



c e r l i m

Centre for Research in Library and Information Management

Usability Study of the Copac service

**Findings and recommendations of an independent usability study
undertaken by CERLIM at Manchester Metropolitan University**

Geoff Butters, Jenny Craven, Frances Johnson

April 2009

Contents

Executive Summary	1
Introduction	4
Scope	5
Methods	6
Sample	8
Initial impressions of Copac	11
Home Page	12
Home page Information menu.....	12
About section	12
Libraries section	13
FAQ section	13
News section	14
Issues for consideration	14
Search.....	15
Issues for consideration	16
Display of Records	17
Brief record display	17
Full record display	17
Pictorial depiction of the book	18
Holdings	19
Issues for consideration	19
Illustration	20
Functions 1 – Menu items	21
Marked list.....	21
Download	22
History	23
Issues for consideration	23
Illustrations	24
Functions 2 - Extra items	26
Google Books.....	26
Delicious.....	27
Find-it!	27
Endnote, Zotero and Reference Manager.....	27
Issues for consideration	28
Potential Functions.....	30
Personal annotations	30

Table of Contents	30
Adding keywords, use of tag clouds.....	30
Inter-library loan via Copac	31
Web 2.0 and Links to other services	31
Links to Copac	32
Issues for consideration	32
Comparison with functions from other services	34
Gower / Ashgate Publishers web site	34
Amazon	34
University of Huddersfield library catalogue (web interface)	34
Science Direct	35
Google Scholar	35
British Library (Search our Catalogue Beta site)	35
Issues for consideration	36
Illustrations	37
Other Observations	38
Copac service overall	38
Copac functions	39
Copac interface	39
Searching Copac.....	39
Issues for consideration	40
Focus Group Final comments	41
Recommendations and Conclusions.....	43
Key recommendations to ensure Copac usability through effective design.....	44
Search.....	44
Display of Records	44
Functions.....	45
Overall processing	46
Key recommendations with focus on Copac functionality	46
Search.....	47
Display of records	48
Functions.....	48
Conclusions.....	49
Appendix One: Tasks and Questions.....	52
Appendix Two: Focus Group Schedule.....	62
Appendix Three: Usability Attributes Table	69

List of Figures

Figure 1 'Edit these search terms' - a hidden option.....	20
Figure 2 Printer Friendly available in Full Record	24
Figure 3 Printer Friendly does not appear in Marked List: Full Record.....	24
Figure 4 Flag icon to mark records in Brief Records.....	25
Figure 5 Tick-box to 'unmark' records in Marked List: Brief Records.....	25
Figure 6 A Full Record in British Library site.....	37
Figure 7 My Workspace page in British Library site (similar to Copac Marked List) .	37

Executive Summary

Copac is a physical union catalogue of some 32 million records created by the merging of records from catalogues of members of Research Libraries UK, specialist collections in other academic libraries and other specialist research libraries. Traditionally Copac has been a stand-alone service. In keeping with current web-based developments, it seeks to improve its service by linking Copac to other services over the web. For some records this means access to table of contents and to information from suppliers such as Amazon and Google Books. Further functionality may be provided in the development of features for the personalised and/or collaborative use of the located items, such as tagging, sharing and book-marking.

The purpose of the usability testing of Copac, undertaken by the Centre for Research in Library and Information Management (CERLIM), was to explore user behaviour and user preferences in relation to the following objectives:

The ease of use of Copac, with specific reference to its support in the users' tasks of searching, locating items and general navigation of the interfaces.

Developments users would be interested in, focusing on additional functionality that might be offered in supporting the users' main task of finding information and in the broader tasks of keeping, using, sharing and reviewing the information found.

CERLIM's usability testing of Copac used a mixture of search tasks, interviews and a structured focus group to gather data to understand the answers to the project objectives. System features which support users' tasks were identified and the usability testing was designed to ensure that users encountered and used those features, thereby ensuring that their responses could be collected and analysed to provide an evidence-base for the recommendation for improved usability and functionality.

The findings were addressed by taking as far as possible a distinction between the 'usability' and 'functionality' issues. Whilst this is an artificial distinction to make in practice, it serves to enable the recommendations for interface design to be made on two levels. The first set - Key recommendations to ensure Copac usability through effective design - are made in this context:

1. General usability of Copac

This would be improved from the changes to the terminology which relate to the usability principle of describing the tasks indicated in users' ('real life') terms. Terminology used should be checked for consistency across the interfaces. Also where appropriate and, where possible, the user should be aware of the system status, that is, an indication that processing is taking place.

Changes to the terminology and to the navigational features are further recommended to highlight functionality and the ease of execution: it is not only inappropriate terminology that obscures the intended purpose of links, buttons, tabs and so on. The re-design of the interface can make more effective use of layout and heuristics to draw attention to the visibility and the purpose of its main functions. Colour can be used to distinguish and group functions, as can the appropriate use of interaction mechanisms. Extra functions such as Google Books and Google Preview, Delicious, RSS, and exporting to a file, Endnote, Reference Manager and Zotero, should all be placed together with a clear indication of what they offer and how they could be used in a Copac situation.

2. Improved functionality

This study has been carried out in the context of the emerging questions relating to provision of access to Online Catalogues that best meets user expectation and experience from web search, and thus how best to exploit the high quality of the information made available, so as to provide useful and usable services for the user. Our second set - Key recommendations with focus on Copac functionality - are made in this context:

Copac at present provides the user with a useful service which with fairly minor amendment could be given improved usability. The changing environment for information access, however, has meant that its users have new expectations of what constitutes a supported experience.

Users may expect a simple search box, together with a link to 'Advanced Search'; a clear indication of the collections searched; relevance ranking; and/or faceted search/browse capability to refine a search. Faceted browse can be useful in helping the user see what is available in the collection and how to refine a search, especially when the initial search has been unsatisfactory.

The information required from the search results relates not only to the brief bibliographic details but also to an indication of different formats and information regarding availability and delivery options. Further detail on the items may be expected and requested, such as detailed summaries, ToC, citation analysis, reviews, 'find similar', recommendations and 'look inside', all of which take the user into the broader use and exploration of the information found.

One finding central to the future usability of Copac was the detrimental effect of key links on the right-hand side of the page being generally assumed to be adverts and ignored. This, and the lack of clarity in the indication of, the visibility of, and the purpose of the functions provided, led to users experiencing difficulty in using Copac and/or gaining an impoverished view of system functionality.

In conclusion, it was evident from the study that users wish to be able to further extend Copac's services into this broader context but facilitating this effectively will require careful interface design. This leads to the main recommendation for the redesign of Copac at a second level: that is one which is focused on functionality. What can be provided with regards to changes in the features for search and extended services for the personal use of the information or the social networking capabilities will depend on required developments made to the underlying techniques and technologies. The design of the interface should serve to highlight the tasks the system facilitates with flexibility to support the user in moving beyond the finding of information to its exploration, manipulation and use. It is important that Copac concentrates on what is its main function as an online catalogue and to do this well. This should be the foundation on which newer functionality is built, such as those provided by social networking tools like list sharing and ratings. The impression from the user study is that unless these are provided as integral to the 'Copac context' a perception of services and functions being added in a piecemeal fashion distracts from their use and value. User-centred design must assess the tasks in which users are engaged and design so that the various sub tasks are handled as distinct, with their requirements for effective use met, yet whilst in view of the Copac system and its related functionality. In other words in providing an extended functionality the Copac interface would need to support the flexibility of a workbench to enable users to search and further to explore and use the information found as distinct from the 'product' view of retrieve and display.

The value of usability research has been demonstrated through the range of issues which arose during the course of this study and the evidence-base on which recommendations have been made. Subsequent redesign of the interface should be subjected to further usability walkthroughs and, in the event of extended re-development for the provision of new services and functions, the interface should be developed through prototyping and user testing of functionality as well as usability.

Finally, the developers of Copac should note that despite the issues revealed and reported in the study, overall, the participants really liked the service provided by Copac, whether they had used it before or not:

"It's great if you know what you're looking for. I think if you want to know how to get hold of a book that you can't get anywhere else, you know where it is, it's brilliant".

Introduction

Copac is a physical union catalogue of some 32 million records created by the merging of records from catalogues of members of Research Libraries UK, specialist collections in other academic libraries and other specialist research libraries. Traditionally Copac has been a stand-alone service. In keeping with current web-based developments, it seeks to improve its service by linking Copac to other services over the web. For some records this means access to table of contents and information from suppliers such as Amazon and Google Books. Further functionality may be provided in the development of features for the personalised and/or collaborative use of the located items, such as tagging, sharing and book-marking.

This report provides the results of a usability test undertaken of various features of the existing Copac service such as navigation, search, results display and item location in assisting the user in searching for and locating items in the catalogue. The testing also identified attitudinal information such as user expectation and responses to the perceived utility of and preference for the information display formats. A focus group was also undertaken to gather information on user preferences for future developments, including an exploration of user preferences and information behaviour in the context of recent developments in library catalogues and digital libraries.

The results of the usability testing and focus group discussions provide the evidence-base on which recommendations for the improved usability and functionality of Copac have been made.

Scope

The study explores user behaviour and user preferences in relation to the project objectives, in particular:

- How easy is it to navigate within and across the search interfaces?
- How easy it is for users to use the search interfaces?
- How easy it is for users to locate specific items?
- How do users understand results and single results display (including whether users are confused by the display of multiple editions of the same item)?
- How do users respond to the display of table-of-contents, reviews etc. within the records? Would they prefer another format, examples include:
 - 'Tabbed' display?
 - Expandable display?
- How easy it is to use the tools provided by Copac to locate or access selected items?
 - Location details.
 - 'Find a Copy'.
 - 'Google Books'.
 - Would users like an inter-library loan request option on the record display?
- What do users think of the existing Marked List function, and what developments in this area would they be interested in, examples include:
 - Tagging;
 - Annotating;
 - Sharing;
 - Looking at Marked Lists (bibliographies) saved by others (anonymously – ala Amazon or attached to public profile?).
- Additional functionality options, examples include:
 - texting records or call numbers? (Mobile)
 - iGoogle/Netvibes plug-in.
 - Book-marking (del.icious, etc).

Data has been collected and analysed according to facilitator observations of user behaviour (user testing) and user comments (user testing interviews and focus group). The report includes all observations and comments which are considered to be of interest to the developers of Copac, including those which illustrate differences of opinion and different approaches to using Copac. However, the Issues for Consideration and the Recommendations are based on findings of a more significant nature. For example:

- An opinion or opinions expressed by the majority of the participants.
- User behaviour observation which was repeated by the majority of the participants.
- Observations which highlighted an issue which was considered (by the facilitators) to be of high relevance to the future development and improvement of Copac.

Not all the Issues for Consideration are covered by the recommendations: some are believed, for the purposes of this report, not to warrant action, though are still possibly of interest to the developers of Copac.

Methods

The investigation uses a mixture of search tasks, interviews and a structured focus group to gather data necessary to answer questions relating to the project objectives.

The usability testing was undertaken using a professional usability laboratory to observe a number of representative users who were asked to complete tasks designed to systematically test the system's features. A "think aloud" protocol (providing a verbal dialogue whilst undertaking a task) was used to collect data about the users' responses when using the system and to gather general reactions and assessment about the look and feel of the interface as facilitating them in carrying out the task(s), such as layout, navigation and design.

The search tasks were developed in conjunction with Copac staff to ensure that the tasks mirror the issues that Copac wishes to investigate. These were carefully designed to ensure that specific features of Copac were used and to help ensure that the participant would come across specific issues, such as the display of multiple editions of the same item (see Appendix One).

Testing was undertaken by ten participants. Usability literature indicates that it is very rare for new information to be generated by going beyond ten participants. In order to minimise any variables which could affect the outcome of the testing, the participants were given the same relevant information prior to testing and all of the test conditions and the material used in each test were consistent. Each participant was asked to undertake an initial exploration of Copac, plus five tasks selected from a total of seventeen tasks developed (some with a single task, others with additional sub-tasks), with a final search of Copac before the post-task questions. Task randomisation was adopted to avoid any tendencies to skew the data due to participants performing better on the later tasks and worse on the earlier tasks.

During the usability testing, participants were encouraged to 'think aloud' and describe the issues and problems they came across, how they tried to resolve them and what the outcomes were. The tasks were logged with screen capture software which logged all user keystrokes and system responses to enable retrospective thinking aloud. Specifically, each participant was asked to return to areas where they encountered problems and to the points at which 'flagged for testing' features were used, such as format of display and use of marked lists. Following each task, participants were asked to consider the main things that they liked and disliked about the system and were encouraged to talk about their perception of the problem and the reasoning behind their actions. This helped to reveal insight into the nature of the problems encountered, user's responses and subsequent action, which cannot be yielded from the think aloud data or to shed further light on the user's assessment of their performance.

The week following the usability testing sessions, a focus group was undertaken with ten participants (the majority of whom had also taken part in the usability testing) to provide a forum for gathering researchers' general perceptions of modern information systems and the development of Copac's functionality concerning the use and the

delivery of the found information – such as linked/ personalised/ collaborative services (see Appendix Two for an example of the focus group schedule).

The focus group sessions began with an explanation to the participants that the purpose of the focus group session was two-fold:

1. To share with them our initial interpretations of the usability testing data that we had collected and from these findings, discuss with the group whether they reflected their own personal experiences and views and whether we were misrepresenting the findings or missing something important from the results.
2. To gather views and preferences of potential functionalities offered by Copac, including examples and discussion of functions offered on similar online services, for example reviews offered by Amazon.

