nothing in digital form

Impact of digitisation of Special Collections on research/studies

I am not aware of many Special Collections in my subject area

Aid public access to rare materials held within universities - for example using sources for local or family history (2)

I could work on the project outside of library opening times. However, there is no substitute for handling the documents themselves, in my opinion.

Improve access to collections and materials not known to exist outside current small communities.

Increase speed of information retrieval, and reduce expense of research. Assist in initial survey of material to judge usefulness or scope.

Would also put into the public domain rare materials that would have wider public appeal

It would enhance the teaching of core research skills (paleography, diplomatic), enable the production of on-line teaching materials for publication (2)

Factors preventing non-digitised Special collections impacting on teaching

Can be integrated into undergraduate teaching only to a certain extent

I need to transcribe and make material available - very time consuming

My teaching normally makes use of images or objects - not documents and papers.

The impact is low because undergraduates rarely NEED to know about the contents of Special Collections. But, for example, I shall next week by SHOWING my students the original Dickens journals in which the novel “Hard Times” was serialised. I’ll probably still want to do that, even when the journals are digitized.

Impact of digitised Special collections on teaching

Access to images

Additional background to course materials (e.g. online thin-section photographs/records for geological specimens).

Digitised material would be of help to distance students.

Develop specific exercises related to collections.

Digitisation would enable my students to interact with the material in ways other than they already do; it would increase access and place less pressure on the materials and resources themselves and on the library staff. Having said that digitisation would not replace the consultation of the original materials.

Discussing serialised novels in tandem with the adjacent content in the original journals/periodicals where they were published i.e. recuperating the original context.

Graphical illustration from the originals would have great impact on students and help to open up the subjects being studied

It would enable sessions to be research-led/ research-directed...

Linked to research knowledge

Preparation of web-based learning materials for wider distribution

Student take-up

To interest and enthuse the students; to encourage their research skills

Use by students in own work

Use in lectures and seminars (PowerPoint presentations) and to work with more students on the material, to show them a greater variety of material

We are often asked to support courses held outside our university - this would be a way to engage HE audiences from a range of physical locations (whether in London, national or international)

Would allow students access to material they cannot now access

Do you feel that there is a lack of *digitised* Special Collections available to assist you in your *teaching*?

If Yes, does the lack of digitised collections hinder your teaching? Please explain how:

Access

Accessibility would be improved

Case studies may be sought from less well defined web sources, rather than collections that are coherent and known about in relation to the field

Could be much more cross-disciplinary and international content if digitised collections were widely available

Difficult for non specialists to find material

Hard to get hold of

Hinders integration to delivery methods like e-learning

If a lot was available, I would undoubtedly use it

If I wanted to develop relevant undergrad courses in this field it would

If I was teaching, the greater availability of sources for medievalists is always welcome

Insufficient range of pre-print materials for students to work with

It affects the bibliographies I can set for my students; with large class sizes, I cannot set papers which require access to Special or remote collections.

It would be nice to have more availability of digitised material.

It would be useful to be able to refer students to the resources themselves rather than being limited to samples I provide.

It would facilitate access in classroom/seminar

It would provide more opportunities to improvise.

Lack of core sources available means that students physically have to visit one site. This is not necessarily beneficial in a world where students approach to research is very different - e.g. with a different approach through the internet and also with more students working/ having commitments outside of taught hours. Encouraging students to use original sources is fantastic, but I don't see why students should have to make a journey to view material which is presented on microfilm anyway!

Limited resources; students are not trained to use these materials

No

Not enough access for students means I have to explain more mundane topics in detail

Not so much hinder, as mean I have a more limited range of potential tools.

Only the most motivated students will visit archives; digitization would improve engagement

Students have no access to original material on history of maths

Students may not be able to access them

There are lots of things I'd like to show the students but can't

There is a significant amount of material from which to choose, but more material would certainly give more flexibility, especially in the context of specialised research seminars

Unavailable to postgrad students

Very limited potential to use primary sources in comparison with other disciplines

When teaching on-line courses to distance learners the lack of these resources hampers the student experience in relation to those I can teach on site

Yes - it impedes student research

Yes, because all descriptions are at second hand without illustration from the originals.

Do you feel that there is a lack of **digitised** Special Collections available to assist you in your **teaching**?

If No please explain why not:

Access to research facilities is appropriate for these purposes

Again, complex. There's enough out there for one to give undergraduates the flavour. I suppose it's a different answer with postgraduates. One of my DPhil students has had to travel widely to access 1830s regional newspapers that are not currently digitised. So I suppose this is a kind of No/Yes answer!

An awful lot is available.

As per previous explanation re. EEBO/ECCO

Generally materials are available in digital format for the purposes of teaching, because my teaching does not frequently require the use of specific copies held by specific libraries or archives, but rather digitisation of any one copy of a work.

More concerned with their availability for dissertation/thesis work than "teaching"

Most of the teaching material is very mathematical and even in digitised form would be difficult to access.

My teaching will always be most heavily reliant on images.

No I use photocopies and reference but it is slow

Only teach to third year level and provide them with primary documents myself

So many American research libraries now have digital collections I am rarely at a loss to find suitable material to bring to seminars in my research area (Civil War America)

Special collections play little role in my teaching

Would *digitisation* of a Special Collection affect your use of that Collection?

If yes, please explain how:

A myriad of ways, depending on the specific collection.

Access

Access

Access easier

Accessibility around the clock

Allow quicker and more thorough access, which in turn would allow more time for research on other collections.

Allowing ease of access would be paramount

Already explained

Be more accessible

Being able to find collections might influence me to using them.

Better teaching and research

Better user access, less travel, lower cost, technological capacity and user-friendliness

Broader use in embedding Special Collections in degree and research programmes.

Browse to find out what's available; use digitised objects rather than the originals

By making a wider variety of materials available for research

Can save on travel and increase material explored

Change from one supervised student visit to whole course unit, and related courseware, based on the holdings

Ease of access

Ease of access. Search capabilities.

Easier access

Easier access (providing it was not site-specific), more useable data.

Easier access makes it much easier to evaluate, and make decisions about utility of objects.

Easier access should increase usage

Easier access to materials - might obviate need to travel.

Easier and cheaper to access

I could use it if it was not local to me...

I hope it might make the material searchable

I would access it more.

I would be able to access it from home, allowing me to spend more time researching it.

I would be able to access the whole collection at a time which suited me and print off examples of the collection (as a reference) or decide which parts of the collection I wanted to see. Currently, apart from accessing part of the collection (which is digitised)... access is dependent on staff availability, which could be an issue if they are very busy with school activities, visiting parties etc.

I would be more likely to use it

I would be more likely to use it myself, and disseminate it to others

I would certainly use the materials more often

I would make increased use of the resource particularly in on line teaching

I would use it for teaching at undergrad and postgrad levels and resume a project I started some years ago

I would use it outside of Special Collections opening times

I'd be more likely to use it

I'd use it more

If available online, it would significantly improve access - if, however, it is all put on expensive CDRoms that universities cannot buy, I will lose out...

If digitised it is easily accessible; if not I am unlikely to be able to use it much.

If it is more available then it is more usable and suggestible to others

If relevant materials were available on line it would be easier to use them in enquiry work and information skills teaching, it would also make it easier to refer academics and students to them where they were relevant to the work of their departments

Improve access

Improve access

Improve access, no matter where I'm living

In general I would still ask for access to the original material in order to check those elements which cannot be conveyed in the form of scans, but this could be done in less time.

Increase awareness of information sources

Increase use/access

Increased use - primarily for teaching

It would be much easier of access than having to travel there.

It would increase it.

It would not usually replace consultation of the original, but it would often extend the period over which one may have access to the material beyond the period one is able to spend in person at the repository which holds the collection.

It would significantly alter the research done in site: less data gathering, more in-depth analysis of the physical format of the object; correct transcriptions prepared in advance

Less likely to go to museum to look at the collection

Less travel, greater use

More frequent

More likely to browse material online than visit an unknown archive

More likely to use it

More likely to use it if easily accessible.

OCR in particular opens up use of collections to a wider range of students and the wider public (local history / family history). However this should be supported by improving access via catalogues. Digitising an uncatalogued collection is not going to improve access!

Online access

One example of this from my point of view, alongside the ability to draw users in, would be that it would allow access to material that is quite "fragile" and not suitable for exhibition/consultation.

Potentially easier access (internet)

Primarily use would be for research and consequently it should be more efficient to access the relevant material

Ready access, such as is now possible with e.g., EEBO

Resource access for self and students

Well... assuming the digital edition is free to access, then one's use will not only be affected it will be kick-started. Instead of having to look at the catalogue to a US Special Collection and then write to the curator to ask for photocopies, information, images etc., one simply logs on to digital facsimiles and forges ahead with primary research. Plus using images and details for teaching purposes. so, almost a no-brainer if I may say so!

Whether I used the collection or not.

Wider range of source material

Would enable much more use

Would it would make me make greater use of it

Would use more online but visit rarely

Digitisation would give me additional opportunities to use the resources which I need for teaching.

Would use it more frequently

Would *digitisation* of a Special Collection affect your use of that Collection?

If no please explain why not:

Original materials provide information that digitisation does not.

Appendix VII - A comparison of collections nominated to DiSCmap with those recorded in SCONE, an established collection-level descriptions service

Contributed by Gordon Dunsire, April 2009.

1. SCONE

SCONE, the Scottish Collections Network, was established in 2000 as a result of the JISC-funded SCONE⁷ and cc-interop⁸ projects. It continues to be maintained by CDLR and the Scottish Library and Information Council (SLIC). SCONE is a collection-level descriptions service, providing metadata about collections as a whole. It covers collections of all types falling within two distinct areas of scope:

- Collections located in Scotland and on any topic.
- Collections on Scottish topics located elsewhere.

The latter scope has only been developed as a pilot, so most of the collections fall into the first category and are located in Scotland.

The collection-level descriptions use metadata from a variety of sources, including institutional websites, institutional catalogues and other finding-aids, collaborative project and service websites, and directed surveys of libraries. SLIC conducts an annual review and updating exercise for library collections across all sectors in SCONE.

SCONE coverage is indicated by statistics for March 2009:

Archive collections	307
Library collections	4556
Museum collections	551
Internet collections	387
All collections	6368

Table 4. SCONE coverage in March 2009

SCONE utilises the concept of “functional granularity” described in the entity-relationship model⁹ which underpins most of the collection-level description metadata schemas currently in use: “Where an institution can choose between different degrees of aggregation in determining what are its Collections ... [the] institution should base its choices on its own pragmatic grounds, such as the level of detail required ... for the purposes of resources discovery or collection management ...” As a result, there are significant differences in the hierarchical depth of SCONE’s coverage of sub-collections between archive, library and museum curatorial environments. For library collections, nearly all named, special sub-collections are included. For archive collections, SCONE does not attempt to duplicate the depth of coverage available in the Scottish Archives Network or Archives Hub services, and in general only records the top-level archive collection and those sub-collections given special prominence on institutional websites. Museum sub-collections tend to be organised on thematic bases, with little or no readily-available documentation, so again SCONE usually only records the top-level collection and specially-named sub-collections.

2. Checking DiSCmap nominations against SCONE

Collections nominated by intermediaries for digitization in the DiSCmap and RLUK surveys were checked against SCONE in order to:

⁷ SCONE: Scottish collections network extension. Available at: <http://scone.strath.ac.uk/>

⁸ Cc-interop: COPAC/clumps continuing technical cooperation project. Available at: <http://ccinterop.cdlr.strath.ac.uk/>

⁹ Heaney, M. (2000) An analytical model of collections and their catalogues. 3rd issue revised. Available at: <http://www.ukoln.ac.uk/metadata/rslp/model/amcc-v31.pdf>

- Identify potential additions to SCONE.
- Augment the DiSCmap metadata obtained from the surveys.
- Identify any issues relevant to the maintenance and use of collection-level descriptions in the DiSCmap “long list”.

Metadata for collections nominated by intermediaries in Scottish institutions were identified and extracted from the DiSCmap database, amounting to 139 entries. These were used to search for corresponding records in SCONE, using two of the service’s standard retrieval facilities:

- Keyword search of collection title, description, and notes.
- Institutional collection hierarchy browse.

In cases where the survey metadata lacked sufficient detail for effective retrieval, additional information was sought from:

- Repository and name searches of the Archives Hub.
- Browse and site searches of institutional websites.
- Keyword searches of Google.

Up to 15 minutes per collection was allowed for obtaining such additional metadata.

If survey metadata had sufficient detail for unambiguous identification, and no corresponding entries were found in SCONE, then the collection was added to the SCONE database.

3. Overlap between DiSCmap and SCONE

The following table shows the extent of overlap between DiSCmap nominations and SCONE entries.