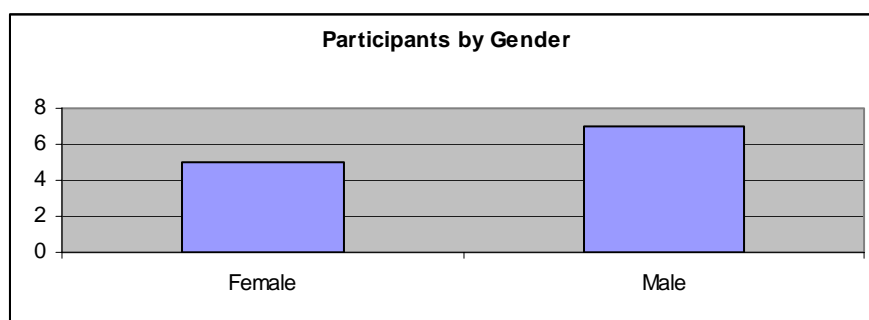
Information collected on the participants' information seeking activities, expectations and preferences for recent developments in features and functionality are summarised and presented in this report to help inform the future development of the Copac service to meet the information uses and expectations of its target group.

Sample

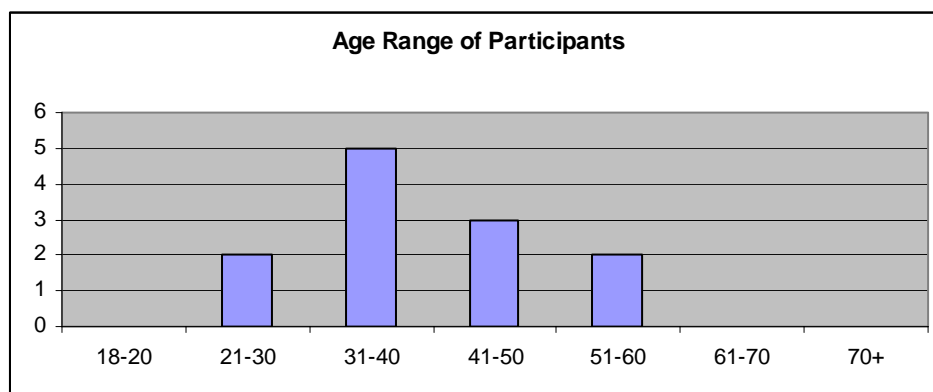
Copac is intended for use mainly by researchers, therefore the sample of participants recruited for both the usability testing and the focus group included Taught Masters students, research students, researchers and academics.

Participants were drawn from researchers across universities within Greater Manchester and covering a range of disciplines. The purpose of including participants from more than one institution was to enable some exploration into whether the information environment of the institution in which the researcher is based has any impact on their preferences for and expectations of the future development of Copac's functionality and services. General data on each participant's research discipline and stage, their general information needs, Copac experience and usage of other information systems was collected in a pre-search questionnaire and is summarised below.

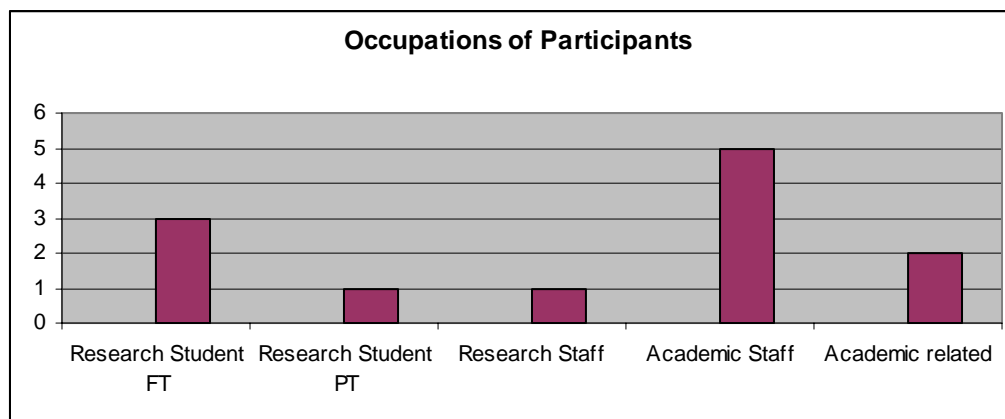
A total of twelve participants took place in either the usability testing and/or the focus group. Five participants were female, and seven were male:



The age of participants ranged from 21-30 to 51-60, with the majority between 31 and 40 years old:



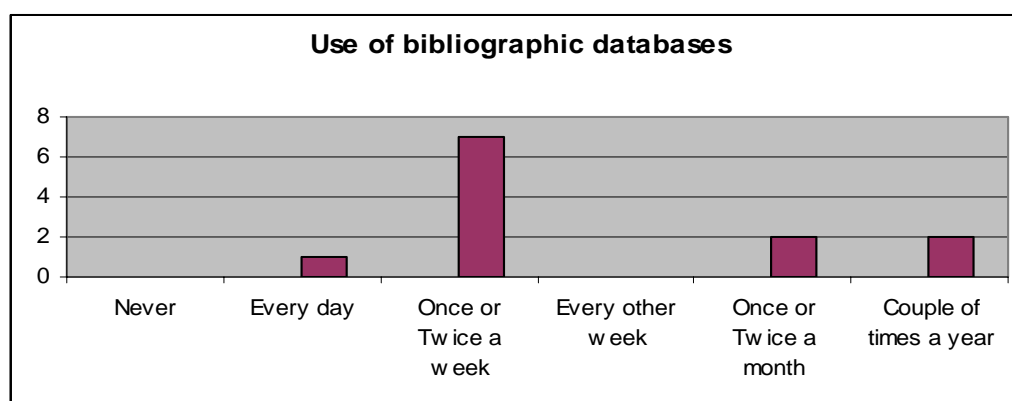
Occupations of the participants included research students (full time and part time), research staff, academic staff and staff working in academic related areas:



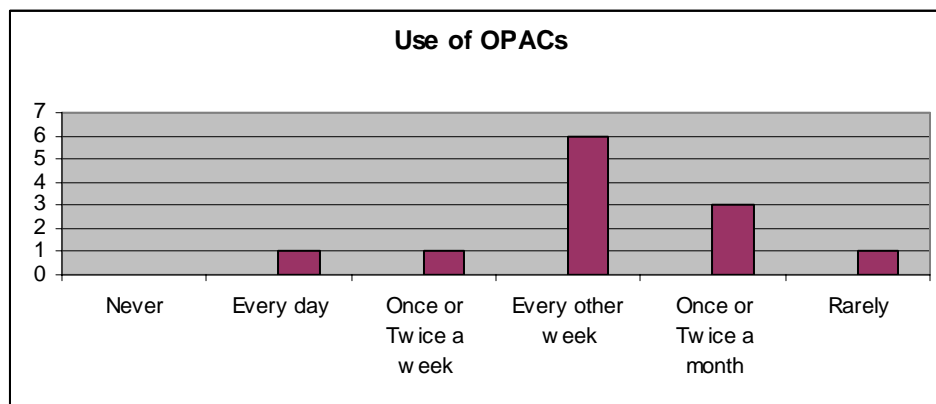
Subject and research areas included:

- Informatics/Computer science.
- Information and Communications.
- Technology, use and consumption.
- Learning development.
- Information and Communications, web design and law.
- Broadcasting, policy and regulation.
- Information systems.
- Learning technology/Centre for Excellence in enquiry-based learning.
- Educational technology.
- Enquiry-based learning/Student support.
- Socio-cultural factors/study styles.

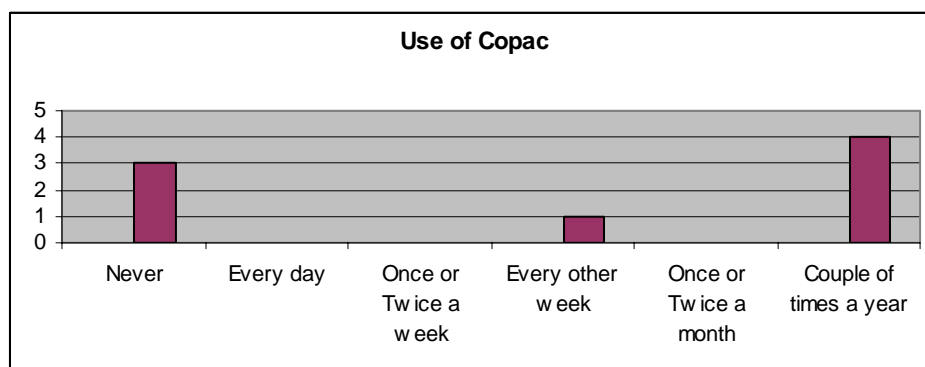
Participants were asked if they used internet search engines, and if so how often this was. All twelve said that they used internet search engines every day. They were then asked if they used any bibliographic databases, such as Web of Science, BIOSIS, Chemical Abstracts, PsychINFO, Emerald or Ingenta. Over half (7) said that they used these types of database once or twice a week:



Participants were asked if they used online library catalogues (OPACs). Half (6) said that they used OPACs every other week, followed by once or twice a month (3), every day (1), once or twice a week (1), or rarely (1):



Eight of the twelve participants had heard of Copac. Of the eight, four used Copac a couple of times a year, one said they used Copac every other week, and three said that although they had heard of Copac they never used it:



Initial impressions of Copac

Participants felt that they would mostly use Copac to look for a known item, rather than searching for items on a subject area (by keyword or subject).

Most understood the main purpose of Copac. Their initial impression of the website was generally positive:

“it’s clean, fairly obvious what it does”;

“It’s a nice clear site”;

“... laid out in a nice clear fashion”;

“I like the clarity”.

However, some found it initially difficult to use

“loads of text there, loads of stuff underlined...”;

“I’d need a bit longer and a bit more thought to find something I would actually want to go and pursue”.

Home Page

Only a few participants spent any time really looking at the Home page; most clicked 'Search' straight away, as soon as they arrived there.

Participants thought the Home Page should be a bit more exciting:

"The Home page doesn't 'grab' you – it looks a bit bland."

Many commented that they would expect a Search box on the Home page for a quick search, instead of having to click to another page to perform the search. Some participants commented that there seemed to be a lot of white space on the Home page - and on many of the Copac pages - which they felt was wasted space, breaking-up the pages too much. That distracted them from looking at certain parts of the page, the right-hand side in particular, which many considered to be where adverts are placed, so usually ignored.

Most found it difficult at first to get back to the Home page, assuming there would be a link at the top, but the only way seems to be via the Copac icon at the bottom:

"having to scroll down to go back to the home page is a blooming nuisance!"

Most users used the browser's 'Back' button (multiple times) to return to the home page.

Home page Information menu

Very few actually initially investigated the options from the top-right menu: 'About', 'Libraries', 'FAQ', 'Support', 'Interfaces'; none looked at 'News'.

About section

Only a small number of participants looked at the link to About (Copac) page and they found the information useful. All participants felt the link should be placed elsewhere as it wasn't very prominent – BUT they would prefer not to have to read the 'About' section in order to use Copac. They would prefer Copac to be more intuitive so you only need to look at more information when you get stuck, and then maybe go to 'Help' or a Troubleshooting page. They considered that 'About' pages were not usually very useful for the task in hand, and in this case there was too much content, some of which ought to be in 'Help' rather than 'About'. Much of the content wasn't of any interest to them, especially the user comments which they considered to be testimonials as a sort of sales tactic rather than the balanced comments where users actually rated a site.

They suggested the Help or Troubleshooting pages should be quite simple – using a bullet point list (see also FAQs below).

Libraries section

Nobody had looked the Libraries section at all! Most participants did not fully understand it, being under the impression that Copac collects everything, for example:

"I think it searches all the major libraries, the British Library, the Scottish library, the university libraries for books and other resources."

". . . searching books and other published work in British libraries around the country, around the university libraries around the country."

When it was explained that Copac only includes records from the contributing libraries listed they felt this wasn't made clear enough, but having explained this it then made sense to them why they couldn't find a record located, for example, at MMU when they knew there was a copy there. They then wanted to know why all libraries are not included in Copac.

Having a link to Copac from their own university library led them to believe they would be able to find records that were held in their library.

"I expected to have my University there . . . I automatically kind of presumed that Manchester, MMU, and Salford would be there. I think it probably would be kind of useful to point out that not every University Library in Britain is on the list."

They liked the fact that the libraries were hyperlinked (though they may have thought that the links went directly to that library).

(Facilitator observation: The first text on the Home page reads:-

"The Copac® library catalogue gives free access to the merged online catalogues of major University, Specialist, and National Libraries in the UK and Ireland, including the British Library".

The text on the RSS feed page reads:-

"Copac® is a union catalogue. It provides FREE access to the merged online catalogues of 24 major university research libraries in the UK and Ireland PLUS the British Library, the National Library of Scotland, and the National Library of Wales/Llyfrgell Genedlaethol Cymru."

The former gives a poor indication of which are the contributing libraries, intimating that there are more than there actually is. The latter is much clearer than the former, better explaining which the contributing libraries are, but it is unlikely to be seen by users. The Home page should have the clearer message and it should be consistent wherever it appears.)

FAQ section

A few participants had looked at the FAQs during the user testing but none really read through them (as evidenced elsewhere by the fact that none knew about the Endnote facility). When demonstrated at the focus group they commented that it would be more helpful to display the actual questions, with links to the answers rather than just topic headings, and that it would be useful to be provided with a link to jump back to the top once a FAQ had been read. They also thought an option to search on FAQs would be useful.

Participants thought it would better (*“more instant”*) to be able to post or add questions directly from the FAQ page rather than having to email the Copac team – and this option wasn’t very prominent anyway.

“It often seems that whatever my problem is it’s not one of the frequently asked questions.”

News section

None of the participants had visited the News page. Having demonstrated it, participants displayed mixed feelings about Copac’s presence on Twitter. Most did not feel this was a necessary addition to Copac:-

“I would probably assume it was a University service jumping on the band wagon but there’s no way I would follow it.”

Others thought it could be a useful way to alert Copac users to service developments, such as downtimes, or new services/functions offered. It was suggested that it might be useful if it could be personalised so as to get only specified information. (NB At this stage RSS hadn’t been discussed)

Issues for consideration

- Include a Search box on the Home page.
- Too much white space.
- Getting back to the Home page: link at the top.
- ‘About’ section wasn’t very prominent.
- Prefer not to have to read the ‘About’ section in order to use Copac.
- Help or Troubleshooting pages be quite simple, using a bullet point list.
- It is not made clear that Copac that only includes records from the contributing libraries listed.
- The brief explanatory text on the Home page does not make clear which libraries contribute to Copac.
- The above Home page text is different on other pages - i.e. inconsistent.
- Few participants looked at the FAQs.
- FAQ topic headings links are less helpful than displaying the actual questions with links.
- Link to jump back to the top once a FAQ had been read would be useful.
- Option to search on FAQs would be useful.

Search

As mentioned under Home Page, participants said they would expect a Search box on the Home page for a quick search, instead of having to click to another page to perform the search.

Several participants were confused by the terms 'subject' and 'keywords', wanting to know what the difference is. They said they would like a Browse option to help select keywords or subject words, which would be particularly useful if your initial search failed to retrieve any results. It was also unclear whether and how wildcards could be used. Some preferred the quick search rather than the Main Search. Several users muttered things about 'Main Search' being unusual terminology, most sites using the term 'Advanced Search', or 'More Options'.

Some would prefer the ability to use Boolean operators (e.g. AND, OR, NOT), or the 'must include' plus sign and 'do not include' minus sign in front of a word. When looking at the 'More' option to find out how to search more effectively they thought there was too much text:-

"A lot of text!"

"Oh. There's lots of text here. I'd much rather this was nice and . . . [tailed off]. It doesn't seem to tell me ANDs or ORs, doesn't actually seem to be terribly helpful."

In short, they wanted to find out whether Boolean searching was allowed, but in fact couldn't find that information.

Search results were sometimes very, very slow in coming. Also, often there was no indication on screen after clicking 'Search' that anything at all was happening.

"At this point I'm not sure, because I pressed 'enter' rather than click 'search', there is no visual feedback that it is actually searching."

One participant found it annoying when a search for an Author retrieved some items about the author rather than by him. They also found it confusing because the Author field said 'Author etc':

"...what on earth does 'etc' mean?"

A few participants were confused by the option for a Map Search alongside the Quick and Main search options. It was not clear whether a map would be retrieved (like a Google map) or a map record.

One suggested that the Search button should be repeated after 'Further options' at bottom of main search page, so as to go progressively down the page.

Issues for consideration

- 'Main Search' is unusual terminology.
- Include a Search box on the Home page.
- The meaning of the terms 'Subject' and 'Keywords' is not made clear.
- Browse facility for 'Subject' and 'Keywords'.
- Availability or not of Boolean searching is not covered in 'Help'.

Display of Records

Brief record display

Few issues were raised with the brief record display. Most thought that a short amount of detail was necessary for a brief record. One participant commented that an indication of the type of extra information provided in the full record might be useful, for example to indicate which full records include summaries.

Regarding the display of multiple records, participants displayed a mixed response, a few commenting that it depended on the type of record – for example they didn't want to look at multiple records of *Pride and Prejudice*, but might want to do this for a textbook record. One participant commented that it might be useful to provide a drop down list of the various entries for a version of a record; another suggested the use of different icons to indicate each of the formats.

A greater preference was indicated for the separation of formats such as book, electronic, DVD, CD etc, although this wasn't unanimous.

There was, however, one issue with the Brief Records page itself. Several participants wanted, from the Brief Record page, to refine their search but none found how, except one who was deliberately prompted to do so (by being prompted to try harder rather than being told how). That participant gave a gasp of incredulity when it was found. *"Other services use 'Refine search'. Even beginners recognise 'Refine search!'"* [In Copac it is click the search terms at the top of the page in: the roll-over text is 'Edit these search terms'.] The browser's 'Back' button was the most often used when wanting to amend/refine a search.

Full record display

Most participants liked the full record display when undertaking the user testing tasks and in the focus group discussion, although some thought there was perhaps too much text provided:

"it's a bit wordy really to be honest with you."

"a little bit too many words in there..."

Others commented that there was not enough information, with possible additional information such as a table of contents, or a list of references. They particularly liked the summaries and felt that all the details displayed were useful. Records have differing amounts of detail, some being very brief, others being rather lengthy.

Although they liked the reviews, participants felt that it would not be possible to provide the volume of reviews to make them a reliable source, and therefore a link to something like Amazon reviews and Amazon star ratings would be better. Another possibility was to have the reviews "more user generated" within Copac – but they still thought this wouldn't generate enough responses to be really reliable (and would

have to be managed); also, they wondered how Copac would be able to cope with commenting to multiple results/versions.

“ . . . comment services start becoming really powerful when lots of people have commented.”

The provision of a star rating was also discussed. Although it was generally agreed that a star rating system was useful, some felt it could be subjective. Again, a link to something like Amazon was preferred because this would aggregate a greater number of opinions and therefore be more reliable.

Participants were asked if they would like some of the more lengthy details (e.g. summaries) to be compressed, with just the heading/title on display as a link – to then be expanded if you clicked on the link. The general consensus at this time was that they didn't see a real need for expandable sections. (However, after viewing the British Library (BL) webpage some changed their views on this: see BL in the section Comparison with functions from other services).

Displaying information on the right-hand side of the page was again raised as a problem because of the assumption that these are adverts (similar to the Google results page). Participants thought it therefore needs to be made very clear what the information on the right-hand side provides.

The Google Books link was viewed very much as an advert and often ignored, and it was felt that Google Books needed a higher visibility and a better description to make it clear what this function offered (i.e. not just a purchasing opportunity).

Many didn't spot the link back to 'Brief Records', and the browser's 'Back' button was the most common way used to return from Full to Brief records. When it was pointed out, they thought 'results list' might be a better term. One used the 'Subject' listing from a Full record to find like things, then looked for a way to get back to original Brief Records list, but again had to resort to browser's back button.

(Facilitator observation: Two users, in a Full Record, clicked the link 'MODS XML' and didn't understand the result. It is the record in machine-readable format, so of no interest to ordinary users. In Marked List the link becomes 'View MODS XML Record', which goes a little way to explaining but there could be a better explanation of what it is - e.g. "Record in machine-readable MODS XML".)

Pictorial depiction of the book

There were mixed response to the pictorial depiction of the record – some thought this was a very powerful way of presenting a record and it helped them to recognise what they were looking for (e.g. by the image on the book cover). Almost all did not click it however: when asked about this some said they said they did not realise it was a link. Some queried whether it needs to be a link, as it seems to take you to the same place as the title link. They felt it might be better as a visual depiction only. Some commented that because it was displayed on the right-hand side they

assumed it was an advert and would take them to a page where they could purchase a copy. They also commented that roll-over text must be meaningful!!! e.g. the title of the book rather than the current description of 'Book cover'.

Participants wondered if it would be possible to 'look inside' the book if you clicked on the link (e.g. like Google Books) – but none had tried this in the user testing nor when using Copac independently. They thought this would be a useful way of displaying different editions of a book – rather than the multiple copies in the record display.

Holdings

Most of the participants liked the Holdings display, although the terms 'Location' and 'Holdings' were, as with several terms used on the Copac website, considered confusing and *"by librarians, for librarians"*. It was felt that a more general term could be used, perhaps indicating to the user that it was to more information, for example, "For availability in XXX library . . .".

"It's confusing: it says Location Details, but it's actually more than that. It's going to that specific record on that location's catalogue".

One commented that it would be useful to have a link from the record to the actual library catalogue

"so you could see if any were available".

Most thought the placement of the 'Location' link was intuitive.

*"it always seems to be at the bottom, so that's why I went to it",
"it's quite logical actually".*

Having gone to the holdings information for a library it would be useful to have a link there to that library so as to be able to check opening times and things like that.

Issues for consideration

- In Brief Records, indication of formats such as book, electronic, DVD, CD etc.
- In the Brief Record page no one found how to refine their search: it isn't evident except on mouse roll-over (see illustration).
- A link to something like Amazon reviews and Amazon star ratings preferable to a Copac rating system.
- Query whether the picture of a book cover in Brief Records needs to be a link to the same place as clicking the title.
 - Suggestion that it should allow 'look inside the book' (e.g. maybe link to a summary or review).
- No attention was paid to things on the right-hand side of the page on the assumption that these were adverts.

- The Google Books link with a picture, in particular, went unnoticed.
- Link back to Brief Records was not noticed: terminology suggested 'Results list'.
- The terms 'Location' and 'Holdings' were (as with several terms used on the Copac website) considered confusing and "*by librarians, for librarians*".
 - Suggested term "For availability in xxxx library . . ."
- 'MODS XML' link without a description is confusing.

Illustration

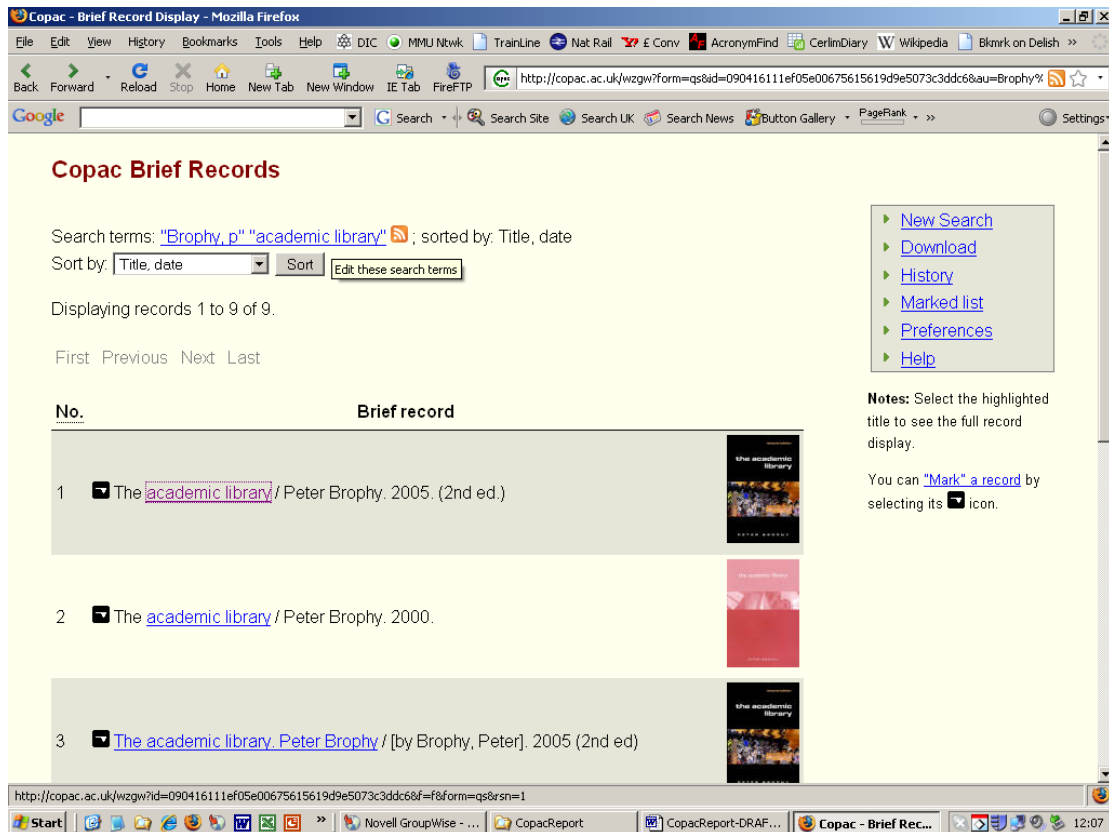


Figure 1 'Edit these search terms' - a hidden option

Functions 1 – Menu items

Participants were shown the Menu of functions on the right of the page (New Search, Download, History, Marked list, etc). Many had not really considered - or even noticed - this list, and felt it should be placed elsewhere on the page, not on the right:

“They look very separate at the moment”.

Suggestions were to place it as a menu along the top of the page, or along the bottom. The issue of too much white space on the pages was raised again, which participants felt was a waste of space and did not attract them to look at functions such as the menu list.

Terms used to describe the functions were also deemed confusing – what does ‘History’ mean? What does ‘Download’ mean? They felt that confusing terms do not tempt the user to follow the link.

Marked list

Participants all liked the ability to mark records. Most participants needed to resort to Help (usually by going to ‘Marked List’ where it is explained when no items are marked) to find out how to mark a record.

“I’d never have guessed that was a marking icon.”

They then could not unmark the record while viewing the full record from the marked list.

“...would prefer to do this rather than go back . .”.

Some were not sure what happened having marked the record. At times it also took a long time for the mark icon to activate, which sometimes resulted in participants clicking a second time, thus un-marking the record.

Many participants said they would like to be able to retain their marked list:

“There’s not a lot of point having a marked list if you can’t get back to it after the search”.

One participant thought it would be useful to provide a clear reminder on the records page showing what had been marked (without going to the Marked List). Several participants also noticed that there was more than one way to ‘mark’ a record – saving it to Delicious being the other method, but many were unsure how this would actually work (this is discussed further later). Participants also commented that they would like to be able to email, save or print it directly from the marked list page.

“ . . . rather than go through the link that says download”.

Having marked the records, the user testing and the focus group discussions revealed that ALL participants wanted to be able to export marked records into a reference management tool – Endnote and Zotero (a Firefox extension) in particular were mentioned.

Several participants said they would like to be able to share their marked lists.

“I think it could be very good, sometimes looking at somebody else’s lists and similar things you can find that are useful”.

This comment ties in with comments (in a later section) about the usefulness of having suggested alternatives or recommended titles (e.g. “If you like this,... you’ll like this”).