Curatorial environment	% in SCONE	% added to SCONE
<i>Source: DiSCmap online survey form</i>		
Archive	37	42
Library	50	6
Museum	20	36
Overall	36	26
<i>Source: RLUK survey spreadsheet</i>		
Archive	0	25
Library	69	0
Museum	0	0
Overall	50	6
<i>Source: RLUK survey list (Aberdeen University)</i>		
Overall	7	15

Table 5. Overlap between DiSCmap long list and SCONE

These figures reflect the breadth and depth of SCONE’s coverage outlined above. An additional factor is that RLUK membership has a preponderance of older universities which tend to have made available more online information about their Special Collections than younger institutions, and therefore have better coverage in SCONE.

4. Visualising the SCONE landscape for DiSCmap

A collection landscape is a set of collection-level metadata with a particular focus, such as strength in a specific subject area, geographical location, or curatorial environment. SCONE supports both static and dynamic landscapes. In a static landscape, the metadata set is pre-assigned; in a dynamic landscape, the set is derived from an ad hoc search based on location, subject, owner/collector, type, language, etc. Static landscapes have been implemented for a number of collaborative groups in Scotland, including Glasgow Academic Libraries Together (GALT)¹⁰, the East of Scotland Museums Partnership¹¹, and the Scottish Visual Arts Group

¹⁰ GALT: Glasgow Academic Libraries Together. Available at: <http://www.slainte.org.uk/galt/index.htm>

(SVAG)¹². SCONE landscapes can mix several levels of collection granularity, so a landscape may contain sub- and super-collections from the same hierarchy.

A landscape was created for collections nominated in the DiSCmap and RLUK surveys and either found in SCONE or subsequently added to SCONE. The landscape can be presented in two ways: the “classic” SCONE listing given in Screenshot 1 (Figure 5); and the more recent Scotland’s Information service which meshes SCONE metadata with Google Maps, given in Screenshot 2 (Figure 6).

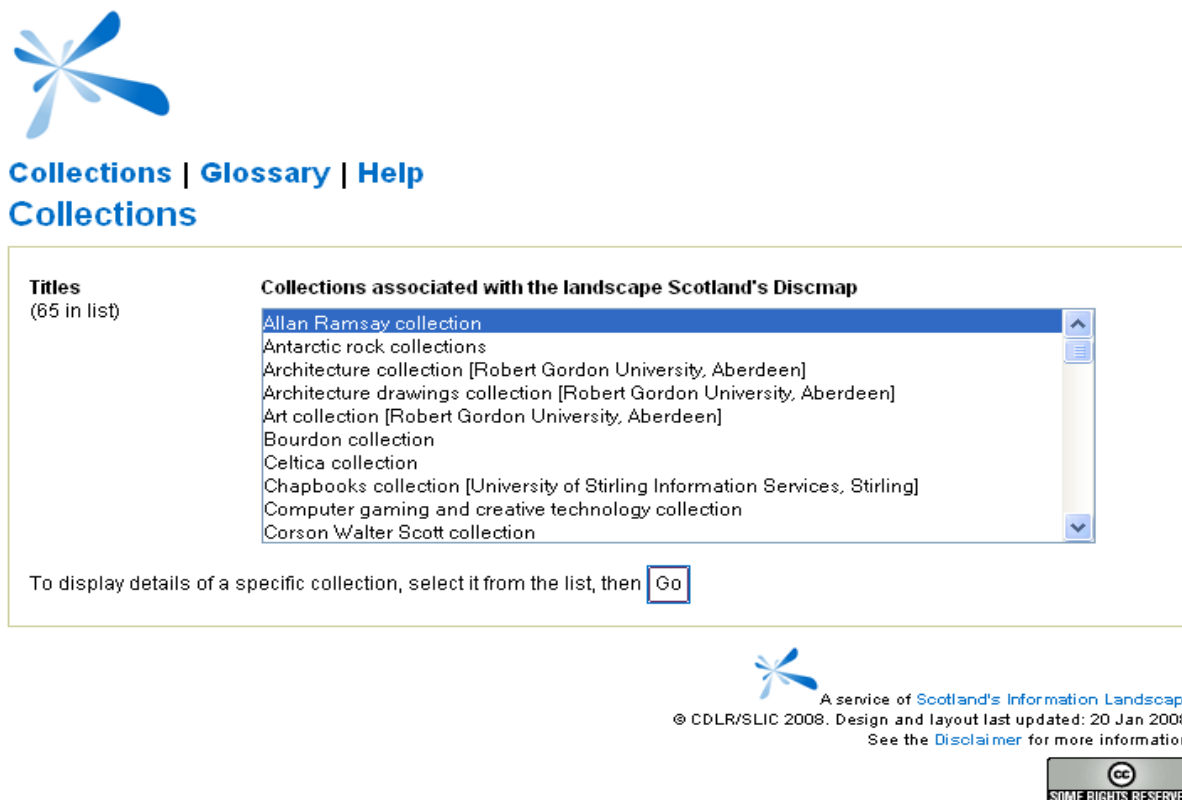


Figure 5. Screenshot 1: The “classic” presentation of the DiSCmap landscape in SCONE¹³.

5. Metadata issues

A number of metadata issues were identified which are likely to impact on the utility of the “long list” of nominated collections:

- Collection titles
- Granularity
- Availability of metadata

5.1 Collection titles

What is the title of this collection? This has been a significant problem for SCONE in the past. Variations are found:

- On institutional websites and finding-aids.
- Between DiSCmap nominations.
- Between DiSCmap nominations and collection-level descriptions services such as the Archives Hub.

Examples are given in the Table 6.

¹¹ ESMP: East of Scotland Museums Partnership. Available at: <http://www.mages.org.uk/q=node/110>

¹² SVAG: Scottish Visual Arts Group. Available at: <http://scur.ac.uk/about/svag.html>

¹³ Available at: <http://scone.strath.ac.uk/service/portal/landscape.cfm?LI=17>

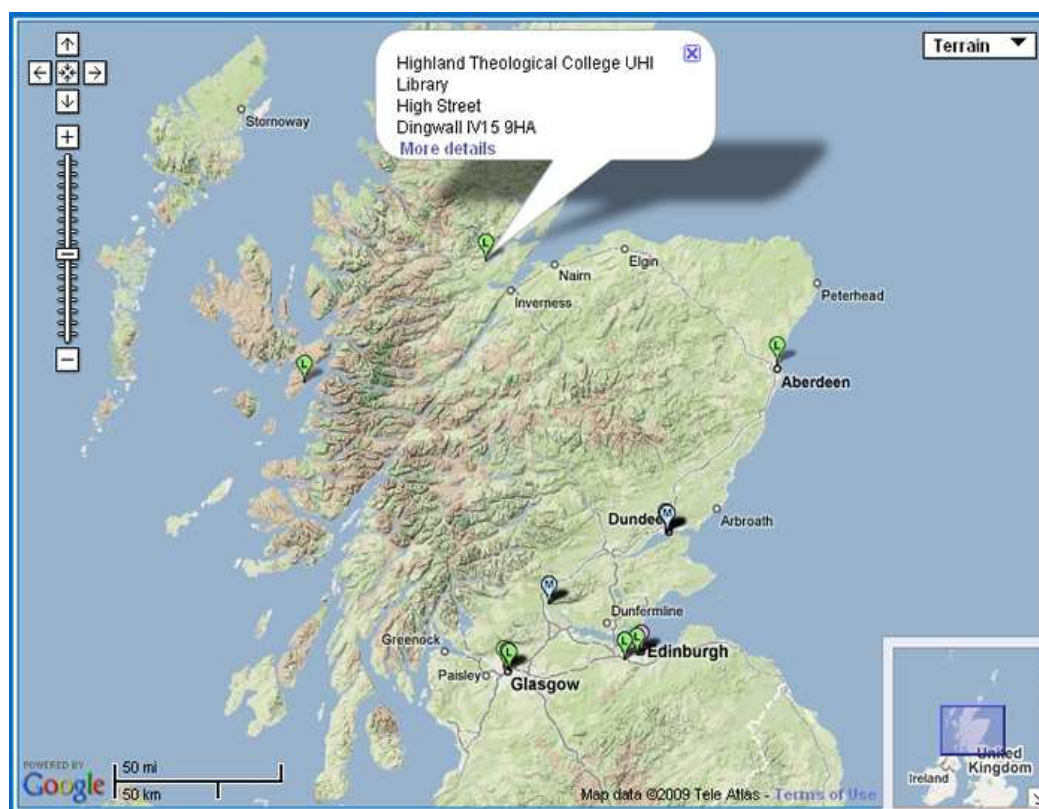


Figure 6. Screenshot 2: The DiSCmap landscape presented on Google Maps¹⁴.

Source	Collection title
DiSCmap online survey	John Tweedie collection/Currie and District History Society collection
Archives Hub	John Tweedie Local History Archive ca.1900-1980 [sic]
SCONE (based on Archives Hub)	John Tweedie local history archive
DiSCmap online survey	Glasgow School of Art photographic collection
Institutional website (1)	GSAA P: Glasgow School of Art photographs
Institutional website (2)	GSA Archive Photographs
SCONE	Glasgow School of Art photographs collection
RLUK survey spreadsheet	James Orchard Halliwell-Phillipps Collection of Shakespeareana
Institutional website	Halliwell-Phillipps collection
SCONE	Halliwell-Phillipps collection

Table 6. Variations in collections' titles

10% (4 of 40) of nominated collections which were already in SCONE had variant titles which would affect sorting and de-duplication of records by machine, necessitating resource-intensive intervention by human intermediaries.

The most common areas of variation identified during maintenance of SCONE have been:

- Differences in institutional name incorporated into the collection title, such as “University of X Special Collection”, “X University Special Collection”, “XU Special Collection”, etc.

¹⁴ Available at: <http://www.scotlandsinformation.com/sishow.cfm?TI=17&ST=1>

- Inversion of title elements, such as “Papers of XYZ” and “XYZ papers”.
- Full and shortened personal names incorporated into the collection title, such as “X.Y. Surname collection”, “Xavier Y. Surname collection”, “Surname collection”, etc.

Examples of each are present in the collection titles submitted to DiSCmap. While many of these can be identified as possible duplicates using title keyword searches, this is not a reliable method for determining that duplication exists. As well as the problem of common names and acronyms, false positives can also occur if the name is a common topical noun. For example “Law collection” may be a variant of “Alexander Law collection”, “Department of Law collection”, “Law [subject] collection”, etc.

Variations in title are also entangled with the issue of granularity.

5.1.1. Granularity

40% (16 of 40) of nominated collections which were already in SCONE were format-specific sub-collections of SCONE collections. That is, SCONE already recorded a collection which entirely incorporated the nominated collection, with the only difference in scope being a specified carrier type. Examples are given in the table below.

Nominated collection	Parent collection in SCONE
Edward Clark Collection: glass slides	Edward Clark collection
Gallacher Memorial library. Pamphlet collection	Gallacher Memorial Library
James Hogg manuscripts	James Hogg collection

Table 7. Examples of sub-collections nominated as collections

Several carrier types were represented more than once:

Carrier type	Number of nominated collections (of 40)
Manuscript	5
Rare book	3
Pamphlet	2

Table 8. Multiple occurrences of carrier types

This suggests that an important factor for intermediaries when nominating a collection is the rarity and fragility of the carrier type, reflecting prioritisation for preservation of and access to these materials.

This exemplifies the application of functional granularity in the context of digitisation, but this may occur on a temporary basis. Once the material has been digitised, along with the rest of the parent collection, there may be no further need for defining a sub-collection in this way and it might be merged back into the parent collection. On the other hand, if the rest of the parent collection remains non-digitised for a significant period, then the sub-collection retains its scope and requires treatment as a distinct collection. And the existence of a digitised sub-collection may perpetuate a functional granularity approach to the original sub-collection.

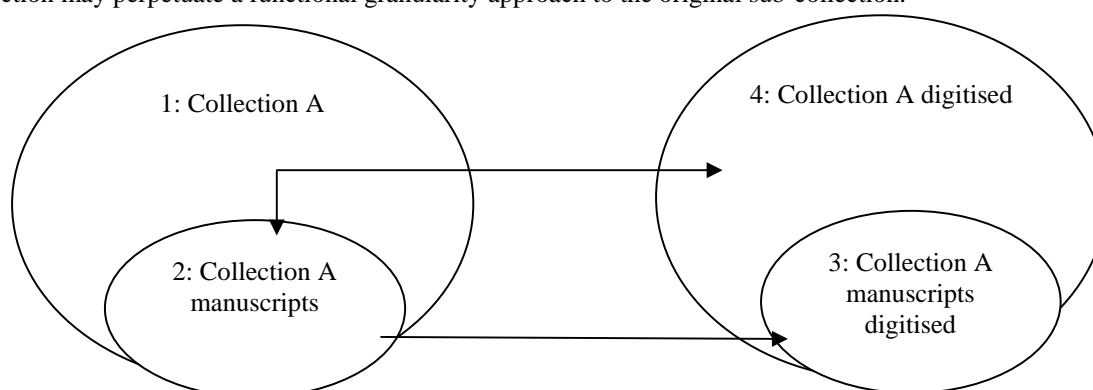


Figure 7. Granularity issues in physical and digitised collections

The diagram shows a sequence of events:

Starting with the established “Collection A”, a sub-collection “Collection A manuscripts” is created as a priority for digitisation, requiring a second metadata record for use during the planning and digitisation process.