One user, when returning to Brief Records (in marked list) then noticed the opportunity to ‘tick’ items and delete them. That user commented:

“Ah! The whole functionality has changed, now using check-boxes and delete. Why doesn’t it just use exactly the same as it had before?”

That user later commented that the tick boxes were more obvious and visible than the flag icon.

Download

Many of the participants thought the term ‘Download’ was not at all clear:

“To me download is downloading like a file or something on my computer, I would have liked on the site that there would straightaway save records or email records.”

“I would have expected it to be Export rather than Download. That’s what I was looking for.”

“I only went to download because I tried a few other things [which] hadn’t worked.”

“I would find it much easier to have two tags or two icons that say ‘email this book’ or ‘email yourself’ and ‘save it’ rather than ‘Download’ it because when they say ‘download’ I am not sure.... what is download? What do you download?”

“Download means to download the complete article or the video file.”

They liked the ability to email the records or to save them to file. In user testing, some looked in Download for an option to send or export to ‘Endnote’. One participant commented that it would be useful to be able to add your own notes to a saved record or to be able to “edit the email before sending it”. The ability to print records – in particular the option in the right-hand menu to select a ‘printer friendly format’ - caused a bit of confusion because it didn’t always appear when viewing records.

(Facilitator observation: The ‘Printer Friendly’ option was only *sometimes* displayed in the top right menu in full record view, but NOT when looking at the full record from

'Marked list'. When it does appear, it comes as an additional item in the middle of an otherwise 'static' menu and therefore goes totally unnoticed as users, even if they look at that menu at all, don't look for additional options to have appeared in it. Good design principles would recommend a consistent display of all menu functions, even if the function wasn't available for that record (in which case it should be displayed by greyed out).

Thus the functionality available in Download was thought to be very useful, but that those functions should be available individually rather than be on a separate page: they thought it would be particularly useful if the functions were available directly from the 'Marked list'.

History

Most participants did not follow the link to History and therefore were not aware that it was possible to save/retain search terms using an RSS feed. One user who did look at History was confused as to why the link to RSS was there. When demonstrated, it was still not clear to many what RSS could offer them. Having explained this, participants still showed more of a preference for saving terms from within Copac. However, it was explained that this might be a problem with a service such as Copac (where you don't log in to the service or have a personal page saved) – and therefore use of something like Delicious or RSS might be effective.

The overall impression was that participants were confused by the term RSS and therefore needed a better explanation of the icon, what the term meant and how it might be used in a Copac situation.

Issues for consideration

- Little attention was paid to menu items, as with most things on the right-hand side of the page.
 - Suggestion it should be along the top or across the bottom.
- Too much white space.
- Terminology not understood for 'History' nor 'Download'.
- Participants needed to resort to 'Help' to find out how to mark a record.
 - Instruction of right-hand side not noticed.
- Not immediately obvious what happened having marked a record.
- When marking records the icon often took a long time to respond.
- Retain marked list for future use.
- Inconsistency in display of marking in Brief Records (icons) and Marked Items: Brief Records (tick-boxes) (see illustration).
- Email, save or print (i.e. the Download functions) directly from the Marked List page.
- ALL participants wanted to be able to export marked records into a reference management tool – Endnote or Zotero.

- Share Marked Lists (See also Personal Annotations section).
- The term 'Download' emphatically was not understood to indicate the functions contained within it: those functions would be better if directly accessible from Records pages.
- The 'Printer Friendly' option was only displayed in the top right menu in 'Full Record' view, but NOT when looking at the 'Marked list Full Record'.
- Most didn't understand the term RSS, nor why it appears in 'History', and how it might be used in a Copac.

Illustrations

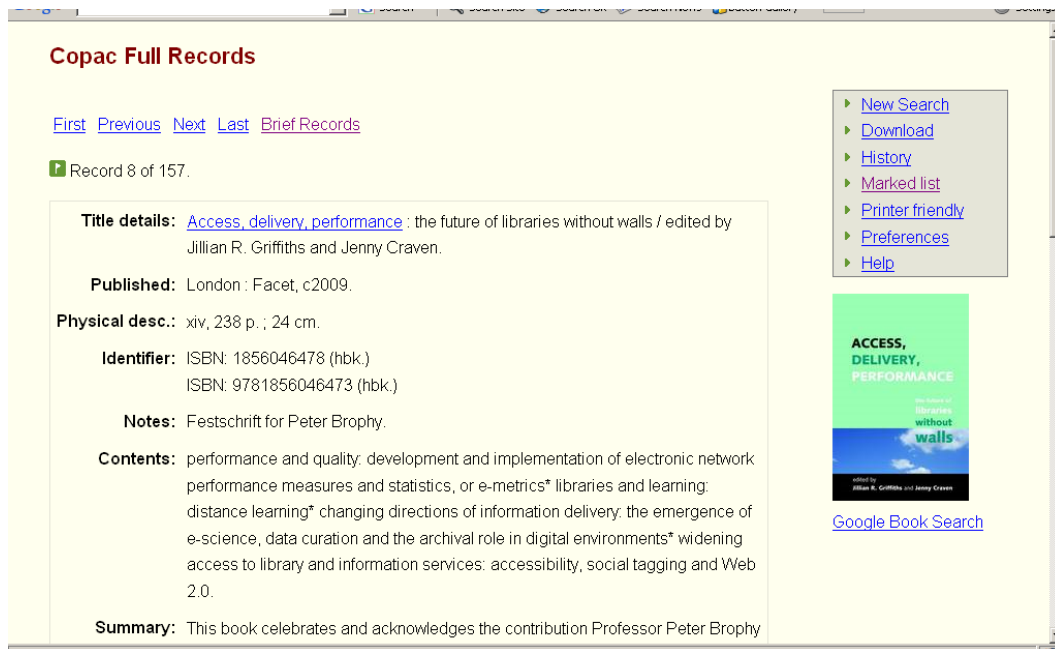


Figure 2 Printer Friendly available in Full Record

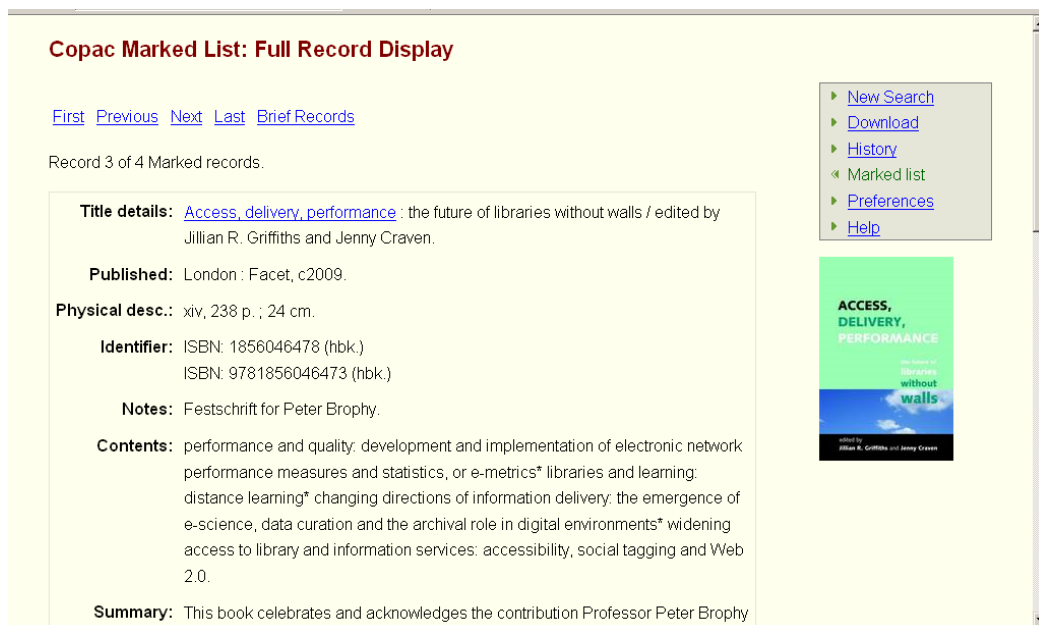


Figure 3 Printer Friendly does not appear in Marked List: Full Record

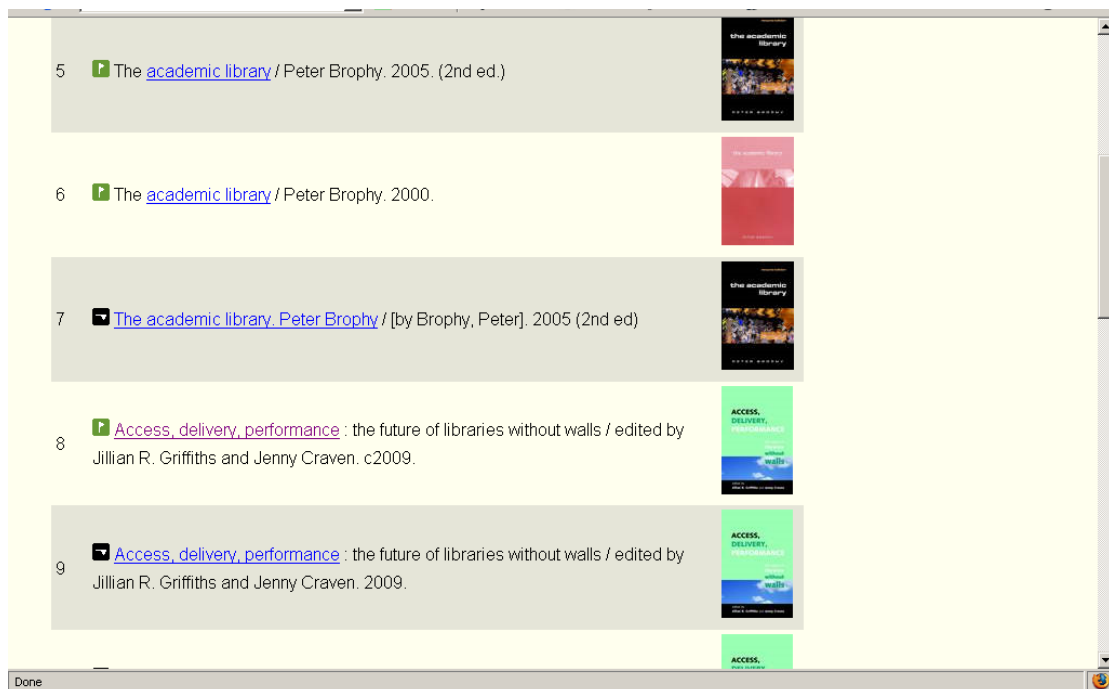


Figure 4 Flag icon to mark records in Brief Records

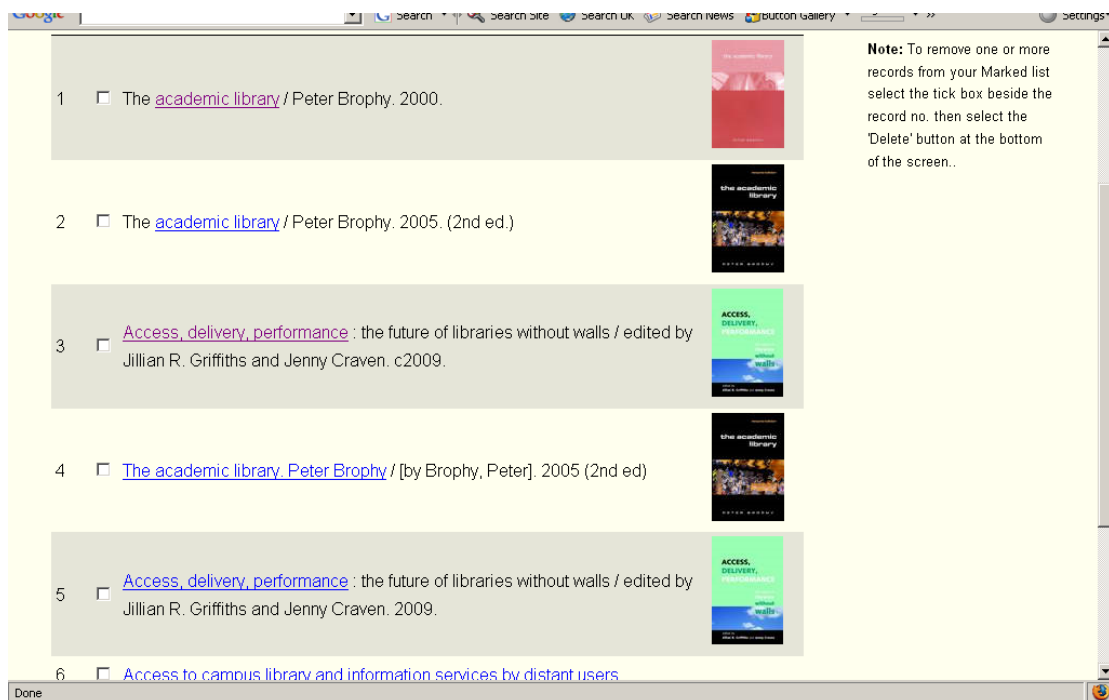


Figure 5 Tick-box to 'unmark' records in Marked List: Brief Records

Functions 2 - Extra items

Google Books

Most users did not notice this option until they were prompted and even then it was felt that the purpose of the Google Books and Google Preview function needed to be explained much more clearly. As has been reported elsewhere, being on the right-hand side, it was ignored on the assumption it was an advert.

"I saw that there was a picture there but I didn't see at all, I just thought it was a picture. I had no idea why it was there . . . because I'm used to going on a social networking site and things like that where that whole side is adverts, so you don't go there."

"That to me just looks like somebody is paying for Copac to advertise there, and I didn't even go near there because I didn't want to get this popup window to come up like I'm going to buy this book. I don't want to buy it, I just want to read it."