Digitisation creates a separate collection “Collection A - manuscripts digitised” which requires its own metadata record for resource discovery and management purposes. If the relationship to the original “Collection A” is to be accurately modelled, the “Collection A manuscripts” record needs to be retained after digitisation is finished. If the rest of “Collection A” is subsequently digitised, a fourth metadata record for “Collection A digitised” is required. But the second and third metadata records are now redundant, and can be deleted. There may be a case for retaining the third record if there is an external super-collection of digitised manuscripts.

This scenario has implications for planning and managing the digitisation of distributed collections and their subsequent aggregation into digital super-collections.

One of the Scottish DiSCmap nominations is a super-collection. That is, the collection title submitted as “Thomson, Harold and King collections, 18th – 20th cents” [sic] is an aggregation of three separate collections recorded in SCONE: Thomson collection, Herald collection, and King collection. SCONE also notes that these three collections complement each other, which is the probable reason for nominating them as a single collection. (Note also that the nomination mistakenly gives “Harold” rather than the correct “Herald”.)

Two other DiSCmap nominations have super-collections recorded in SCONE. “Needlework development scheme” comprises part of a collection which was dispersed in 1961 and distributed to higher education institutions across the UK. “Scottish Chapbooks Collection”, a variant title recorded in SCONE as “Chapbooks collection”, is a component of a distributed super-collection, confusingly titled “Scottish chapbooks collection”, which has its own catalogue developed by inter-institutional collaboration. In both cases, the value of digitising the institutional component collection would be enhanced if all of the component collections were digitised.

5.1.2. Availability of metadata

Metadata for 38% of collections nominated via the online DiSCmap survey and 44% of those from the RLUK survey could not be found during a 15 minute search of SCONE, the Archives Hub, Google, or the website of the nominating institution.

16 of these 30 collections have “increased usage” as an indication of priority, and 15 have “facilitate access” as an indicator. 14 have “preservation” as an indicator, so it may be the case that institutions do not wish to encourage access to the original materials. However, the lack of online collection-level metadata for resources prioritised for access and usage merits further investigation.

5.2. Coverage

Institutions nominating collections to DiSCmap constitute less than 25% of institutions with one or more research-level collections recorded in SCONE. The main reason for this disparity is likely to be the restricted scope of the DiSCmap sources, confined to higher and further education institutions, compared with SCONE which includes research institutes, and public libraries (with research-level collections mainly in the areas of local and family history).

The RLUK survey asked respondents to note collections which complement those being nominated. The numbers of complementary collections located in Scotland are given in the table below.

Institution located in Scotland	Number of complementary collections
Abbotsford House	1
Glasgow University	1
National Archives of Scotland	2
National Library of Scotland	8
National Museums Scotland	1

Table 9. List of complementary collections not nominated by their host institutions

None of the collections noted were nominated to DiSCmap by their owning institutions.

And Glasgow University was the only institution to nominate any collection to DiSCmap.

Note that these complementary collections have been added to the “long list”, where sufficient metadata was available.

Appendix VIII. Frameworks of digitisation priorities

In this appendix we summarize criteria for digitisation nominated by different frameworks.

Despite the passage of 10 years since their first articulation, the SOUDAAM recommendations of Seamus Ross (1999)¹⁵ are still pertinent to today's digitisation frameworks,

"Institutions and even individual researchers are encouraged to adopt a source-orientated user-driven asset-aware model (SOUDAAM) for the identification, selection, and prioritization of material for digitization." (p. 22)

These wide ranging principles form the basis of what is termed a Digital Collection Development Plan (DCDP). Institutions are counselled to form such DCDPs and funding agencies are encouraged to view them as benchmarks for allocation (p. 21).

To effectively prioritise collections for digitisation, it is advocated that,

- *Institutions need to define the objectives that they wish to achieve through the digitization of their holdings e.g. "enhanced research performance".*
- *Institutions should draw up Digital Collection Development Plans before embarking on future projects.*
- *The needs of users (students, researchers, general public) must be considered.*
- *Conservation needs should be audited and risks assessed. (p. 22)*

Ross does not advocate a mass digitisation approach to Special Collections, rather he argues for an orderly approach, deploying DCDPs in order to ensure the scalability and sustainability of projects, "it is important that the selection of material for representation in digital form be subject to systematic and thoughtful planning" (p. 5).

It is suggested that, in the search for prioritisation criteria for the digitisation of Special Collections, "four key parameters could provide a framework". Digitisation programmes should be founded on:

1. *an analysis of conventional holdings and strategic planning of digital collection development on institutional, regional and national level;*
2. *source orientated reviews of collections;*
3. *institutions establishing whether the newly created digital materials would complement other local, regional or national collections or leverage their conversion; and*
4. *estimate the level of user demand for enjoyment, teaching and learning, or research." (p. 5, 6)*

Such a framework is necessary to both aid and justify decisions "to digitize certain materials first" and are the core principles of a Source-Orientated, User-Driven, Asset-Aware Model (SOUDAAM).

The DCDP consists of two essential components, an Intellectual Asset Survey (IAS), a "strategic survey of the institutions collections and their intellectual, cultural, social, curatorial and public value" and a Digital Representation Implementation Plan (DRIP) an examination not only of technical infrastructure and digitisation technology, but of public access requirements and the needs of teaching and research. DCDPs, Ross explains, are therefore "a schematic model for handling the decision making activities associated with selection and prioritization of holdings for digital representation"; it is crucial that the model, among its 9 imperatives, include a survey of user needs "to ensure these needs are reflected in the decision making process" and be responsive to both research objectives and public access (p. 10).

DiSCmap's search for end user priorities and its attendant survey of Special Collections, therefore, conforms to these two necessary aspects of a DCDP, and within DiSCmap's current framework, these end user priorities would ultimately determine implementation policy.

However, a User-Driven model, for Ross, should not be viewed in isolation as the dominant principle for digitisation,

"On occasion research, teaching and public benefit may not be the foremost justification for prioritizing holdings for digitization and it may be institutional marketing or development priorities that come to the fore." (p. 16).

¹⁵ Ross, S. (1999), Strategies for Selecting Resources for Digitization: Source-Orientated, User-Driven, Asset-Aware Model (SOUDAAM) in Coppock, Terry., Ed. (1999), *Making Information Available in Digital Format: Perspectives from Practitioners*. The Stationary Office Limited: Edinburgh p. 5-27

Larger, more established institutions, it is argued, can find that even once collections material has been selected “it will need to be placed in an order of priority to maximize investment”. A comprehensive collection strategy, which takes into account institutional marketing, collection and research development, labour and digitisation costs alongside end user needs, is therefore ultimately required to inform prioritization for digitisation programmes.

He lists a series of 16 “vantage points” for prioritization which encompass this range of collection level, user-focused, institutional and legal issues (p. 17). Amongst those priorities which would advantage teaching and research for end users, three selection criteria are key to informing DCDPs:

- *Does the material have untapped research potential?*
- *Would the improved functionality that digitization would bring enhance the research potential of the item or collection?*
- *Could the material play a role as a teaching resource?* (Ross, p. 17)

The relatively narrow but essential range of research and teaching criteria to be found in the SOUDAAM recommendations has been further explored and expanded by DiSCmap’s own survey of intermediaries and end users. DiSCmap’s range of priorities also provide a series of insights which support the observation made by Ross back in 1999¹⁶ that “arts and humanities research... is becoming more collaborative” (p. 14).

Whilst Ross acknowledges the benefits of digitisation in response to existing demand and the potential for digital projects to create end user demand for collections and transform their use (p. 12, 17), exactly how this demand is to be met is still being hotly debated amongst intermediaries a decade on.

A mass digitisation approach is not considered suitable for Special Collections, being viewed as problematic not least due to the dangers inherent in IPR issues, “Where the institution does not own these [IPR] rights (...) other assets should be selected for digitization” (p. 12), but also due to potential liability in areas such as radiography and structural analysis if images of poor quality are presented for use in scholarship (p. 21), and the danger of uncontrolled access to the potentially defamatory or obscene materials within collections (p. 11).

Nevertheless, it is recognised that there exist drawbacks to the strategic approach he advocates. Conflict, contradiction and misrecognition can often be located at the interrelated levels of

- The individual scholar;
- The institutional research strategy;
- The institutional collections.

When prioritising the research needs of end users, for instance, it is necessary to remain aware of the fact that much scholarship into Special Collections is undertaken within distinct intellectual specialisms; whilst “umbrella institutional research strategies” have been developed to enable such specialisms to cohere to “institutionally-led objectives”, Ross finds that such imperatives often pay insufficient reference to the institution’s own research collections. Research strategies need, therefore, “to take into account the institutional collections and inform, and be informed by, strategies to represent them in digital form” (p. 18). Collections themselves should therefore help shape research agendas and digitisation programmes.

To unlock the full potential of collections, it is concluded, “Projects (...) must focus on creating sustainable resources that will be reusable in the face of changing technology and be part of scalable programmes” (p. 18). Scalability, sustainability and re-use, therefore, form the bedrock of Ross’ call for a *national strategy for digitisation* where the needs of end users are just one aspect amongst a range of competing and equally valid priorities. It is a call first advocated nearly two decades ago by the British Library and the British Academy.¹⁷

The focus on user needs in isolation from other strategic drivers for digitisation may lead to the neglect of key sets of imperatives and rewards which also hold the potential to additionally benefit end users.

It is therefore necessary to examine how such factors are considered in other digitisation frameworks.

The National Library of Australia Digitisation Policy (2000-2004)¹⁸ for example, places *end user imperatives* such as digitisation in response to demand and the improvements in access this would bring on the same level of

¹⁶ Ross, S. (1999), Changing trains at Wigan: Digital preservation and the future of scholarship, The JISC/NPO Digital Preservation Workshop, 3 / 4 March 1999, Scarman House, University of Warwick, <http://www.leeds.ac.uk/cedars/OTHER/SROSS.htm>

¹⁷ British Library and the British Academy [BL/BA] (1993) *Information Technology in Humanities Scholarship: British Achievements, Prospects, and Barriers*, The British Library Research and Development Department and The British Academy, London.

¹⁸ National Library of Australia (2000-2004) Digitisation Policy <http://www.caul.edu.au/org/NLADigitisationPolicy.doc>

priority as *institutional imperatives* such as “efficiency gains for the library” through the cost benefits of digitisation in the provision of physical access to items in heavy use.

The NLA’s more recent Collection Digitisation Policy (2008)¹⁹ incorporates elements of both supply and demand, balancing its “public outreach” requirements and the need to respond to end user demand with institutional marketing or revenue raising objectives, which advocate digitising “items selected for publication or exhibition by the library”.

The EU MINERVA initiative²⁰ of 2004, qualifies the priorities of end users with a series of caveats which include the necessity for the intervention of intermediaries in determining issues of preservation, cost and the “appropriateness of the source material for online viewing”.

The New Zealand “National Digital Forum Digitisation Position Paper” (2007)²¹ makes similar recommendations which balance the demands for increases *intellectual access* by end users with the professional responsibility of intermediaries to exercise *intellectual control* particularly in the online environment. The “enhancement of intellectual access” with the improved functionality that digitisation can bring including the “creation of new finding aids” improved search capacities and the potential for the “widespread dissemination” of collections is to be measured against a range of “intellectual control criteria” which, alongside the necessity to abide by Copyright law, include the requirements of “cataloguing, processing and related organisation work” and the need to address the requirements of digitisation workflows, “staff and resources to support creation of appropriate metadata relating to document identification, technical capture information, provenance, and easy navigation within the information resource”.

It is a position in keeping with the “selection for digitisation matrix” produced over a decade ago by Hazen, Horrell and Merrill-Oldham of Harvard University Library²².

In the Harvard “digitisation matrix” the needs of end user access are comparably weighted with other criteria such as improved conservation and preservation of fragile materials, added functionality and cost savings and the merits offered by “improved intellectual control” for collection navigation; “Intellectual control” being the provision of electronic finding aids linked to digital images and indexes linked to authoritative bibliographic records, all of which are the product of the systematic selection processes and professional stewardship by intermediaries.

Closest to the range of end user orientated, scholarly values which inform DiSCmap’s range of digitisation criteria are those expressed in Cornell University Library’s selection criteria for digitisation projects²³. Cornell’s selection criteria for digitisation prioritise *value*, *utility*, *access*, *innovation* and *continuity*. The criteria are understood in terms of their impact on *scholarly communication*, in essence, the support they would engender for both local and global teaching and research, such as the linking electronically of dispersed Special Collections to create critical mass in a subject or theme, and the use of digitally enhanced capabilities to forge new modes of scholarly provision and communication.

Whilst the criteria advanced by Cornell have the makings of a model of digitisation for *scholarly access*, absent from this range of criteria, beyond the choice of collections of strength for Cornell, is any emphasis on the necessary stewardship role of intermediaries in either the selection process or the maintenance of *intellectual control* to ensure sustainable wider access – criteria which are in the foreground of frameworks produced by the National Libraries serving end user in the Public domain.

The distinction is an important one as it is also this range of *intellectual control criteria* which is absent from the current JISC Digitisation Strategy (2008)²⁴ yet has been advanced in a range of forms by intermediaries to the DiSCmap survey. There exists then an implicit division between digitisation frameworks characterised by

¹⁹ National Library of Australia (2008) Collection Digitisation Policy. <http://www.nla.gov.au/policy/digitisation.html>

²⁰ MINERVA Working Group 6. (2004). *Good practices handbook*, p.21. Available: http://www.minervaeurope.org/structure/workinggroups/goodpract/document/goodpractices1_3.pdf/

²¹ New Zealand, National Digital Forum (2007) Digitisation Selection Work: Position Paper October 2007. <http://ndf.natlib.govt.nz/downloads/NDF%20Digitisation%20Selection%20Work%20edited.pdf>

²² Hazen, Dan. Horrell, Jeffrey and Merrill-Oldham, Jan (1998) *Selecting Research Collections for Digitization* Available: <http://www.clir.org/pubs/reports/hazen/matrix.html>

²³ Cornell University Library (2005). *Selecting Traditional Library Materials for Digitization*. Report of the CUL Task Force on Digitization. <http://www.library.cornell.edu/colldev/digitalselection.html>

²⁴ JISC, (2008) *JISC Digitisation Strategy*. Available: http://www.jisc.ac.uk/media/documents/programmes/digitisation/jisc_digitisation_strategy_2008.doc

intellectual access criteria devised for the scholarly community and those weighted towards *intellectual control criteria* without explicit recognition that achievement of the former depends on the maintenance of the latter.

What is at stake, therefore, is the issue of who constitutes the “end user” for University Special Collections. Intermediaries who nominated collections and digitisation criteria to DiSCmap revealed that the “end user” could not be limited to the scholarly community inside HE. Whilst increased access for end users was prioritised throughout, it was not assumed that digitised resources would be hidden behind password protected silos and thereby kept from wider public use, an emphasis was therefore placed on the necessity for the systematic selection of resources, the provision of adequate context and metadata, and the stewardship of digital collections for end users of all kinds.

Below, we summarize the prioritisation criteria in the frameworks discussed.

Access

- Would digitisation provide access to material which would otherwise be unavailable, or of limited availability?
- Would digitisation provide wider and easier access to very popular material?
- Would digitisation provide make the hidden visible and enable access to and use of difficult or impossible to access collections?
- Would digitisation make available material that may otherwise be restricted due to its condition, value, vulnerability or location?
- Would digitisation improve quality of access to resource content, e.g., through improved legibility of faded or stained documents, enhanced images or restored sound quality through digitisation processes?
- Would digitisation provide access to materials not readily accessible due to conservation or security considerations?
- Will it be necessary (or possible) to monitor how the material is used?
- Would digitisation of the materials make them easier to navigate and handle?

Administrative Issues

- Are there copyright/IPR issues surrounding the digitisation of this material?
 - Is it material for which copyright restrictions have expired or permission to digitise has been obtained? Have copyright and rights issues been secured?
 - Would digitisation enhance intellectual control through the creation of new finding aids, links to bibliographic records, and development of indices and other tools?
- Are there issues related to the use of standards?
- Would making the material available diminish or enhance the value of the underlying collection?
- Are there particular institutional/individual considerations regarding this material (e.g. local collection development policies, existing digitisation agreements with external agencies, etc.)?

Demand

- Does a recognisable demand for the material exist? Is there an active current audience for the materials?
- Will digitisation create a demand for the material? Is there a realistic expectation of attracting new users even if current use is low?
- Non-Duplication: Are there already existing digital versions of the materials, or similar digital resources which can reasonably meet the expressed needs for digitisation?
- What is the current level of digitisation of this type of material. Is there a need and/or potential for capacity building in this subject area?
 - Does the proposed material map to a particular area of the curriculum or research interest?
 - Would digitisation of this material inspire new avenues of research, or new approaches within learning and teaching?
 - Would digitisation of this material contribute to the creation of a critical mass within a given area or help to create a theme across previously unassociated materials?
- Would digitisation contribute to regional, national, or global research and teaching? Does the material have untapped research potential? Could the material play a role as a teaching resource?

Technical considerations

- How appropriate is the source material for online viewing? Will the materials display well digitally?
- To what degree can a digital version represent the full content of the original material?
- How will people use the digitised material and what does this imply for the levels of quality required?
- Is the current generation of technology suitable or would it be better to wait? Will digitisation support future users with better equipment and thus avoid the need to rescan in a few years?
- Does the institution have enough expertise to digitise this material in-house?
- Is the material of a type to require special consideration, i.e. one of the following:
 - materials that require unusually high resolution
 - materials for which fidelity to original colour is essential
 - oversized items
 - three-dimensional objects
 - items with poor legibility

Financial considerations

- Is the source material of a type which would not otherwise be funded, or struggle to attract significant funding from other sources (note: JISC seeks to prioritise the digitisation of such material)
- What would be the cost of digitisation of this material?
- Is there a potential for external funding for the digitisation of the materials?
- Would digitisation have the potential to attract funding or to generate income through marketing?
- Is there potential for commercial exploitation where such exploitation would not diminish the value of the item or collection?
- Does the material have the potential to attract or promote additional digitisation activities?

Preservation

- What is the condition of the original materials? Would digitisation contribute to the preservation of delicate originals, by making digital versions available as an alternative?
- Are the materials at risk from being lost to the UK HE community through sale, deterioration or disaggregation?
- Would digitisation protect materials at high risk of theft or mutilation?

Utility

- Would digitisation of the material provide context or contrast to, supplement or complement, existing digital collections?
- Is there a potential to create synthesized virtual collections, linking geographically dispersed content?
- Is the intellectual content of the work enhanced? Is there a potential to enhance the research/teaching value of the materials through value-added enhancements (e.g. improved functionality, search capabilities, text manipulation, interpretive commentary, bibliographic apparatus)?
- Will the digital content be capable of being reused for multiple purposes?
- Does the material provide opportunities to forge new delivery models, metadata standards, technological advantages, entrepreneurial models, or modes of scholarly communication?

Value

- How valuable is the material?
 - Are the materials of particular historical or intellectual significance?
 - Are the materials rare or unique?
 - Are the materials important for the understanding of a given subject area?
 - Does the material give information on subjects or groups that are otherwise poorly documented?
 - Does the material provide exceptionally broad or deep coverage of a subject or theme?
 - Would digitization have publicity benefits, either for the institution or JISC?

Source material

JISC's Digitisation Strategy (2008)²⁵

1. Make the hidden visible: enable access to and use of difficult or impossible to access collections;
2. Address a recognised need or gap within learning, teaching or research provision;
3. Map to a particular area of the curriculum or research interest;
4. Inspire new avenues of research, or new approaches within learning and teaching;
5. Contribute to creating critical mass within a given area or help to create a theme across previously unassociated materials;
6. Would not otherwise be funded, or be able to attract significant funding from other sources;
7. Are at risk from being lost to our community through sale, deterioration or disaggregation

EU MINERVA initiative²⁶,

- Access to material which would otherwise be unavailable, or of limited availability;
- Wider and easier access to very popular material;
- Condition of the originals;
- Preservation of delicate originals, by making digital versions available as an alternative
- Project theme
- Copyright and IPR
- Availability of existing digital versions
- Cost of digitisation
- Appropriateness of the source material for online viewing

DIGIT STAG report (2002)²⁷

- Average Willingness (Institutional/Individual)
- **Wide** Scientific Potential
- Economic Impact
- Active Curators/Quality of Data
- Current Level of Digitization
- World checklists available
- Need/Potential for Capacity Building
- Potential for Funding
- Potential for Networking or Leveraging Resources
- Cost/per specimen

National Library of Australia collection digitisation policy²⁸

- Items of particular historical and/or cultural significance;
- Unique collection material;
- Collections in high demand;
- Items selected for publication or exhibition by the Library;
- Material for which copyright restrictions have expired or permission to digitise has been obtained;
- Material that may otherwise be restricted due to its condition, value, vulnerability or location; and
- Collection material that is relatively unknown, for which digital access could increase interest in and use of the items.
- Preservation
- Public outreach
- Content for federated resource discovery services

²⁵ JISC, 2008, *JISC Digitisation Strategy*. Available: www.jisc.ac.uk/media/documents/programmes/digitisation/jisc_digitisation_strategy_2008.doc/.

²⁶ MINERVA Working Group 6. (2004). *Good practices handbook*, p.21. Available: http://www.minervaeurope.org/structure/workinggroups/goodpract/document/goodpractices1_3.pdf/

²⁷ Report of the Meeting of the Digitalization of Natural History Collections STAG of GBIF. (2002). Available: http://circa.gbif.net/Public/irc/gbif/digit/library?l=/meetings/digit_stag_meeting&vm=detailed&sb=Title

²⁸ National Library of Australia (2008) Collection digitisation policy. <http://www.nla.gov.au/policy/digitisation.html>

Cornell University Library Selection Criteria for Project Digitization²⁹

1 Value

- Collections of unique materials or subjects of supreme strength at Cornell
- Materials that provide exceptionally broad or deep coverage of a subject or theme
- Materials not well represented in other digital collections or projects
- Collections that provide potential for generating revenue for CUL (per Goal I.3B)
- Collections that offer potential to attract development opportunities

2 Utility

- Demonstrated or potential demand
- Responsive to Cornell research and teaching needs
- Responsive to regional, national, or global research and teaching needs

3 Access

- Provides value-added enhancements such as search capabilities, text manipulation, interpretive commentary, or bibliographic apparatus
- Offers synthesized virtual collection, linking geographically dispersed originals
- Provides surrogate access to fragile originals for preservation purposes

4 Innovation

- Provides opportunity for building innovative relationships among institutions
- Provides opportunity to forge new delivery models, metadata standards, technological advantages, entrepreneurial models, or modes of scholarly communication

5 Continuity

- Considers the inventory of Cornell's current digital holdings and projects in preparation and builds on them, where possible

NOTE: Institutional level guidance

NZ National Digital Forum Digitisation Position Paper (2007)³⁰

Value

The value of the materials' content and the benefits derived from access to digital versions justify the expenditure of time and effort of carrying out a digitisation project. The content should have sufficient intrinsic value to ensure ongoing use by a defined constituency for a significant period of time. Many factors contribute, but they include

- intellectual content, historical significance
- rareness or uniqueness
- importance for the understanding of the relevant subject area
- broad or deep coverage of the relevant subject area
- useful and accurate content
- information on subjects or groups that are otherwise poorly documented
- access to the material currently restricted due to its condition, value, vulnerability or location

Demand

To justify the effort and expense, there should be a reasonable expectation that the product will have immediate utility for New Zealanders community and/or other appropriate audiences. Thus factors to be considered might include:

- an active, current audience for the materials
- advocacy for the project from part of the community
- realistic expectation of attracting new users even if current use is low
- requests from potential partners in collaborative or consortial efforts

²⁹ Cornell University Library (2005). Selecting Traditional Library Materials for Digitization . Report of the CUL Task Force on Digitization. <http://www.library.cornell.edu/colldev/digitalselection.html>

³⁰ National Digital Forum (2007) Digitisation Selection Work: Position Paper October 2007. <http://ndf.natlib.govt.nz/downloads/NDF%20Digitisation%20Selection%20Work%20edited.pdf>

Non-Duplication

There is no identical or similar digital resource that can reasonably meet the expressed needs.

Collaborative Potential

The following factors could be considered:

- part of a collection split among a number of institutions that could be united online as a virtual collection
- contribution to development of a "critical mass" of digital materials in a subject area
- flexible integration and synthesis of a variety of formats, or of related materials scattered among many locations

Enhancement of intellectual access

The following factors could be considered:

- Enhancement of intellectual control through creation of new finding aids, links to bibliographic records, and development of indices and other tools.
- ability to search widely, manipulate images and text, and study
- disparate images in new contexts
- widespread dissemination of local or unique collections

Enhancement of resource quality

Improved quality of access to resource content, e.g., through improved legibility of faded or stained documents, enhanced images or restored sound quality through digitisation processes.