The one person that used the Google Books and found a review was very pleased with the result.

Participants thought it was a useful function, but like many of the useful functions provided by Copac (e.g. exporting to Endnote) – it was not very visible. They thought that this, along with other different services (Delicious, RSS, exporting to Endnote etc), should all be placed together with a clear indication of what they offer.

(Facilitator observation The links to Google Books or Google Preview were confusing in that it was not obvious how that link was generated - i.e. what caused which to appear. 'Edit preferences' was treated with disdain, having only the 'preference' for Google books - *"that's the stupidest preferences I've ever seen!"*. At a later date the researcher deliberately investigated this and eventually found an explanation, but ONLY in the Copac news archive of March 12, 2008, and in discussions on the Copac development blog.

from http://copac.ac.uk/blog/2008_03_01_archive.html

Copac links to Google Book Search

The Copac national, academic, and special library catalogue now includes links to documents in Google Book Search. Where a record contains an ISBN a link appears on the right of the Full record display and will take one of three forms:

- Google Full View: this link takes you to an online copy of the book.
- Google Preview: this allows you to see a limited number of pages from the book.
- Google Book Search: most links will be in this form. These links don't offer a view of the book itself, but in some cases there will be options such as links to web sites mentioning the book, links to other works that reference the book etc.

Neither of these is likely to be seen by users, so a brief version ought to appear in 'Preferences'.)

Delicious

Some participants saw the option to save on Delicious, although not all were sure what this function offered, only two of them having a Delicious account. There was considerable confusion about what this link could offer. Some felt that it would save the display of the record, others thought it would save the Copac webpage or the marked record. Some did not even notice it.

When it was explained that Delicious would save the search term for re-use the participants thought this would be useful but would prefer to be able to do this from within Copac. As with RSS, participants were confused by Delicious and therefore needed a better explanation of what the term meant and how it might be used in a Copac situation.

Find-it!

Most participants didn't try the 'Find-it!' link. They generally found the 'FindIt!JRUL' icon confusing (including those users from Manchester University), even when some explanation was provided:

"I didn't understand what JRUL was so that's the reason I didn't try to click that".

"The JRUL, the little icon thing is a bit misleading."

When the function was explained to them it made much more sense. They commented that both the language used and the icon were problematic (although you would probably get used to this). They said they would prefer a more uniform icon and textual explanation so that you would see the same thing wherever you accessed Copac from (e.g. from home, your university, another university etc).

"I didn't realise that was a link, nor that that it was John Rylands. 'Try to find ways . . .' - doesn't sound very helpful or hopeful, that phrasing! Not very positive."

Endnote, Zotero and Reference Manager

ALL participants wanted to be able to export marked records into a reference management tool – Endnote and Zotero (a Firefox extension) in particular were mentioned. Only one of the participants had discovered that it was possible to do this from Copac. When the other participants were shown in the FAQs that this was possible they commented that this information was "*buried*" within Copac, not prominent enough, and not very clear.

"I think if you're a Copac power user you would probably find them eventually but for the more casual user, you don't have much chance do you?"

They thought that this service should be offered in the Full Record display (i.e. via a link) and should be available at the point of download. For example, an instruction "Export to . . .".

"Definitely this is the first functionality I'm looking for . . . because if I read, I need to cite it probably in the future."

"Actually the terms export, I mean, I think it's just a matter of just looking what are the standard terms used. Because you just go to the main publishers, use that term 'export reference' and then later on comes the 'Do you want to save to Endnote' or whatever. So it has to be on the record where you get the information on the book."

"I think it would be so useful if all these things could be together somewhere on the full record. If there was a list of what you could actually do with that record and then you could see and you use... it's like you saying earlier you could choose whether to put it in Delicious or Facebook or Endnote."

They felt that the instructions were far too lengthy and that bullet point instructions would be much more helpful. The hyper-link in the instructions for Endnote doesn't make it clear what you needed to do, nor what will happen if you clicked the link.

"I think the way the instructions look, I don't think I'd read through them. I'd have a look, it's too long, it's too convoluted, I would do something else."

"I would like some kind of a wizard or something helpful that sort of took you step by step through the process."

"Here it's in the FAQ but if it was . . . when we were looking at the downloads page that it would say if you want to download click here and you get the stuff about Endnote."

Issues for consideration

- The purpose of the Google Books and Google Preview function were not clear, and being on the right-hand side was often ignored on the assumption it was an advert.
 - It would be useful, but its purpose was not very visible and users cannot find out about it on the Copac web site.
- Extra functions such as Google books, Delicious, RSS, exporting to Endnote etc, should all be placed together with a clear indication of what they offer.
- Most users did not understand what the link to Delicious could offer.
- Lack of explanation about many terms, what was actually being offered and how they could be used in a Copac situation.
- The purpose 'FindIt!JRUL' icon was not at all clear (including for those users from Manchester University).
 - The icon and language used were not comprehensible.
 - Preference for a more uniform icon and a better textual description.
- ALL participants wanted to be able to export marked records into a reference management tool, but did not find out how to do so within Copac.
 - This information was "buried" within Copac, not prominent enough, and not very clear.
 - Should be one of the Download functions (thought term 'Download' should not be used).

-
- Should be offered in the Full Record display.
 - Instructions were far too lengthy: that bullet point instructions would be much more helpful.

Potential Functions

Personal annotations

Participants thought it would be useful to be able to save annotations, e.g. for a reading list, and to do this from within Copac rather than using Endnote. (However, if the process of exporting to Endnote or similar reference tool was made easier they might be happier doing this). This might also be used, for instance, to build a reading list for use by others.

There was also the suggestion that a 'Forum' might be useful for users to share comments, reviews, news, etc.

Another function which might be useful is recommendations or alternative reading (e.g. if you like this ... you might like this...) as offered by other services. This might be simply something encouraged on the forum - i.e. that contributors make recommendations on the forum.

Table of Contents

Participants thought a table of contents would be very useful (and this is planned for a future release of Copac), as would a list of the references and an introduction.

Adding keywords, use of tag clouds

Participants wondered if this would be an appropriate function for Copac, and it could be problematic.

"Who would administer key words and tag clouds? . . . I would rather trust in some other sort of key words which are listed by the publisher, the writer, the library itself."

Other concerns related to searching and whether user-generated tags would make searching more difficult. However, some thought a combination of official keywords and user generated keywords might be helpful when searching for a subject.

This led to a discussion about browsing keywords. Participants thought it would also be useful to provide a Browse facility for when your search terms did not retrieve any results. This could be very useful for less experienced searchers who may be "put off" using Copac if their initial searches retrieved no results.

One of the participants wondered if it was worth the time and effort for these options to be provided just for Copac and perhaps it would be more worthwhile if they were provided across other MIMAS services such as JSTOR and Zetoc etc.

Inter-library loan via Copac

Almost all the participants said would like to be able to order inter-library loan (ILL) items directly from Copac, perhaps via their university library. One possibility would be the capability to charge the cost to their student account (also used for photocopying payments, library fines etc). If provided, they commented that this function needs to be placed in a prominent and consistent place (e.g. from the location page).

Only one thought that providing an ILL option could result in being tempted to request

"...tons and tons of stuff half of which I never read."

Web 2.0 and Links to other services

There was considerable discussion as to what Copac wanted to be, whether it wanted to be a focussed service or whether it wanted to be a more complex, multi-purpose interface from which users can do lots of different things – in particular whether to include more Web 2.0 type functionality. Participants were generally lukewarm about the other services suggested to them such as: Facebook or other social networking sites; iGoogle and similar; and Twitter (even when shown that Copac already had a presence on Twitter). They made no new suggestions that they felt would be useful to link to from Copac (except reference management tools - repeatedly). Whilst participants agreed that links to some external services could be useful, and that offering Web 2.0 functions might also be useful, no additional Web 2.0 functions were really needed. Nor was text-messaging: those interested in getting information 'on the move' use email and web on their mobile. It was felt, though, that as Copac is offering tools such as Delicious and Google Books, then it should include a choice of different tools (i.e. serving a similar purpose) rather than just one application.

The general consensus was that Copac provides a good service for searching and locating quality resources and should not try to change too much:

"don't loose the original purpose";

and that it should stay focussed, very close to the original idea:

"Copac has its own purpose and it should stick there . . .".

It was re-iterated by the group that the Copac interfaces need to be improved, and maybe some additional functionality and connections added, but participants were also concerned that, if too many extra functions are added, it might make the interface a lot more complex and cumbersome and could slow up the system. Those services that are offered should be grouped together and displayed in a consistent way: consistency was considered to be of major importance, not only here but in discussions of other areas.

They considered that they should be displayed in two ways. Firstly they should be on the right-hand side, along with all the other services, prominently displayed and perhaps with pictures, BUT with a really clear indication that they are useful services or functions and NOT merely advertisements. Secondly, they should also be displayed across the bottom of the page, this time just as quick links, but consistent with the right-hand side ones.

" . . . logically, after you finished reading the page and then you will find an export information or any other external things . . .".

"Have bigger links with pictures on the right-hand side and then just have the quick links on the bottom and have them consistent so that you have everything in both of them and not just have something here and something there and something somewhere else."

Links to Copac

Participants engaged in some debate about the merits of providing a link to Copac from Facebook – or whether Copac should set up a presence on Facebook. Some felt that this could be a good thing as it might attract more students to use Copac:

"If you could do it on our Facebook group, all sorts of different, the way that we communicate particularly with our students it would be great to have those sorts of links there, very useful for them"

Some were not sure if Facebook is the best medium, it being for social networking rather than academic practices.

However, links to Copac were in general considered a good thing; for example a link from libraries, University departments and academic research institutes would be very useful.

"That is the sort of place you expect to find Copac rather than Facebook."

"The option to put a link on our web page - that would be brilliant I think."

One participant suggested providing:-

"Something like a generic widget that would allow you to do a search from Mac Apps or from Google Apps that is using a standard, industry compliant standard. Because there is a lot of work being done at the moment on standardising widgets. I think that would be quite useful and that would then, hopefully . . . it may well be able to be plugged into Facebook or whatever system people use."

Overall, opinion was divided as to whether a Copac presence on Facebook would be useful, but there was agreement that Copac should be more visible in other places.

" . . . I've never come across Copac before and I don't know if it's just some sort of general knowledge that people have and I just never tapped into that, or if Copac has an issue of kind of marketing themselves better to their target audience . . . like having it in the university website, and not just having a Copac logo but having something that tells you what it is and why you should use it."

Issues for consideration

- Participants thought it would be useful to be able to save personal annotations.

-
- A 'Forum' might be useful for users to share comments, reviews, news, etc.
 - 'Recommendations' or 'alternative reading'.
 - Table of Contents would be very useful.
 - Adding keywords and use of tag clouds, though they may be useful, were generally not really considered appropriate for Copac.
 - Browsing existing keywords would be useful.
 - Inter-library loan would be very useful.
 - Links to other services are / would be useful: all services should be grouped together and displayed in a consistent way.
 - Consistency was considered to be of major importance, here and in other areas.
 - Should be prominent on the right-hand side with all the other services, BUT really clearly indicating that they are external links and NOT merely advertisements.
 - Should also be displayed across the bottom of the page, as quick links, and consistent with those on the right-hand side.
 - Web 2.0 type functions could be useful, but should offer a choice of different tools rather than just one.
 - Consensus was that Copac provides a good service for searching and locating quality resources and should not try to change too much.
 - Copac interfaces need to be improved.
 - Copac should be more visible in other places.
 - Links to Copac were in general considered a good thing from academic institutions.
 - Facebook may or may not be an appropriate place for Copac.

Comparison with functions from other services

Gower / Ashgate Publishers web site

The focus group was shown Ashgate's Library and Information Management homepage and then a record accessed from that page as a comparison with Copac's full record display. Their attention was drawn to the picture of the book cover and 'brief record' details on the right-hand side, and the middle section of the record which displayed full details: a summary, 'Contents' (though not as a table), 'About the editor', 'Reviews', a link to an eBook version, a link to 'Full contents list', and a link to 'Index'.

There was very little relevant comment about this site nor its presentation of records, except for an appreciation of the 'Full Contents list' link. The group were asked to comment on the fact that it was necessary to click a link to get to the contents list: there were no strong views either way.

Amazon

As Amazon reviews had been mentioned several times and discussed elsewhere it was deemed unnecessary to visit the site.

University of Huddersfield library catalogue (web interface)

The focus group was shown the Basic Search page which also displayed a tag cloud of the most popular keywords used in the last two days. The group as a whole did not think that the addition of such tag clouds in Copac would be useful.

The group was then shown a list of brief records generated by a title word search, some of which had a picture of the book cover, and then shown a full record. The details in the full record were also quite brief, below which were the options to save that class number to an RSS feed, and 'Virtual shelf browser' - a clickable graphic of book covers which is similar to the "if you like this ... you'll like this..." option on some other sites. The group liked this feature with its powerful use of a book cover to illustrate the item.

A user here commented that they were not sure what would happen in Copac if, in a full record, you clicked the authors name:- *"Presumably that takes you to other things by the same author. That would be really useful."* This hadn't been mentioned in user testing, only being brought up when 'Virtual shelf browser' showed items by the same author on the Huddersfield site (though by accident), seemingly striking a chord with the user, suggesting that it wasn't obvious on Copac.

Participants liked the display of "Useful links" at the bottom of the record and thought it was very clear what these would offer as they had a text name for the link destination rather than an icon.

The group were generally not much in favour of the Star Rating offered, believing that, whilst it could be useful, reviews would be more useful. They also believed that Amazon, because of the high numbers of reviews, gave a better idea, and also identified the author of the review and the rating they attributed.

Science Direct

The issues planned to be dealt with on Science Direct had been mentioned several times and discussed elsewhere, so it was deemed unnecessary to visit the site.