Preservation

While digitization does not in itself constitute preservation, there are preservation aspects to be considered through the creation of digital surrogates which allow

- significant reduction in handling of fragile materials
- access to materials that cannot otherwise be easily used
- protection of materials at high risk of theft or mutilation

Technical Feasibility

Potential projects should be evaluated as to whether it is technically possible with current equipment and software to capture, present, and store digital resources in ways that meet user needs. Considerations include:

- degree to which a digital version can represent the full content of the original
- understanding of how people will use the digital versions and the level of quality that that implies
- whether the materials will display well digitally
- anticipation of future users with better equipment, to avoid a need to rescan in a few years
- staff and resources to support programming, user interface design, and search engine development to assure that the project can fulfil the functions for which digitisation is planned

Materials that require special consideration include:

- materials that require unusually high resolution
- materials for which fidelity to original colour is essential
- oversize items
- three-dimensional objects
- items with poor legibility

Intellectual Control Criteria

Potential projects should be evaluated as to whether appropriate intellectual control can be provided for the original materials and the digital versions:

- cataloguing, processing and related organisational work already accomplished or to be accomplished as part of the project
- staff and resources to support creation of appropriate metadata relating to document identification, technical capture information, provenance, and easy navigation within the information resource
- Digitisation has to take account of the provisions of the 1994 Copyright Act

Consideration of special requirements around traditional knowledge

Special consideration needs to be given to the digitisation and online delivery of resources which are considered to be mātauranga Māori.

National Library of Australia Digitisation Policy (2000 – 2004)³¹

(a) Projects that will increase **access** to the materials. This will include projects to digitise:

- Items of key historical or intellectual content, “national treasures”;
- Collections in medium/high demand;
- Material not readily accessible due to conservation or security considerations;
- Items that are relatively unknown, for which digital access could be expected to increase demand for and interest in the items; and,
- Projects to digitise new acquisitions in certain formats.

(b) Projects that will contribute to the **preservation** of Library material. While recognising that digitisation will not cancel the need to preserve original items, digitisation will assist preservation goals by reducing the need for originals to be physically handled.

(c) Projects that will increase the **utility** of the items. This will include projects to digitise:

- Items that are easier to navigate and handle in digital form;
- Collections for which digitisation would add to the ways in which the material can be used; and,
- Collections which will complement other digital collections by allowing materials to be compared and contrasted.

(d) Projects for which there is an **institutional imperative**, including:

- Projects which will result in efficiency gains for the Library by reducing the cost of maintaining and providing physical access to heavily used items;
- Projects that have the potential to attract funding or to generate income through marketing; and,
- Projects that have the potential to attract or promote additional digitisation activities.

(e) Projects that will provide **context** to other collections, including projects that will supplement or complement existing digital collections.

(f) Projects or ad hoc requests where the full cost of digitisation is born by another agency or individual.

Ayris, P. (1998). Guidelines for Digital Imaging³²

Assessment

- Is there user support?
- What are local collection development policies?
- Does this form a national or international contribution?

³¹ <http://www.caul.edu.au/org/NLADigitisationPolicy.doc>

³² Ayris, P. (1998) Guidance for selecting materials for digitisation. In: Joint RLG and NPO Preservation Conference: Guidelines for Digital Imaging, 28-30 September 1998, Warwick, UK. (Unpublished). Available: http://eprints.ucl.ac.uk/492/1/paul_ayris3.pdf

- Does a similar product already exist elsewhere?
- Is this conservation or preservation?

Gains

- Does digitisation reduce wear on the originals or open up access?
- Is the intellectual content of the work enhanced?
- Is navigation easy?
- Are disparate collections unified?
- Is use of the damaged original material enriched?

Standards

- Have suitable standards been followed?
- Are the originals available from a variety of hardware platforms?
- Is the software available and easy to use?
- Does the metadata conform to agreed standards?
- What are the archiving requirements?

Administrative Issues

- Do you have enough money?
- Have copyright and rights issues been secured?
- Does your institution have enough expertise?
- Is there a partnership with a commercial provider?
- Do the benefits justify the costs?

NOTE: Institutional level guidance

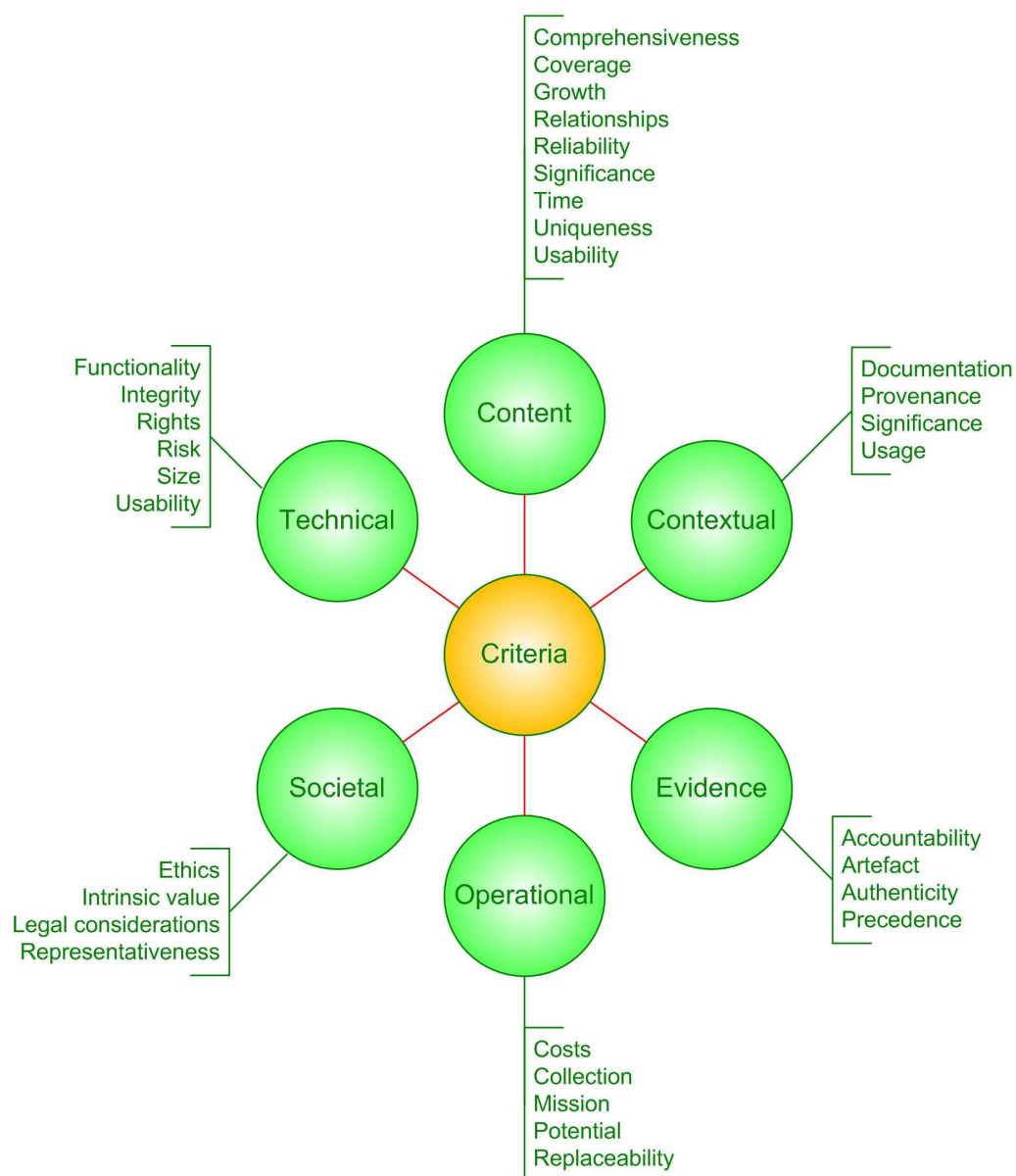
Ross, S. (1999). Strategies for selecting resources for digitization (p17).³³

- Would making the material available diminish or enhance the value of the underlying collection?
- Would conversion of the material leverage the opening up of material in other collections?
- Have other projects digitized complimentary material?
- Is the material unique?
- Is there an existing demand for the material?
- Will digitization create a demand for the material?
- Will the digital content be capable of being reused for multiple purposes?
- Will it be necessary or possible to monitor how the material is used?
- Would digital representation assist in the conservation of the material?
- Is there potential for commercial exploitation where such exploitation would not diminish the value of the item or collection?
- Does the material have untapped research potential?
- Would the improved functionality that digitization would bring enhance the research potential of the item or collection?
- Could the material play a role as a teaching resource?
- Would digitization lead to financial savings through reducing infrastructure and labour costs associated with supporting collection management and access?
- Would digitization have publicity benefits?
- Is the current generation of technology suitable or would it be better to wait?

NOTE: Institutional level guidance

³³ Ross, S. (1999). Strategies for selecting resources for digitization: source-orientated, user-driven, asset-aware model (SODAAM). In: Coppock, T. (Ed.). *Making information available in digital format: perspectives from practitioners*. Edinburgh: The Stationery Office Ltd. Pp. 5-27.

A specialised framework for appraisal of archival materials was developed by Gillian Oliver et al. (2008).³⁴ The next figure from their report summarizes the types of criteria which are suggested specifically for the archival domain. We believe that further research on frameworks across specific types of cultural institutions and the respective user-related issues would help to establish a clearer picture of common and specific issues across domains.



³⁴ Image used with the permission of G. Oliver.

Appendix IX. Sources of information regarding digital and analogue Special Collections

1. Digital resources

UNESCO/IFLA Directory of Digitized Collections <http://www.unesco.org/webworld/digicol/> - Can be searched by institution, theme, type of material, and then by region.

Smithsonian Institution Library - <http://www.sil.si.edu/SILPublications/Online-Exhibitions/> - Links to online exhibitions that have been created by libraries, archives and historical societies as well as to museum online exhibitions with a significant focus on library and archival materials. Can be searched by region.

Digital Preservation Europe (DPE) - <http://www.digitalpreservationeurope.eu/> - Although focussed on loosely-defined repositories, keyword searching for “Digital Library” etc. turns up some useful results which could help supplement our list.

JISC's Information Environment Service Registry (IESR) <http://iesr.ac.uk/> - Keyword searching, and searching by field, title, Dewey Class, Date Range, Service Type, Created by. Very useful for when we start drilling-down into the specifics of which subjects are currently well-catered for and which may be “orphaned”.

A list of JISC's HE/FE Institutional digitisation (and other) projects can be found here: <http://www.jisc.ac.uk/whatwedo/projects.aspx>

Scottish Distributed Digital Library (SDDL) <http://scone.strath.ac.uk/sddl/index.cfm> - More general, looks at digital resources with a Scottish theme. Lists 165 collections. (Scotland only)

SCRAN: <http://www.scran.ac.uk> - Can be limited to FE/HE resources, and a list of Scran Web Sites (65 listed at present) is provided, which might be useful. (Scotland only)

The **JISC Report from 2005 “Digitised Content in the UK Research Library and Archives Sector”** has a very good list of collections as Appendix G.

http://www.jisc.ac.uk/whatwedo/programmes/programme_digitisation/reports.aspx

Digital Repositories and Archives Inventory (DRAI) Project Reports - 1. Final Report and 2. Conclusions and Recommendations. Available on JISC website: <http://www.jisc.ac.uk/search.aspx?keywords=DRAI&filter=s>

2. Physical (and Digital) resources

Bloomfield, B. C. (1997) *A directory of rare book and special collections in the United Kingdom and the Republic of Ireland (2nd ed.)*. London: Library Assoc.

Multi-Lingual Inventory of Cultural Heritage in Europe (MICHAEL): <http://www.michael-culture.org/en/about/project> - Digital Collections are searchable by subject, spatial coverage (NOT location) and period. Institutions are searchable by institution type and location. Services are searchable by audience, subject, spatial coverage and period.

UNESCO Libraries Portal Directory - <http://www.unesco-ci.org/cgi-bin/portals/libraries/page.cgi?d=1> - Can be searched by institution type then by region.

UNESCO Archives Portal - <http://www.unesco-ci.org/cgi-bin/portals/archives/page.cgi?g=index.html;d=1> - Can be searched by institution type then by region.

Research Collections Online (RCO) <http://scone.strath.ac.uk/rco/index.cfm> - searchable by theme; could be very useful. Surveys Subject Strengths (using CONSPECTUS) of 14 institutional/research collections in Scotland.