Google Scholar

Attention was drawn to the 'Cited by' function, and participants thought it was useful function and one which they would like Copac to offer.

They also liked the 'related articles' function (e.g. if you like this ... you'll like this...).

British Library (Search our Catalogue Beta site)

The group were shown a full record display and asked to comment on the layout and content. The main record details are displayed across three-quarters of the page and various functions in the right-hand column.

The page generally was liked by all the group. They particularly liked the display of functions on this page, despite their being on the right-hand side. The options on the record under the title 'Keeping this item' of 'Email', 'Print' and 'Save to . .' - options including Delicious, Refworks and Endnote - were noted as being very much preferable to the 'Download' option on Copac. It was felt that the prominent 'Details' orange-coloured band right across the page indicated that things on the right-hand side were 'included' and relevant, not just something separate or adverts.

They also liked the 'Similar items' function (e.g. if you like this ... you'll like this...), and thought that the instruction to find 'This record in Copac' (i.e. text) was more meaningful than the Copac 'Find it' or 'FindIt!JRUL'.

"In other words it's really quite a clear looking site, it kind of has a lot of information but it's still not too messy."

They suggested the interface was more eye-catching than Copac with better use of colour to differentiate sections of the page. On the BL site it is clear what is useful to you, whereas on Copac it is not clear, for example, that the menu items on the right could be useful.

"They seem to have made a bit better use of the available area on the page in this site than Copac does."

They thought the help offered by 'Haven't Found What You're Looking For?' and 'Similar items' good and something Copac might offer.

There was some discussion of the use of underlined hyperlinks. Copac underlines them all, making the interface look too "busy", whereas many sites, as well as the BL site under discussion, often reserve underlining for links to information, "*stuff that's actually important*", and do not underline navigation links. Also the 'Email' and 'Print' links on the BL site are made easily visible.

Interestingly, when previously discussing the full record display, participants indicated a preference for showing all the record fields rather than a condensed version with expandable links (e.g. to reviews). However, on viewing the BL site (which has links to further information such as reviews) some changed their views and thought this looked better.

Issues for consideration

- Some things noted on other sites that are available in Copac, but not obvious - e.g. Other things by the same author.
- Participants liked the display of "Useful links" with clear explanation.
- Liked 'Cited by' function.
- Liked 'Related Articles' and 'Similar Items' facilities.
- Liked 'Haven't found what you're looking for?' help.
- Liked the terms 'Keeping this item' with options to 'Email', 'Print' and to 'Save to' a choice of Delicious, RefWorks, Endnote and others.
- Items on the right-hand side on the BL site were and were obviously relevant and not likely to be mistaken for adverts.
- The text 'This record in Copac', or 'This item in Amazon' was much more meaningful than the Copac 'FindIt!JRUL' icon'.
- Liked the use of colour on BL site to differentiate sections.
- Underlined links only used for links to information, not for navigation links, and is clearer, and looks less 'busy' than when all underlined.
- Liked the fact that further information such as ToC and Abstract were accessible via links instead of being fully displayed on the page - contrary to the views expressed under Full Record display section of this report.

Illustrations

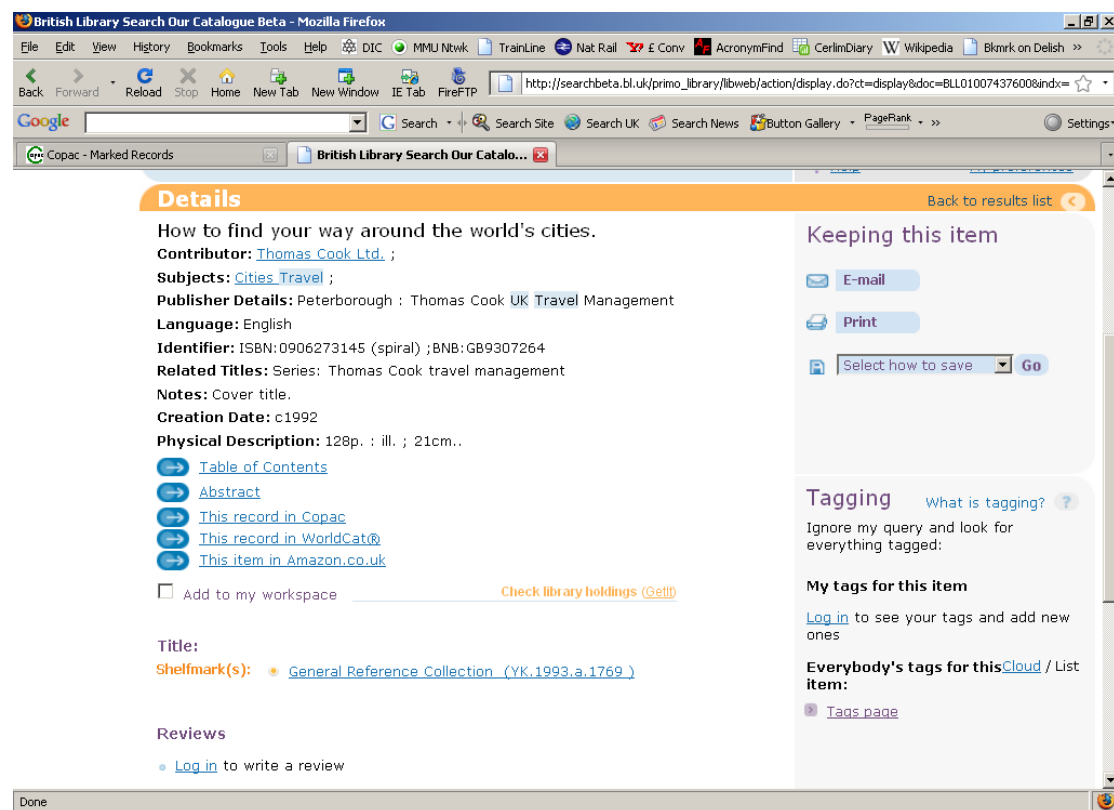


Figure 6 A Full Record in British Library site

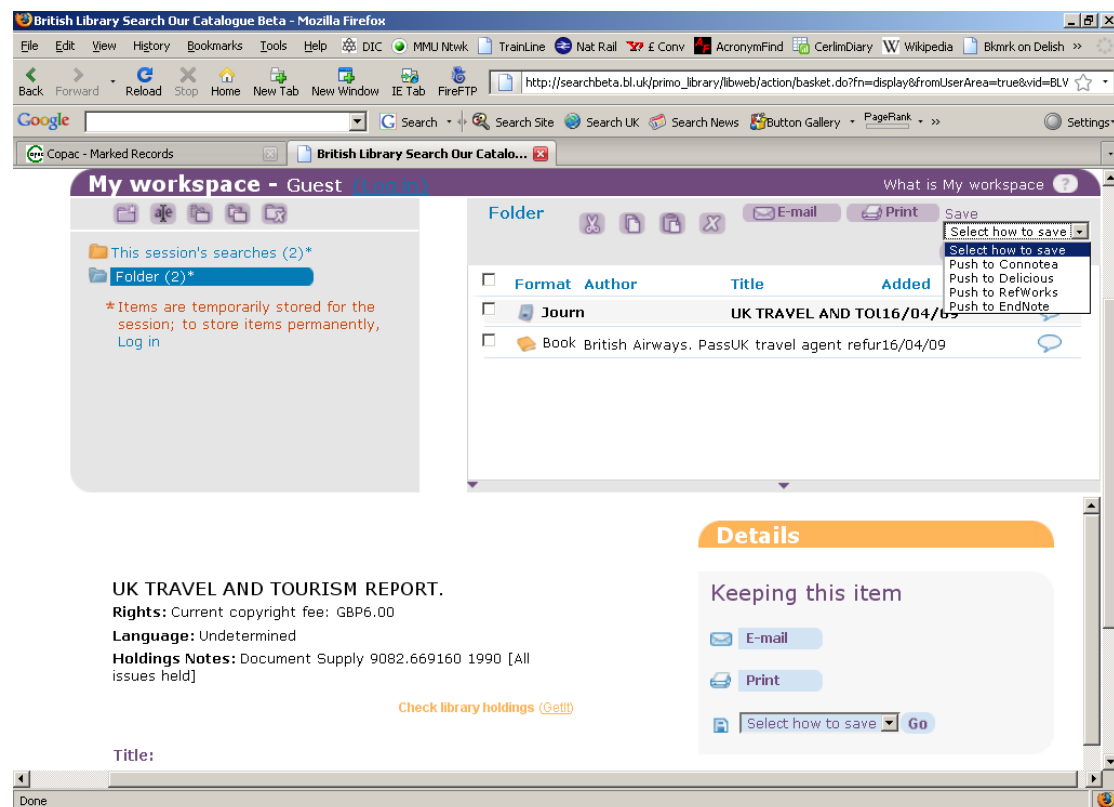


Figure 7 My Workspace page in British Library site (similar to Copac Marked List)

Other Observations

Copac service overall

Twelve participants: 4 had not heard of Copac before. Of the 8 that had heard of it, 3 had never used it, 4 had used it rarely (1-3 times a year), one had used it weekly.

Generally, they liked the different functions offered such as the marked list, summaries, the ability to search by language, the book covers, Google Books, bookmarking (Delicious), and the ability to find copies at other libraries, especially locally or in libraries they can get to easily. The vast majority of them also said they would use Copac again and probably more so now they had experienced or seen more of its capabilities.

From participants who had used Copac before:-

"I hadn't used it for such a long time, coming back to it and having done the usability test, I feel that there was a lot more that I could actually use it for. So, yes, I definitely would use it differently in the future."

"I have used the service quite extensively as a great deal of material is only kept in certain Libraries, in the British Library or Oxford, so I really need the service for inter Library loans. I can get the ISBN numbers."

From participants who had not used Copac before:-

"I would definitely use it, especially in the job I'm in at the moment which requires a little bit more research work . . ."

"The most important thing that impressed me with Copac, it was summaries. I could get access to summaries. I am sure there were some other facilities that come with Copac, like link to other tools, like bookmarking."

"I put it in my bookmarks and so I can use it in the future."


". . . liked the book covers as a reminder of the books that I have seen."

". . . the option of instead of going to our Library catalogue at University, I can see them all in the one place and check if the book is available anywhere close by is a good thing."

"The links to Google Books is a really handy thing that you don't have to go to Google separately to search . . ."

During user testing, Copac was sometimes very, very slow in returning results. Also, sometimes it returned a 'no results' when there should definitely have been hits. Restarting the browser was a nuisance, but simply going to the Copac 'Home' page and starting over again worked most times. This was repeatedly a problem, causing much frustration and delay. Even when clicking the flag to 'mark' an item it was often very slow to change. It is unlikely that our users would have persevered if they were not in a test situation - i.e. they may have lost interest and left with a very low opinion of Copac. The Google Books option which loads for some records was sometimes so slow to load the user had scrolled down the page and did not see it.

Copac functions

Functions currently offered by Copac are useful BUT are “hidden” within the pages of Copac, or give the appearance of being an advert on the right hand side. For example, on the right-hand side in Brief records there is the message ‘You can “Mark” a record by selecting its  icon’, but nobody noticed it! Many users had difficulty finding out how to mark records.

Copac interface

The overwhelming view was that Copac needs to update its interface and to prominently display the different functions and services it offers. There are lots of good functions, but information is “*here and there and everywhere*”, and thus functions are not very visible.

The site isn’t visually attractive. Participants generally liked the neutral cream background colour on Copac but thought different colours could be used to group functions to separate each out. They also felt that too much empty space makes it hard to see what the most important part of a particular page is.

Things on the right-hand side should have titles to help make it clear what their purpose is. The menu here should be re-positioned: at the moment there is too much space below it.

“The bizarre way that the interface changed with the marked list which just seemed really weird, [should] keep it consistent throughout.”

“I have to say, though it’s arguable, but that menu option, you see so many options, . . . It actually goes New search, Download, History, Marked list but if I’d probably wanted to do a new search, I might first look at History, look at the Marked list, and then Download or Printer friendly, I don’t think they’re in a logical order, personally.”

(Facilitator observation: Links taking the user out of Copac sometimes used the same window, requiring the use of the browser’s ‘Back’ button to return to Copac, and sometimes opened a new window. The links to FindIt!JRUL and to Delicious each caused a new window to open, whilst the links to Google books and to a selected RSS service open in the same window. It is quite common on web sites for a new window to open when going off-site, especially if that departure is intended to be temporary.)

Searching Copac

Some users’ search skills were those of the ‘Google Generation’ and not very sophisticated. Some showed reasonable skill, but only one user demonstrated really good search skills, and it made a difference! That user, in Final Exploration, really investigated how to use Copac and found materials which he was very interested in. Also, for most users familiarity with Copac made an obvious difference in that the Final Exploration was usually better handled than the initial exploration.

Most, if not all, users did not know how to make multiple selections in the list boxes on the Main Search page. Some sought help using the 'More' option to find out how to make multiple selections, but didn't read much and failed to find out.

Issues for consideration

- Functions currently offered by Copac are useful BUT are "hidden".
- The overwhelming view was that Copac needs to update its interface and to prominently display the different functions and services it offers.
- Liked the cream background colour on Copac, but thought the use of colour to differentiate sections of the page would be helpful.
- Too much unused empty white space.

Focus Group Final comments

In general participants really liked the service provided by Copac, whether they had used it before or not:

"It's great if you know what you're looking for. I think if you want to know how to get hold of a book that you can't get anywhere else, you know where it is, it's brilliant"

"...it was very useful, I'll definitely use it again."

"...Very interesting and I think I will be using it from now"

"I think it has the potential to be very useful"

But they did have many reservations - as reported elsewhere in this document - which should be taken into account. Some of those are crystallised in these quotations:-

". . if you're quite specialist then I think it's very difficult to do a search."