SCONE <http://scone.strath.ac.uk/rco/RCOService/ColnSel.cfm> - Can be searched by subject, location, landscape and collection type. Keyword searching "University" could be useful, giving 1136 results. Limiting it to Library gives 1011 results.

Intute: Arts and Humanities: <http://www.intute.ac.uk/artsandhumanities/mla> - Aimed at researchers and students within UK higher and further education and has a section focussing on Museums, Libraries and Archives. It can be searched combinatorily by a variety of groupings such as "HE Institutions", "Collections", "Academic/Libraries, Archives, Museums" but sadly can't be limited to the UK.

Archives Hub: <http://www.archiveshub.ac.uk/> - It's all about archives in UK Universities and Colleges. *[Note: the hub would be good for identifying collections. Doing an advanced search for "Digital Collection" or "Online Collection" might be worthwhile though it does return over 1,300 results].*

Gateway to Archives of Scottish Higher Education: <http://www.gashe.ac.uk/> - Only covers 10 institutions but aims to be "representative" in its choice of collections, which could be worth a look. "Outstanding collections of records produced by Higher Education Institutions in Scotland made fully accessible on the web via an integrated gateway."

RASCAL: <http://www.rascal.ac.uk/> - research collections available locally in Ireland. Searchable by institution, title, description or keyword.

Access to Archives (A2A) - <http://www.nationalarchives.gov.uk/a2a/> - English/Welsh strand of the UK Archives Network. Access to catalogued collections dating from 8th century to present day; searching is limited to keyword/phrase, date or region.

The CILIP Rare Book and Special Collections Special Interest Group: <http://www.cilip.org.uk/specialinterestgroups/bysubject/rarebooks/links> - Making contact with one of their number could be extremely useful.

EUROPEANA: <http://www.europeana.eu> – item-level descriptions; information on collections is not provided; might be helpful where a particular type of holding can be discovered but not allowing to see the collection context at this stage of its development.

HERO: <http://www.hero.ac.uk/uk/home/index.cfm>

SCURL: <http://scurl.ac.uk/>

Appendix X - Examples of short lists

1. Collections nominated by various groups of users

This “short list” includes collections nominated by two or more sources. Webpages, where users could be invited to register and vote for collections they want digitized, may perhaps be viewed as potential tools to obtain such “short lists”. However, in the case of DiSCmap, rather than select from a pre-determined list, intermediaries and end users advanced collections based on their own or institutional priorities for teaching and research support. Collections which were nominated more than once are listed below. The list is separated into two sections. The first section includes collections nominated by intermediaries AND end users. The second section includes collections nominated by two or more end users.

The second section also illustrates the ambiguity inherent in the concept of a “Special Collection” for end users. In place of isolated, physical collections, end users often nominated “sub-collections” or distributed “super-collections” such as “Libraries holding medieval manuscripts” - an example of a “super-collection” which extends beyond existing institutional boundaries. Such “super-collections” also included resources which are already digitised such as Early English Books Online (EEBO) (<http://eebo.chadwyck.com/home>).

	Collection	N	Source	Institution
1	Bill Douglas Centre for the History of Cinema and Popular Culture	3	DiSCmap_i, DiSCmap_e (2)	Exeter, University of
2	Carte manuscripts	3	DiSCmap_e (2), RLUK	Oxford, University of
3	India Office records	3	DiSCmap_e (2), RLUK	British Library
4	Victorian culture collections	3	DiSCmap_i, DiSCmap_e (2)	Exeter, University of
5	Walter Greenwood collection	3	DiSCmap_i, DiSCmap_e (2)	Salford, University of
6	Aldine collection	2	DiSCmap_i, RLUK	Manchester, University of
7	Broadsides	2	DiSCmap_i, RLUK	Newcastle University
8	Cookery collection	2	DiSCmap_e, RLUK	Leeds, University of
9	Entymology collection	2	DiSCmap_i, RLUK	Newcastle University
10	Forster collection	2	DiSCmap_e, RLUK	Victoria and Albert Museum
11	Herbals	2	DiSCmap_i, RLUK	Newcastle University
12	Hutchinson collection	2	DiSCmap_i, RLUK	London School of Economics and Political Science
13	John Johnson collection: political, religious, social and economic ephemera (a discrete section of the Collection)	2	RLUK, RLUKc	Oxford, University of
14	Johnston-Lavis archive	2	DiSCmap_i, RLUK	UCL (University College London)
15	Journalism archives	2	DiSCmap_i, RLUK	Cardiff University
16	Liddle collection	2	RLUK, RLUKc	Leeds, University of
17	Local illustrations	2	DiSCmap_i, RLUK	Newcastle University
18	Music archives	2	DiSCmap_i, RLUK	Cardiff University
19	Pitman collection: ITA	2	DiSCmap_i, RLUKc	Bath, University of
20	Pybus collection	2	DiSCmap_i, RLUK	Newcastle University
21	Trevelyan papers	2	DiSCmap_i, RLUK	Newcastle University
	Collection	N	Source	Institution
1	Collections	4	DiSCmap_e	British Library
2	EEBO: Early English books online	4	DiSCmap_e	Chadwyck-Healey
3	Women's library	3	DiSCmap_e	London Metropolitan University
4	Libraries holding medieval manuscripts	2	DiSCmap_e	Unassigned

5	Newspapers	2	DiSCmap_e	British Library
6	John Rylands Library collections	2	DiSCmap_e	Manchester, University of
7	State papers	2	DiSCmap_e	Unassigned
8	Special collections	2	DiSCmap_e	Oxford, University of
9	Ormonde MSS	2	DiSCmap_e	Unassigned
10	Tract collection, Roderic Bowen Library	2	DiSCmap_e	Wales, Lampeter, University of
11	Sidney Jones Special Collection	2	DiSCmap_e	Gerald R. Ford Presidential Library and Museum
12	Burgess collection, Roderic Bowen Library	2	DiSCmap_e	Wales, Lampeter, University of
13	Collections	2	DiSCmap_e	National Archives
14	School resources	2	DiSCmap_e	Unassigned
15	Vatican Library	2	DiSCmap_e	Vatican
16	Blunt collection	2	DiSCmap_e	Courtauld Institute of Art
17	Literary archives	2	DiSCmap_e	Exeter, University of
18	ICE	2	DiSCmap_e	Unassigned
19	Bacon papers	2	DiSCmap_e	Unassigned
20	Collections	2	DiSCmap_e	Working Class Movement Library
21	Annals of archaeology and anthropology	2	DiSCmap_e	Unassigned

Table 10. Short list 1: collections nominated by different groups of users

2. Collections related to a specific policy framework (HEFCE)

This short list (see Table 10) is only one example of the several lists which can be constructed, selecting the subjects identified by the Higher Education Funding Council for England (HEFCE) (<http://www.hefce.ac.uk/>) as strategically important and vulnerable³⁵. The subject domains represented in the long list of collections form three groups: subject areas with low, medium and high number of nominations. Fig. 7 presents these three groups and the respective numbers of collections, and highlights in red the subject domains which correspond to the HEFCE list.

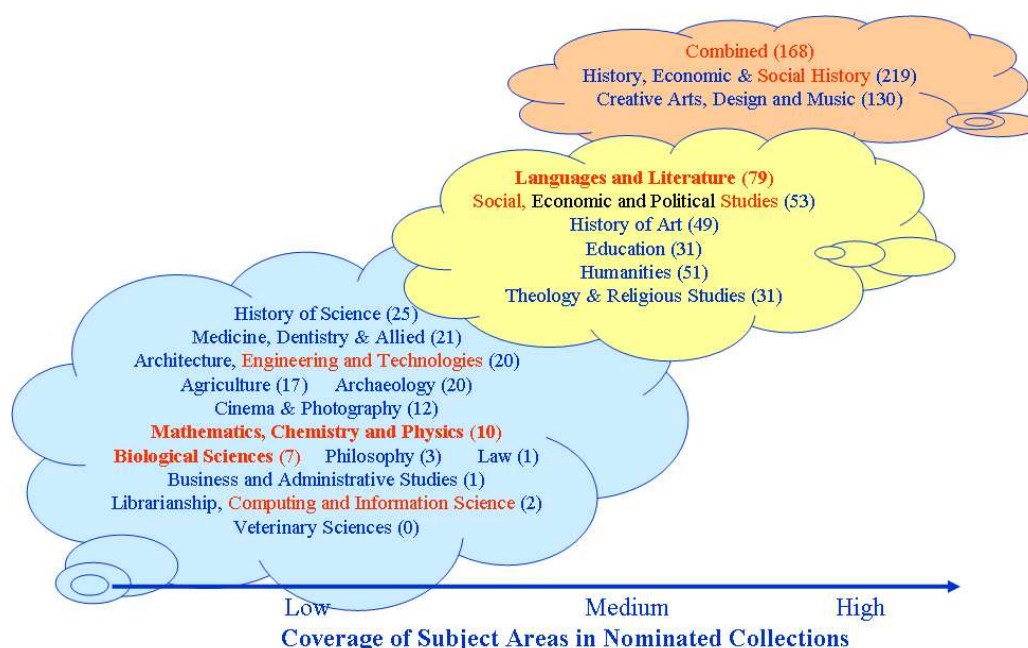


Figure 8. Coverage of subject domains in the collections from the long list

³⁵ See <http://www.hefce.ac.uk/AboutUs/sis/>

Title	Institution
Copernican treatise	Aberdeen, University of
De Morgan library	Senate House Library
John Hersee collection of mathematical manuscript exercise books	Leicester, University of
Johnston-Lavis archive	UCL (University College London)
Papers of Ernest Rutherford	Cambridge, University of
Papers of Ernest Rutherford	Manchester, University of
Papers of Ernest Rutherford	Royal Society
Papers of Halley and Flamsteed	Cambridge, University of
Papers of Joseph John Thomson	Cambridge, University of
Papers of Joseph John Thomson	Royal Society

Table 11. List of collection under the subject domain Mathematics, Chemistry and Physics

This list is provided as an example; all other lists can easily be received using the long list.

3. Collections on specific thematic clusters

The list below groups collections where four (4) or more collection titles cluster alphabetically, excluding generic titles.

These clusters provide preliminary indications of topical themes:

- Architecture
- Artists
- British colonial period
- British Foreign Office
- Historical themes
- Incunabula
- Medicine
- Medieval studies
- Mendelssohn
- Music
- Newspapers
- Maps other than the period of George III (!)
- Pamphlets
- Private papers
- Sir Flinders Petrie (archaeology and Egyptology)
- Photographs
- Universities
- Women's studies

Collection title	Institution
Architecture collection	Robert Gordon University
Architecture drawings collection	Robert Gordon University
Architecture history collections	Cardiff University
Architecture images	Cardiff University

Artists' books	Victoria and Albert Museum
Artists' books collection	Manchester Metropolitan University
Artists' books collection [1]	University of the Arts London
Artists' books collection [2]	University of the Arts London
Artists' multiples collection	University of the Arts London
Colonial blue books - series of books providing statistical information from the colonies	Cambridge, University of
Colonial Office and predecessors: Maps and plans: Series 1	National Archives
Colonial Office and predecessors: original correspondence. Thirty "CO" series relating to the British West Indies.	National Archives
Colonial Office and successors: Photographic collection 1815-1986 CO 1069	National Archives
Foreign Office confidential prints	Cambridge, University of
Foreign Office confidential prints	National Library of Australia
Foreign Office confidential prints	Leeds, University of
Foreign Office confidential prints	Oxford, University of
Foreign Office confidential prints	National Archives
Foreign Office confidential prints	British Library
Foreign Office: Political Departments: General Correspondence from 1906-1966 (FO 371)	National Archives
Foreign Office: Political departments: General correspondence, 1906- 66 (selected parts focussing on "Records of the Muslim World")	National Archives
Historic maps collection	Senate House Library
Historic pamphlets	London School of Economics and Political Science
Historic scientific instruments	St Andrews, University of
Historical aerial archives	Unassigned
Historical books collection	Scottish Agricultural College (SAC)
Historical collection	Royal Agricultural College
Historical collection	London School of Hygiene & Tropical Medicine
Historical papers	Oxford, University of
Historical papers	British Library
Historical photographs collection	Robert Gordon University
Historical print collection	Aberdeen, University of

Historical statistics	London School of Economics and Political Science
Incunables	Edinburgh, University of
Incunabula	Liverpool, University of
Incunabula	Manchester, University of
Incunabula - 15th c. books	UCL (University College London)
Incunabula collection - a selection of unique items from the library's collection of Fifteenth-century printed books	Cambridge, University of
Medical albums	Aberdeen, University of
Medical Officer of Health reports	National Archives
Medical Officer of Health reports	British Library
Medical Officer of Health reports	Wellcome Library
Medical Officer of Health reports	National Archives of Scotland
Medical textbooks	Wellcome Library
Medieval and early Greek manuscripts	British Library
Medieval charters	Unassigned
Medieval manuscripts	Liverpool, University of
Medieval manuscripts	Leeds, University of
Medieval manuscripts	UCL (University College London)
Medieval manuscripts	Glasgow, University of
Medieval manuscripts	Manchester, University of
Medieval manuscripts and documents	Unassigned
Mendelssohn	Leeds, University of
Mendelssohn "green books"	Oxford, University of
Mendelssohn collection	Berlin Staatsbibliothek
Mendelssohn drawings	Oxford, University of
Music archives	Cardiff University
Music manuscripts	Royal Northern College of Music
Music on LP	Birmingham, University of
Music preserved	York, University of

Newspaper cuttings file	Queen Margaret University
Newspapers	British Library
Newspapers	Aberdeen, University of
Newspapers from Changi WWII civilian internment camp - newspapers produced by male internees in this Japanese-controlled civilian internment camp in Singapore	Imperial War Museum
Newspapers from Changi WWII civilian internment camp - newspapers produced by male internees in this Japanese-controlled civilian internment camp in Singapore	Cambridge, University of
Non-George III maps	National Library of Wales
Non-George III maps	National Maritime Museum
Non-George III maps	Royal Geographical Society
Non-George III maps	Oxford, University of
Non-George III maps	National Library of Scotland
Non-George III maps	British Library
Pamphlet collections	Senate House Library
Pamphlet collections	UCL (University College London)
Pamphlet collections	Bristol, University of
Pamphlet collections	London School of Economics and Political Science
Pamphlet collections: Knowsley, Liverpool, Lancelyn Green, and a pamphlet series	Liverpool, University of
Papers and annotated books of Isaac Newton	Cambridge, University of
Papers and correspondence of Christian Guthrie Wright.	Queen Margaret University
Papers of Arthur Ransome	Leeds, University of
Papers of Ernest Rutherford	Cambridge, University of
Papers of Ernest Rutherford	Manchester, University of
Papers of Ernest Rutherford	Royal Society
Papers of Halley and Flamsteed	Cambridge, University of
Papers of James David Forbes	St Andrews, University of
Papers of Joseph John Thomson	Royal Society
Papers of Joseph John Thomson	Cambridge, University of
Papers of Sir Isaac Holden and family, West Yorkshire wool combers.	Bradford, University of
Papers of Sir Ronald Ross	London School of Hygiene & Tropical Medicine

Petrie correspondence	UCL (University College London)
Petrie Museum collection	UCL (University College London)
Petrie Museum index cards corpora: beads corpus by Xia Nai	UCL (University College London)
Petrie Museum pictorial archive	UCL (University College London)
Petrie Palestine collection	UCL (University College London)
Photograph collection	University for the Creative Arts
Photograph collection [1]	London Metropolitan University
Photograph collection [2]	London Metropolitan University
Photographs of George Bernard Shaw	London School of Economics and Political Science
Print collection	Robert Gordon University
Printed illustrations sources	Cardiff University
Prints and drawings	Victoria and Albert Museum
Prints, drawings, paintings and photographs collections	Victoria and Albert Museum
University archive - photographs, printed material e.g. calendars, university periodicals	Durham University
University art collection	Heriot-Watt University
University calendars	Aberdeen, University of
University of Stirling art collection	Stirling, University of
University plans	Glasgow, University of
University probate records	Cambridge, University of
University records archive collection	Robert Gordon University
UoE MD theses	Edinburgh, University of
UoE student records	Edinburgh, University of
Women's International Art Club archive	University of the Arts London
Women's library	London Metropolitan University
Women's library posters	London Metropolitan University
Women's suffrage collections	Manchester, University of

Women's Trade Union League	London Metropolitan University
Woodruff library collections	Emory University

Table 12. Short list 3: thematic clusters based on collection titles

4. Collections with highest number of reasons for digitisation

In total, five data sources were used in the production of the “long list”. One of these, which appeared in the DiSCmap survey of intermediaries to aid usability of the form, was a pre-loaded set of 5 digitisation criteria drawn from the findings of the pilot survey. Respondents were asked to select from this pre-established range, those criteria considered to be most relevant to their nominated collections. The rest of the data was gathered from sources where the information was not collected in such quantitative fashion. Table 12 presents the distribution of digitisation reasons; note that collections can have more than one digitisation reason.

<i>Reason</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>Total</i>
Collaboration	134	3	0	0	4	134
Facilitate access	297	11	0	0	6	296
Increase usage	292	11	0	1	6	291
Other	16	1	0	0	2	16
Preservation	231	6	0	0	6	230

A - DiSCmap survey of intermediaries, B - RLUK survey, C - RLUK list (Aberdeen University),
 D - RLUK survey complementary collections, E - DiSCmap survey of end users (CERLIM)

Table 13. Collections per digitisation reason

The next diagram presents the distribution of the five criteria used in the survey with the intermediaries.

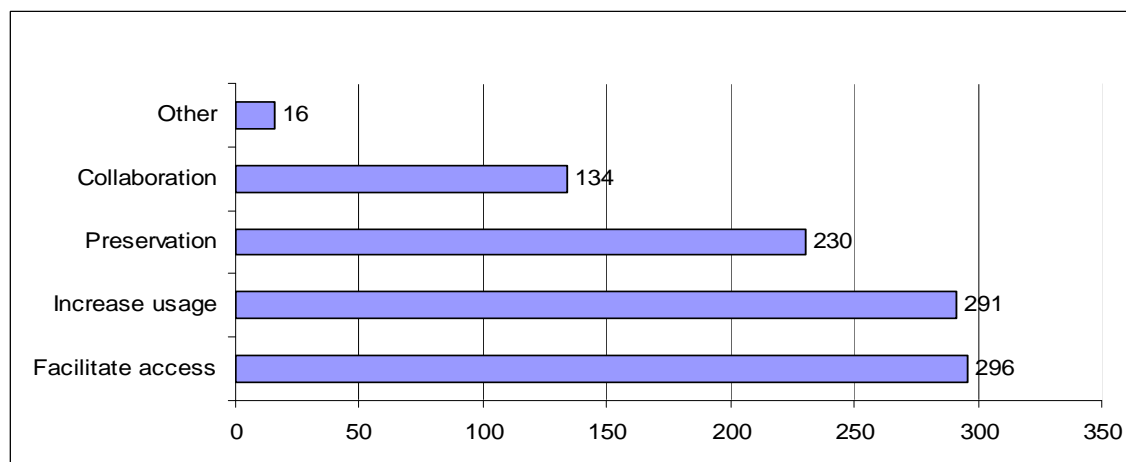


Figure 9. Popularity of digitisation reasons in the long list

Based on the suggestions of intermediaries regarding which of the pre-loaded set of criteria were applicable to their nominated collections, only seven collections merited all five reasons advanced for their digitisation:

- Duke of Bridgewater collection - Salford, University of
- Historical collection - Royal Agricultural College
- John Tweedie collection/Currie and District History Society collection - Heriot-Watt University
- Johnston-Lavis archive - UCL (University College London)
- Stanley Houghton collection - Salford, University of

- Walter Greenwood collection - Salford, University of
- Wesley Historical Society Yorkshire Branch collection - Huddersfield, University of

Using this “check box” system, a total of 110 collections merited 4 digitisation reasons advanced for them, another 110 merited 3 reasons, a further 70 merited 2 reasons, and 22 collections merited just 1 (see the next diagram). As there was a clear tendency for respondents to select multiple digitisation reasons against each nominated collection, it is therefore not justified to use the supplied data as the primary and only criterion for the selection of Special Collections for a digitisation “short list”.

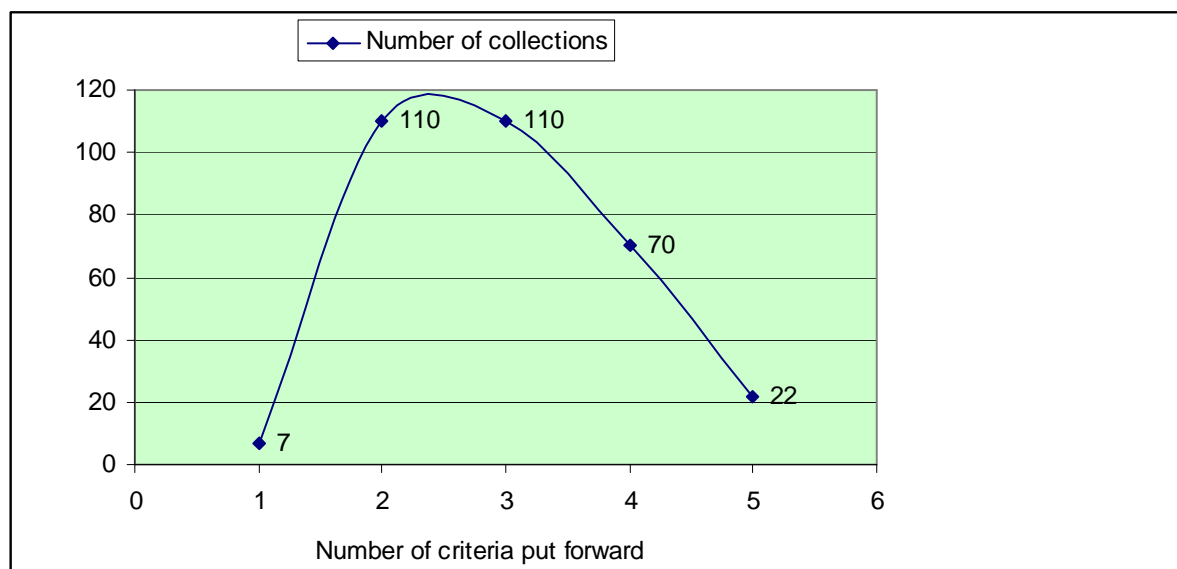


Figure 10. Collections ranked according to number of digitisation reasons

Appendix XI – Mapping of data on collections coming from the various sources

A	B	C	D	E
Institution name	✓	✓	✓	In some cases needs to be clarified
Collection title	✓	✓	✓	In some cases needs to be clarified
Collection description	n.a.	n.a.	n.a.	n.a.
Curatorial environment (library/museum/archive/department)	✓ (added by DiSCmap team)			n.a.
Catalogue URL	n.a.	n.a.	n.a.	n.a.
Subject (one extended HESA code, see Appendix III)	✓ (added by DiSCmap team)			n.a.
Item age (-1799, 1800-1899, 1900-1949, 2000-)	✓ (modified by DiSCmap team from free text field to the possible values)	n.a.	n.a.	n.a.
Languages (other than English)	Added where possible	n.a.	n.a.	n.a.
Collection size No. of books (volumes) No. of serials (parts) No. of manuscripts No. of maps No. of images Size of archive (shelf-meters) No. of audio recordings No. of film/video recordings No. of other items/objects	✓ (modified by DiSCmap team from free text field to the possible values)	n.a.	n.a.	n.a.
Digitised (part/no/selected)	n.a.	n.a.	n.a.	n.a.
Distributed (yes/no/not known)	n.a.	n.a.	n.a.	n.a.
Digitisation criteria (increase usage/collaboration/facilitate access/preservation/other)	n.a.	n.a.	n.a.	n.a.
Case or additional criteria for digitisation	n.a.	n.a.	n.a.	n.a.
Teaching impact now (not known/none/low/high/very high)	n.a.	n.a.	n.a.	n.a.
Research impact now (not known/none/low/high/very high)	n.a.	n.a.	n.a.	n.a.
Teaching impact if digitised (not known/none/low/high/very high)	n.a.	n.a.	n.a.	n.a.
Research impact if digitised (not known/none/low/high/very high)	n.a.	n.a.	n.a.	n.a.
Impact statement	n.a.	n.a.	n.a.	n.a.
Copyright (none/held by institution/held by another party/not known)	✓	n.a.	n.a.	n.a.
Current conservation (yes/no)	n.a.	n.a.	n.a.	n.a.
Notes	n.a.	n.a.	n.a.	n.a.

Table 14. Details on the data received from different sources

A - DiSCmap survey of intermediaries, B - RLUK survey, C - RLUK list (Aberdeen University),
 D - RLUK survey complementary collections, E - DiSCmap survey of end users (CERLIM)

Appendix XII – Selected, Systematic or Mass Digitisation?

DiSCmap has sought to investigate the priorities for the creation of new digital cultural heritage materials, to establish fresh principles upon which the future digitisation of Special Collections should be based. Just what kind of foundations these principles should be built upon was an issue strongly debated by intermediaries in their response to DiSCmap.

The Curator of Archives and the University of Exeter nominated the Syon Abbey Collections, a library collection, for digitisation, advocating a *selective* approach, arguing a “selected rather than systematic” approach to the creation of digital surrogates “would be more appropriate” for this collection to meet the perceived needs of end users.