"I've no idea of the difference in the subject and the keywords and I don't understand why there's two separate things. One smart subject/keywords search box would be much more useful."

"I'd prefer a much more basic system really that doesn't have all these extra fatty bits attached to it, so I just want to find what I want to find really and I don't want to spend ages reading loads of text and doing all sorts of weird and wonderful things with it."

"There are some facilities in Copac which are very useful but totally hidden from users . . .".

"You need some sort of, not saying 'joyful', but some sort of . . . some attraction."

The interface could be more attractive, especially the Home page

"It's not very inviting and not very informative."

"It looks at little bit bland as well."

"If you note Google – very simple design but elegant."

"The Copac interface needs to be simple, but joyful!!!"

There was further discussion here about a quick search box on the Home page, as several users had advocated in user testing. It was suggested that a user should be able to type-in 'Endnote' and just automatically be taken to the information on how to use Endnote in Copac - i.e. a search for help rather than for locating materials. The quick search box on many websites offers the option of searching the site or searching the web. For Copac those options would be different as the user would want to search either for information or help *about* the site, or to search the *catalogue of records*.

The group thought that Copac is not very 'visible' and should be more widely promoted to students and researchers, not just to librarians, and they should be reminded of it from time to time.

Recommendations and Conclusions

The usability of Copac has led to key recommendations to ensure its usability through effective design. The study took the ISO 9241-11 definition of usability to be fundamental, that is “the extent to which a product can be used by specific users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.”¹ Various usability attributes have been specified to help measure or assess usability accordingly. ISO 9241-11 specifies effectiveness, efficiency and satisfaction. While Nielsen (2003)² proposes learnability, efficiency, memorability, errors and satisfaction others (such as Tsakonas, G. and Papatheodorou, C., 2006³) have proposed learnability, ease of use, aesthetic appearance, navigation and terminology. The evaluation of Copac took the focus on the users’ goals to extend usability to include functionality and draws on the usability attributes that come out of data collected from the observation of users engaged in the use of Copac.

Acknowledging the complexity in determining usability, the Copac evaluation went beyond a ‘standard’ heuristic evaluation to judge conformity to the usability attributes in an attempt to identify and eliminate existing usability problems. Instead the study purposefully used a professional usability laboratory to observe representative users undertaking tasks designed to systematically test the system’s features. Each user was given a set of search topics to conduct on Copac which involved a range of search tasks using the system features identified for exploration. For example, to find a given edition of a work the user would make use of the full record display, view multiple editions and the loan request option. The “think aloud” protocol was used to collect data about the users’ responses when using the system and to gather general reactions and assessment about the look and feel of the interface. In addition specific questions were asked to gain deeper insight into the use of the system and in the focus groups the researchers were able to further explore users reactions to similar systems and, in particular, services which might be offered from within Copac.

The approach taken was to provide Copac with the evidence-base for the recommendations for the improved usability and functionality of Copac. In making the recommendations it is important to highlight that the study focused on users’ use and opinions of specific system features which go towards determining its usability with respect to achieving users’ goals. That is, we were concerned not only with usability through effective design (the look and feel of the interface) but also with respect to system functionality or usefulness: a functionally useless system will not be used or valued no matter how effective its design. This focus on the evaluation of use and usefulness is particularly relevant in the current environment for access and search systems dominated by Google web search and the tantalising features and functionality from Web 2.0 taking services into a broader context of personalisation, collaboration and general use of the information located by the user.

¹ http://www.usabilitynet.org/tools/r_international.htm

² Nielsen, J. (2003) Usability 101: Introduction to Usability. *Jakob Nielsen's Alertbox*. <http://www.useit.com/alertbox/20030825.html>

³ Tsakonas, G. and Papatheodorou, C. (2006) Analysing and evaluating usefulness and usability in electronic information services, *Journal of Information Science* 32: 400-419.

Data was collected on users' activities, responses and assessment about the interface design and functionality in facilitating the conduct of the assigned tasks. This data has been summarised under the specific areas and features investigated of 'Home Page', 'Search', 'Display of records', 'Functions', 'Potential functions' and 'Comparison with functions from other services' with issues for consideration highlighted under each. The standard measures of effectiveness, efficiency and satisfaction were not directly taken as the interface was not to be tested per se. However the key issues emerging from the qualitative data can be loosely grouped under further usability attributes of Understandability, Learnability, Appearance, Errors, Ease of use, Navigation and Terminology (See Appendix Three).

Not all the Issues for Consideration are covered by the recommendations: some are believed, for the purposes of this report, not to warrant action, though are still possibly of interest to the developers of Copac.

Key recommendations to ensure Copac usability through effective design

The appearance of the interface, in particular the layout, consistency and appropriate use of colours, fonts, graphics associate with system usability. Terminology refers to how well the user can understand the terms used, especially to describe system functions, as well as consistency of terms used. Navigation refers to the ease of use of the navigational tools available (menus, icons, colour coding and so on) and how well the user can control where they are and where they want to be. The study of Copac highlights several design issues relating to appearance, navigation and terminology to be addressed to improve its general usability.

Search

Use the widely known term 'Advanced Search' or 'More Search Options' instead of 'Main Search'.

Provide guidance on the difference and use of the terms 'subject' and 'keywords' in search.

Provide a clear option to 'Refine Search' from the brief record page.

Display of Records

Consider using the terminology 'Results list' to link back to 'Brief Records' from Full records.

Consider use of a general term such as "For availability in XXX library . . ." instead of the terms 'Location' and 'Holdings'.

Include 'Export to a reference management tool' as one of the Download functions (though term 'Download' should not be used).

In Brief Records use icons to indicate and separate each of the formats.

Consider providing a drop down list of the various entries for a version of a record.


Consider how to best use the link on the pictorial depiction of the record (i.e. book cover image). The image helps user recognise what they were looking for. The link could take them to further detail (e.g. to 'look inside').


In Full Record make clear what the hyperlinked text is for: e.g. the author name - 'By the same Author'; title - 'Similar items'; and correspondingly for subject words and location details.

Consider expandable sections (e.g. compress lengthy details with just the heading/title on display as a link – to expand to further details).

Provide a better explanation of the link "MODS XML".

Functions

Replace the 'mark a record'  icon with a different, possibly larger, clearer icon, or use a tick-box instead.

Consider consistency in the display of marking in Brief Records () and Marked Items: Brief Records (tick-boxes).

Consider different terminology for functions that better reflect what their actual purpose is:-

'History' might be 'Your search history'; 'Your earlier searches'.

'Download' might be 'Keep this item', with the options:- 'Email', 'Print' and 'Save to . .' (offering the various options in one place - to a file, Delicious, Endnote, Reference Manager, Zotero, RSS feed). These could be directly accessible from the Records pages instead of on a separate page. Saving from the Full Record should save that record, saving from Brief Records should save the brief records list.

Provide a better textual description alongside the icon for 'FindIt!'.

Consider a different icon for 'FindIt!'.

Add an explanation (or a link to an explanation) of the RSS icon and how RSS can be used to save search terms.

Ensure consistency in the display of the 'Printer Friendly' option in 'Full Record' view and in 'Marked list Full Record' view.

Use colour to highlight, draw attention to and distinguish/group functions (the cream background colour is OK).

Items on the right-hand side should be obviously incorporated by the use of meaningful titles and effective grouping, and their purpose made clear.

Visibility and purpose of the Google Books and Preview function needed to be explained much more clearly.

Overall processing

Copac was sometimes very, very slow in returning results; when clicking the flag to 'mark' an item; and in loading the Google books icon. This led to frustration and sometimes errors being made or information missed.

Consider providing some indication to the user that processing of the user request / action is taking place.

The majority of these design issues could be addressed through the consideration and use of terminology derived from the task domain of the users of Copac. That is changes to the terminology should strive to find terms which self-describe the tasks to be executed – from 'search' and 'refine search' to 'view results list' to 'find availability' to 'keep item'. Consistency of navigation tools, such as links back, can help ensure that the user does not experience disorientation. The suggestion of the use of colour coding requires further consideration relating as it does to the system functionality. In particular the details on the right-hand side of the page need to be clear with respect to their purpose and relevance in the Copac context. Use of colour (or some other means of grouping functions) should be used to emphasise these as integral to the users overall task of locating and using information available from Copac.

Key recommendations with focus on Copac functionality

The issues arising under the attributes of understandability, learnability and ease of use again reveal areas for re-design to ensure system usability and functionality. understandability and learnability and ease of use are fundamental to system usability as they consider how easily and effectively the user can accomplish tasks.

It is of fundamental importance that users are able to understand what they are searching. It needs to be clear that Copac only includes records from the contributing libraries and which they are.

The help or troubleshooting pages need to contain simpler instructions and be organised to enable the user to quickly find or spot their particular question. Specific suggestions made are:

- Help or Troubleshooting pages should be simple, a bullet point list.
- Display actual questions in FAQ rather than topic headings links.
- The option to search on FAQs would be useful.
- A link back to the top of page should be provided.

The consensus was that Copac provides a good service for searching and locating quality resources and should not try to change too much. It should be more visible, especially as a link from academic institutions. Its links to other services should be grouped together and displayed in a way to indicate what is useful to the Copac user.

However at the same time the overwhelming view was that Copac needs to update its interface and to prominently display the different functions and services it offers.

Users should be able to quickly see what functionality the service provides, and how these could be useful in the Copac context. The lack of visibility relies on the user knowing what to look for and a less-than-intuitive usage of the functions found.

The call for Copac to effectively display its features and functionality relates to another preference from its users: not be expected to resort to help. It is expected that any re-design will help highlight the relevance of the functions, and appropriate use of labels, icons and placement will guide usage and lessen the need to resort to Help.

Specifically ease of use could be improved by the following suggestions arising from the study:-

Search

Include a Search box on the Home page for (quick) search (instead of having to click to another page).

Explain in Help whether Boolean searching is possible.

Provide a Browse option to help users select subject/ keywords (particularly if an initial search failed to retrieve any results).

In the Brief Record page make the option to refine search more prominent.

Consider allowing the saving of search terms for re-use from within Copac.

Display of records

Keep the full record display.

Consider providing additional information such as a table of contents, or a list of references.

If adding reviews consider linking to Amazon reviews and/or Amazon star ratings for their volume and reliability compared to what would be possible in a Copac rating system.

Functions

Enable retention of a marked list for future use.

Make it clear that the exporting of marked records into a reference management tool is possible in Copac.

Make it clear that the emailing of the records or saving to file is possible.

Consider the ability to enable notes to be made to a saved record or “edit the email before sending it”.

Consider providing the ability to share marked lists.

Consider the function of suggested alternatives or recommended titles.

Extra functions such as Google Books and Google Preview, Delicious, RSS, and exporting to a file, Endnote, Reference Manager and Zotero, should all be placed together with a clear indication of what they offer and how they could be used in a Copac situation.

Consider consistency when using external links whether to open a new window or re-use the same window⁴.

Within the context of usability these recommendations relate to functionality and how well the system facilitates the user in accomplishing their goal driven tasks. Users should be able to refine and save their searches more readily and guidance in using the subject and keyword searches (possibly by a browsing functionality) would help some users to achieve effective use. The full record display is useful and additional information such as ToC or 'Cited by' may be useful in a 'detailed view'. It was evident from the user data that 'marked list' is liked and that this functionality could be extended: e.g., to export records, save personal annotations (e.g. to build a reading list), use for recommendations, provide a 'Forum' for users to share reviews.

Conclusions

The findings were addressed by taking as far as possible a distinction between the 'usability' and 'functionality' issues. One finding central to the future usability of Copac was the detrimental effect of key links on the right-hand side of the page being generally assumed to be adverts and ignored. This, and the lack of clarity in the indication of, the visibility of, and the purpose of the functions provided, led to users experiencing difficulty in using Copac and/or gaining an impoverished view of system functionality. However, that is not to say that things should not be positioned on the right-hand side: as long they are obviously incorporated and their purpose is clear then that is the preferred position.

A key recommendation is that colour coding or some other means of grouping functions should be used to indicate the purpose and relevance of Copac's functions and to emphasise these as integral to the users' overall task of locating and using information available from Copac. Prominence should be given to Copac's basic and extra functionality with clear guidance on their purpose, value and usage through effective design. This is critical if Copac is going to attract and keep its users with existing services and features beyond search to the broader context of using the information located (download and annotate) and into the Web 2.0 environment of sharing and collaboration.

Whilst the separation between the 'usability' and 'functionality' issues is an artificial distinction to make in practice, it serves to enable the recommendations for interface design to be made on two levels. The first set - Key recommendations to ensure Copac usability through effective design - are made in this context:

⁴ Web design recommendations have generally discouraged the opening of new windows and tabs because "Users often don't notice that a new window has opened So a user who tries to return to the origin will be confused by a greyed out *Back* button" (Nielsen, J. (1999) The Top Ten Web Design Mistakes of 1999, Jakob Nielsen's Alertbox, May 30, 1999 <http://www.useit.com/alertbox/990530.html>). Recent advice from the World Wide Web Consortium (World Wide Web Consortium, Web Content Accessibility Guidelines 2.0 (2008): <http://www.w3.org/TR/2008/REC-WCAG20-20081211/#consistent-behavior-unpredictable-change>) is that if you do decide to open links in a new window you should give users advanced warning of this. Recommendations regarding consistency also apply, so that ALL links to external sites either open in a new window (and gives a warning of this) or uses the same window, not a combination of the two.

General usability of Copac would be improved by the changes to the terminology which relate to the usability principle of describing the tasks indicated in users' ('real life') terms. Terminology used should be checked for consistency across the interfaces. Also where appropriate and, where possible, the user should be aware of the system status, that is, an indication that processing is taking place.