In addition, the same respondent nominated the South West Literary Collection, an archival collection, also held at the University of Exeter, assessing that the impact of its digitisation “would be greater if a thematic focus on literary Heritage was developed across a range of literary collections in research libraries/author houses in the UK.” The emphasis, in this case, is clearly upon on a *systematic* approach to digitisation to improve impact.

The project found, therefore, that the approach to determining digitisation priorities and the strategy for the creation of surrogates often differed from collection to collection within and across curatorial environments even within the same institution. Few respondents recommended a “one size fits all” *mass digitisation* solution.

In both *selected* and *systematic* approaches, however, materials would be prioritised for digitisation on the basis of a thematic relationship being identified between artefacts within a single collection or across multiple, distributed collections. However, it is not clear whether such contexts would be established on the basis of existing collection description and hierarchies or on a thematic brought to the collections by end users to identify relationships at a derived level.

This inevitably revisits the issue of collection description and organisation in the question of digitisation; the question of how best to describe and organise online Special Collections, and by whose standards and expectations – those of intermediaries or end users?

A 2007 report by OCLC Program officers Ricky Erway and Jennifer Schaffner into the scaling up of digitisation of Special Collections entitled *Shifting Gears: Gearing Up to Get Into the Flow*³⁶ argues, however, that “While researchers value the description and organization that we bring to collections, they don’t want to have to consult dozens of specialized sites to find what they need.” Erway and Schaffner advise that, rather than attempt to perfect description and presentation of online collections, we need to make it easier for end users (who may, after all, alight somewhere in the middle of an online collection) to link to contextual information. Our emphasis, should instead, go on “making our content harvestable, collectable, and indexable by others who are more successful at reaching broad audiences”.

Broader reach to an online audience was the overriding factor in the nomination of the Hunterian Manuscripts Collection at the University of Glasgow for digitisation to DiSCmap. The Keeper of Special Collections at the University Library, suggested that to cherry pick or adopt a *selective* or *systematic* approach to the digitisation of the Hunterian manuscripts would be inappropriate and not improve their impact, arguing instead for a *mass digitisation* approach,

*“It would be of great benefit not only to Glasgow University but also the wider research community if [...] the Hunterian manuscripts could be rendered more fully accessible by adopting a **mass digitisation** approach, rather than (as currently) a user driven or selective approach”*

Such recommendations chime with the conclusions of researchers at OCLC, who argue that in the case of Special Collections, “the selection process has already been done.” (Erway and Schaffner, 2007).

The argument in summary is that carefully acquired and curated collections are *all* going to be worthy of being accessible online and should ultimately be scanned in *their entirety*; secondly, if intermediaries digitise in response to demand, then this will inevitably align their selection criteria for collections with the selection of items by end users, “In this way, our initial selection of collections combines with their selection of items to float materials in likely demand to the surface”; and lastly, they advocate “minimal processing” and the production of quick, representative scans for the creation of digital collections in order to “bring our collections out of the shadows and into the light”.

To assist intermediaries, they offer their own list of priorities. There are, it is advanced, three reasonable means to determine what to digitise:

³⁶ All references can be found in the bibliography of the main report.

- *Scan as materials are accessioned.*
- *Scan on demand.*
- *Scan signposts and then devote more effort and use and interests warrant.*

It is not yet clear, however, if such an agile and minimal framework will find itself adopted across the often very different terrains of Special Collections materials, archival artefacts and museum objects. Further, it is not clear that prioritising digitising for access at the expense of preservation issues serves what Alice Prochaska has termed “the responsibilities and values involved in stewardship of the original materials in our care”.

The requirements, Prochaska identifies for a coordinated strategy within “a recognised and responsible structure for stewardship” do not, however, sit easily with the growing recognition from OCLC that such “traditional practices are not aligned to the requirements of web users”. Yet this does not alter the fact, for Prochaska, that librarians and archivists still have a duty to explain to communities of enthusiasts their professional requirements to be selective as “the task of providing any kind of descriptive standards” she explains, in the case of printed ephemera or “philatelic collections”, to take but one example, has to negotiate distinct hierarchies “among the aristocracy of library ephemera”. The task, in other words, is still that of *selection, preservation* and *stewardship*, and Prochaska insists, “That task does not disappear in the digital context” (Prochaska, 2007).

In an OCLC and Research Libraries Group (RLG) Program “Webinar” of March 2008, Jennifer Schaffner makes the case for the approach of mass digitisation programs such as those of Google, the Open Content Alliance (OCA), Microsoft Live Book Search and EEBO to now be applied to Special Collections,

“As the libraries are increasingly sharing that collective collection of library books, it’s the Special Collections that are going to distinguish the libraries and archives and museums from one another. And we can choose to hide the treasures in the backlogs or we can push them out into the light of day.” (Erway and Schaffner, 2008).

The ARL Working Group on Special Collections, led by Prochaska, also addressed the possibility of improving end user access to Special Collections through extending the reach of mass digitisation,

“Most recently, the mass digitization movement, which began with large general collections in some of the largest research libraries, has begun to focus on Special Collections. This turn of events has much to do with the legal morass surrounding digitization of works in copyright and the issues of fair use and open access, as well as mass digitization simply extending its reach.” (Associated Research Libraries, 2009).

However, Prochaska views the economies of scale involved in such an approach as to be prohibitive for many university libraries seeking to digitise their own holdings without reference to the priorities of commercial partners,

“Mass digitization programs are generally projects involving multiple libraries; and from the perspective of each library, the task is too great to be taken on without the involvement of significant corporate involvement and economies of scale that go beyond the capacity of even the largest research library on its own” (Prochaska, 2008, p. 11).

With acknowledgement of such concerns Proffitt and Schaffner, in their study on *The Impact of Digitizing Special Collections* (Proffitt and Schaffner, 2008) present the views of Paul Courant (Economics and University Librarian, University of Michigan) who counseled that, “libraries and archives will rely in part on third parties to assist with the digitization of their holdings” and warned, therefore, that “care must be taken to assure maximum benefit for the scholarly community in the long term.”

The emphasis here is on the appeal to *scholarly values* - such as those necessary to support HE teaching and research - as the drivers of digitisation priorities for Special Collections, in the face of arguments for a mass digitisation approach.

Erway and Schaffner assess how the landscape is likely to alter in coming years “After the lower hanging fruit, the books, are done, private companies will probably be increasingly interested in forming partnerships to digitize Special Collections.” (Erway and Schaffner, 2007). In light of the trends being identified by Prochaska and others that “Scholars now have an appetite for increased quantities of digitized material” (Prochaska, 2008, p. 13), it is clear that the digitisation priorities of DiSCmap have been formed in the shadow of online giants such as Google and YouTube.

With such shadows looming, JISC have sought to remind those concerned that the *educational communities* and the *digitisation communities* are not one and the same,

“The public sector needs to remember the differing perspectives of the web giants. Values such as the insistence on scholarly quality (...) are aspects that the public sector values more than the private sector. The educational communities therefore must be prepared to negotiate in the light of their own values.” (JISC, 2008d)

However, a need has been identified for the educational community to enter into commercial collaboration and to adopt sustainable business models borrowed from the digitisation community for its digitisation projects,

“The digitisation community needs to develop and deploy sophisticated business models to enable it to support the content it has digitised. This will also have the advantage of focussing the digitisation community on what content it really values and what content it is prepared to put to one side.” (JISC, 2008d)

The issue here, however, is what is at stake for the educational community, attempting through efforts such as DiSCmap to establish its own digitisation priorities, when a provider is also being encouraged to focus their efforts *on what content it really values and what content it is prepared to put to one side* based on the imperatives of commercial partners, and ideals quite other than those being advanced by end users.

In the context of the current landscape, where the *scholarly values* of the educational community are being pitted against the *commercial values* of the corporate digitisation community such as Google, the only sustainable and feasible response it seems, according to OCLC research, is to let the users decide, and to “put the images where the users are”.

In *Supply and Demand: Special Collections and Digitisation*, Ricky Erway refers to the 2008 Web Trend Map (Information Architects Japan, 2008) which revealed that of the top 300 internet sites visited by end users – which included Amazon, Yahoo, Google, Wikipedia and YouTube – there were no libraries listed, “No OCLC, no JISC, no TEL”. The implication of such a landscape for Special Collections is made plain,

“The environment is dominated by large scale information hubs. Users bypass the authoritative content of libraries in favour of just-in-time information from sources more convenient to their daily networked lives. Discovery happens elsewhere – we need to be there.” (Erway, 2008)

Amongst other initiatives, is cited the work undertaken by The Library of Congress with Flickr to create a Commons (http://www.flickr.com/people/library_of_congress/). The Commons³⁷, Erway explains, offers end users “a taste of the hidden treasures in the world’s public photography archives” and in exchange provides intermediaries with an opportunity “to see how user input and knowledge can help make these collections even richer”.

However, despite conclusions of OCLC researchers on the ubiquity of mass digitisation for access, they themselves acknowledge that more work has to be done to ascertain the needs and priorities of end users, “We’ve spent a lot of time guessing what will be useful to our users, but we need to spend more time learning from our users (and listening when they tell us) what they want”. (Erway and Schaffner, 2007).

It is clear that end users want increased access to digital resources, but it is worth speculating whether research is beginning to be driven by the resources that are available digitally. If so, a potentially Utopian landscape for the creation and free transfer of human knowledge, what has been described, with reservations, as an ‘infotopia’ (Grafton, 2007) could find itself fenced in by the confines of dystopian research practice.

The 2006 documentary *Zizek!*³⁸ on the Slovenian philosopher and cultural theorist Slavoj Žižek, reported his view of what form our cultural landscape may take in the future, both physical and digital, “The true Utopia”, Žižek informs us “is when the situation is so without issue without a way to resolve it within the coordinates of the possible that out of the pure urge of survival you have to invent a new space.”.

Two key methods of inventing such a new online space for Special Collections, identified by Prochaska (Prochaska, 2008 p. 14), reside in identifying *new relationships to users* and in *working with users to describe collections*.

In order to further such goals, adding an extra dimension to the innovative, “Web 2” inspired “conversational framework” for libraries posited by Lankes et al. (2007) is proposed; specifically, a dimension where the consideration of which Special Collections should be prioritised for digitisation, how they should be described, and in what fashion the resulting digital files might be used and repurposed, could be discussed by both intermediaries and end users. When the collections are made available digitally, these (or indeed, individual

³⁷ The Commons <http://www.flickr.com/commons/>

³⁸ Further information on *Zizek!* Including excerpts can be found at <http://www.zizekthemovie.com/sightsandsounds/belief.mov>
<http://www.zeitgeistfilms.com/film.php?directoryname=zizek>

items and their metadata) could be linked to researcher's profiles or made available in localised "wiki" or "Web 2" environments so that librarians might gain a better understanding of the "conversations" which end users ultimately have with digital items and collections.

The need for such a "new space" is strengthened by an awareness of many of the practices and trends presently discernable in the digital environment – for example, the increasing sophistication of researchers from within and outside HE, as they traverse the traditional "boundaries" of institutions and curatorial environments online to assemble items into their own distributed, conceptual, virtual collections. This is aided by the efforts of JISC's Digitisation Strategy to create "a critical mass within a given area or help to create a theme across previously un-associated materials" (JISC, 2008b) and by many other organisations (both public, private and commercial) making Special Collection materials available online – for example, National Libraries and Archives, the BBC, the Guardian and Observer.

Even if we are to accept the proposals of Erway and the OCLC and stop debating gold standards to focus on quantity, not quality, providing only minimal rather than "perfectionist" descriptive metadata (a suggestion influenced by the success of the Google Books project among others), we must remember the need for 1. the expertise of those working in the library and information professions as they assist researchers and curate materials both physical and digital; and 2. the need to control the flow of digitisation in line with both available funding and demand.

A recent OCLC report into end user and Librarian expectations of catalogue data quality found, "two traditions of information organization at work – one from librarianship and the other from the Web" (OCLC, 2009). As with the library OPAC, there is inherent in the digitisation of Special Collections, a difference in priorities between the library profession's "classical principles of information organization" and the new expectations of end users based on "how information is organized on popular websites" given the findings of an OCLC report on the trends of information seekers (OCLC, 2005) which found that 84% of seekers begin their search with a search engine and just 1% with a library Web site.

The OCLC report concludes that what is now required is to put differences to one side and to "integrate the best of both worlds". However, the solution to the challenges of information organisation in the shadow of such corporate behemoths as Google and YouTube might ultimately be less a question of the inevitable *integration* of "classical principles" with commercial ones, than in their commensurate and contingent *interoperability*.

"The future, in this respect, looks like the past (...) our work will ALWAYS be a work in progress. We are not going to achieve perfection."

Alice Prochaska