Changes to the terminology and to the navigational features are further recommended to highlight functionality and the ease of execution: it is not only inappropriate terminology that obscures the intended purpose of links, buttons, tabs and so on. The re-design of the interface can make more effective use of layout and heuristics to draw attention to the visibility and the purpose of its main functions. Colour can be used to distinguish and group functions, as can the appropriate use of interaction mechanisms. Pop up windows or balloons allow users to quickly see what is available under the functions such as 'Download' without committing to a mouse click or a new window display.

With regards to the recommendations for improved functionality it is informative to summarise what users liked about Copac and what they thought was important as users of the system.

The users approached Copac to find and ultimately obtain needed information. Some tasks required that they use the system purposefully to find known items rather than for the reason of discovery, and for this they liked the ability to specify searches. They then, in general, commented on assistance that might be useful for that purpose, particularly when an initial search failed or on it being unclear as to how to refine a search.

The users liked the detail provided on an record, for example the summaries in the full record, and would find some further detail useful such as ToC, 'Cited by' analysis and 'Find similar'.

The users liked the ability to produce marked lists and to export records into a reference management tool. Additional functionality wanted, on the whole, related to further management of the information found, such as annotate their list, share lists and reuse searches within the Copac context.

This study has been carried out in the context of the emerging questions relating to provision of access to Online Catalogues that best meets user expectation and experience from web search, and thus how best to exploit the high quality of the information made available, so as to provide useful and usable services for the user. Our second set - Key recommendations with focus on Copac functionality - are made in this context:

Copac at present provides the user with a useful service which with fairly minor amendment could be given improved usability. The changing

environment for information access, however, has meant that its users have new expectations of what constitutes a supported experience.

Users may expect a simple search box, together with a link to 'Advanced Search'; a clear indication of the collections searched; relevance ranking; and/or faceted search/browse⁵ capability to refine a search. Faceted browse can be useful in helping the user see what is available in the collection and how to refine a search, especially when the initial search has been unsatisfactory.

The information required from the search results relates not only to the brief bibliographic details but also to an indication of different formats and information regarding availability and delivery options. Further detail on the items may be expected and requested, such as detailed summaries, ToC, citation analysis, reviews, 'find similar', recommendations and 'look inside', all of which take the user into the broader use and exploration of the information found.

It was evident from the study that users wish to be able to further extend Copac's services into this broader context but facilitating this effectively will require careful interface design. This leads to the main recommendation for the redesign of Copac at a second level: that is one which is focused on functionality. What can be provided with regards to changes in the features for search and extended services for the personal use of the information or the social networking capabilities will depend on required developments made to the underlying techniques and technologies. The design of the interface should serve to highlight the tasks the system facilitates with flexibility to support the user in moving beyond the finding of information to its exploration, manipulation and use. It is important that Copac concentrates on what is its main function as an online catalogue and to do this well. This should be the foundation on which newer functionality is built, such as those provided by social networking tools like list sharing and ratings. The impression from the user study is that unless these are provided as integral to the 'Copac context' a perception of services and functions being added in a piecemeal fashion distracts from their use and value. User-centred design must assess the tasks in which users are engaged and design so that the various sub tasks are handled as distinct, with their requirements for effective use met, yet whilst in view of the Copac system and its related functionality. In other words in providing an extended functionality the Copac interface would need to support the flexibility of a workbench to enable users to search and further to explore and use the information found as distinct from the 'product' view of retrieve and display.

The value of usability research has been demonstrated through the range of issues which arose during the course of this study and the evidence-base on which recommendations have been made. Subsequent redesign of the interface should be subjected to further usability walkthroughs and, in the event of extended re-development for the provision of new services and functions, the interface should be developed through prototyping and user testing of functionality as well as usability.

⁵ An explanation of faceted search/browse can be found on Wikipedia http://en.wikipedia.org/wiki/Faceted_search

Appendix One: Tasks and Questions

Initial Exploration of Copac (Pre-Task)

We will start with an initial exploration of the Copac site. Think about an area of interest, either work related or personal, which you would like to research further. Spend a few minutes exploring the Copac site. Try out some searches, view the results and see what sort of information you can find out about your area of interest.

- What is your overall impression of the Copac site?
- What services do you think it offers?
- Were you able to find any useful information about your area of interest?
- Are there any similar services or systems you already use? If so, what is it that you like about them?

TASK 1: Display of formats; Display of records

You are building a website and need to find a book recommended by a colleague on HTML and CSS. Your colleague thinks the book is by someone called Moore, or Moreton and it was published after 2001.

Questions:

- Were you able to find the information you needed?
- Was the necessary information available from the Brief Record display?
- Would you like more detail? If so, what details?

Or, If they then went to look at the full record display:

- What prompted you to continue to the Full Record display?
- What did the full records tell you?
- Did you like the layout of the full record display?

TASK 2: Display of formats; Display of records

You are giving a lecture on the work of Graham Greene and for demonstration purposes you would like to obtain a copy of The Third Man on DVD.

Questions:

- Were you able to find the information you needed?
- Was the necessary information available from the Brief Record display?
- Would you like more detail? If so, what details?
- If multiple editions of the same record were displayed, is this useful or problematic?
- Would you prefer one record for all editions, that could be expanded to give single editions if required?
- Would you prefer to see a single record for books, CDs, DVDs etc or would you prefer them to be separated?

If they then went to look at the full record display:

- What prompted you to continue to the Full Record display?
- What did the full records tell you?
- Did you like the layout of the full record display?

TASK 3: Display of formats; Display of records

You are researching *Pride and Prejudice* by Jane Austen to prepare for discussion at a reading group. Using the Quick or Main Search see if you can retrieve any records which could help you with this preparation.

Questions

- Were you able to find the necessary information from the Brief Record display?
- What did the brief records tell you?
- Would you like more detail? If so, what details?
- If multiple editions of the same record were displayed, was this a problem for you?
- How helpful was it for you to be able to see all the different versions/editions of this work in separate records in the Copac Brief Record Display?

If they then went to look at the full record display:

- What prompted you to continue to the Full Record display?
- What did the full records tell you?
- Did you like the layout of the full record display?

TASK 4: Display of records; Find particular dates; Get a copy

You are interested in obtaining copies of recent works of Professor Stephen Hawking. Using the Quick or Main Search, how many records could you retrieve?

Then, look at a selection of records in the Full Record display and find out how you could obtain or access a copy or selected copies.

Questions:

- Were you able to find the necessary information from the Full Record display?
- Did you like the layout of the full record display?
- Were you able to find out how to access or obtain a selected a copy or copies of his work? (if not, show them)
- Would you like to be offered an inter-library loan request option on the record display?
- Where you aware of the additional information provided in the full record display? (e.g. Google books, bookmarking, accessing via a library)

TASK 5: Particular dates; Display of records; Get a copy

You wish to obtain a copy of the British Computer Society Review. See if you can find any copies listed on Copac and find out how you might access or obtain a copy.

Questions:

- Were you able to find the necessary information from the Full Record display?
- Did you like the layout of the full record display?
- Were you able to find out how to access or obtain a copy or copies of his work? (if not, show them)
- Were you aware of the additional information provided in the full record display? (e.g. Google books, bookmarking, accessing via a library)

TASK 6: Find a copy; Display of records; Borrow a copy

You want to borrow a copy of *The Library in the twenty-first century* by Peter Brophy. Perform a search using Copac to find out where it is located and whether it is available for loan.

You then decide you want to purchase a copy. Can you find out how to do this using Copac?

Questions:

- Were you able to find the Holdings display? If not, show them
- If so, did you understand the content of this display?
- Which details in the Holdings display do you find most useful?
- Is there any other information or other options you would like to see in the Holdings display?
- Is there anything else you would like to see in the Holdings display?
- Would you prefer Holdings information displayed elsewhere on Copac?
- Were you aware of 'Google Books' link? If not show them.
- If so, did you understand what it is offering? Do you think this is a useful function?

TASK 7: Find a copy; Display of records; Borrow a copy

You need to get hold of a copy of *'Clinical medicine'* edited by Parveen Kumar and Michael Clark. You need to get the most up to date edition you can find in a library that you can get to today.

Questions:

- Were you able to find the information you needed?
- Were you able to find the Holdings display? If not, show them
- If so, did you understand the content?
- Which details in the Holdings display did you find most useful?
- Is there any other information or other options you would like to see in the Holdings display?
- Is there anything else you would like to see in the Holdings display?
- Would you prefer Holdings information displayed elsewhere on Copac?

TASK 8: Find format; Display of records; Mark records; Bookmarking

You want to focus your research on Carol Reed, who directed the film: The Third Man, by Graham Greene. Perform a search and Mark a few records which include the director, which you want to keep whilst performing other searches. Review the records you have selected.

Questions:

- Were you able to select or Mark records for future reference? If so, how?
- Was it clear to you what happens once you have 'Marked' the records?
- Do you think this is a potentially useful feature? Please give reason for response.
- Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac or other services?
- Did you notice the 'Bookmark with Delicious' function? If so, do you feel it is helpful to be able to bookmark in this way?

TASK 9: Find edition; Display of Records; Mark records; Bookmarking

Perform a search for The Academic Library by Peter Brophy, 2nd edition, and view the full record of one copy. Select this record for future reference using two methods of marking or book marking offered via Copac.

Questions:

- Were you able to select or Mark a copy for future reference? If so, how?
- Was it clear to you what happens once you have 'Marked' the record?
- Do you think this is a potentially useful feature? Please give reason for response.
- Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac?
- Are there any other features you would like added to a Marked list? (e.g. annotated records, tagging records with keywords, sorting records, multiple bibliographies what could be made public selectively?)

-
- Were you aware of the option to bookmark records in Delicious? If so, do you feel it is helpful to be able to bookmark in this way?
 - Are there other services for which you would like to have bookmark options?

TASK 10: Find format; Display of records; Mark records; Bookmarking

Perform a search for a recording of the television programme A history of British Art with Andrew Graham-Dixon. View the full record of any suitable items and see if you can find two methods of marking or book marking offered via Copac.

Questions:

- Were you able to select or Mark a copy for future reference? If so, how?
- Was it clear to you what happens once you have 'Marked' the record?
- Do you think this is a potentially useful feature? Please give reason for response.
- Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac?
- Are there any other features you would like added to a Marked list? (e.g. annotated records, tagging records with keywords, sorting records, multiple bibliographies what could be made public selectively?)
- Were you aware of the option to bookmark records in Delicious? If so, do you feel it is helpful to be able to bookmark in this way?
- Are there other services for which you would like to have bookmark options?

TASK 11: Find edition; Display of records; Mark items; Get copy

You need to do some research into academic libraries and have been told that a good starting point is The Academic Library by Peter Brophy, 2nd edition. Search for this record in Copac and see if you can find any reviews about this book.

Then look for other books by Peter Brophy and Mark any records which provide reviews, summaries, contents descriptions, or tables of contents.

Review the Marked records to see which items you think might be useful for a reading list on the topic of libraries

Questions:

- Were you able to find the necessary information?
- Were you able to find any reviews, summaries or tables of contents? (if not, show them)
- Would you prefer additional information, such as summaries, reviews etc to be included in the full record display, or in a separate tab for 'additional information'?

-
- Were you able to select or Mark records for future reference? If so, how?
 - Was it clear to you what happens once you have 'Marked' the records?
 - Do you think this is a potentially useful feature? Please give reason for response.
 - Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac or other services?
 - Are there any other features you would like added to a Marked list? (e.g. annotated records, tagging records with keywords, sorting records, multiple bibliographies what could be made public selectively?)

TASK 12: Display of records; Mark items; Download results

You are developing a reading list for your web design students and want to include a list of references relating to CSS (Cascading Style Sheets). Perform a search to find relevant items on this topic, review the records and mark any suitable items for the reading list.

See if you can find out how to Save records to a file, and also email the selected records to yourself for compiling into a reading list.

Questions:

- Were you able to find the necessary information?
- Were you able to select or Mark records for future reference? If so, how?
- Was it clear to you what happens once you have 'Marked' the records?
- Do you think this is a potentially useful feature? Please give reason for response.
- Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac or other services?
- Are there any other features you would like added to a Marked list? (e.g. annotated records, tagging records with keywords, sorting records, multiple bibliographies what could be made public selectively?)
- Were you able to find the Download function and the option to Save the records to a file?
- Were you aware of the Download function? Would you find this a useful function?
- Which aspects of the Download function do you think are the most useful?

TASK 13: Find items; Display of records; Mark items; Bookmarking

You are about to start your research into genetics and agriculture. You need to find out what books there are on this topic. Perform a search and Mark a selection of records which you want to keep for future reference. Review the records you have Marked.

Next try another search to find items on agriculture which discuss the issue of modified crops. Mark any records for future reference.

Review all your marked records and compare the items marked in the first search more general search on genetics and agriculture with the second more focused search on crop modification.

Questions:

- Were you able to select or Mark records for future reference? If so, how?
- Was it clear to you what happens once you have 'Marked' the records?
- Do you think this is a potentially useful feature? Please give reason for response.
- Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac or other services?
- Did you notice the 'Bookmark with Delicious' function? If so, do you feel it is helpful to be able to bookmark in this way?
- Are there other services for which you would like to have bookmark options?

TASK 14: Display of records; Mark items; Share records,

You are updating a reading list and want to do a review of any new, revised, or updated editions of A Brief History of Time by Professor Stephen Hawking. You don't have time to look at each record in depth so you need to find out how to Save records to a file, and also email the selected records to a colleague for review.

Questions:

- Were you able to select or Mark records for future reference? If so, how?
- Was it clear to you what happens once you have 'Marked' the records?
- Do you think this is a potentially useful feature? Please give reason for response.
- Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac or other services?
- Are there any other features you would like added to a Marked list? (e.g. annotated records, tagging records with keywords, sorting records, multiple bibliographies what could be made public selectively?)
- Were you able to find the Download function and the option to print the records?
- Were you aware of the Download function? Would you find this a useful function?
- Which aspects of the Download function do you think are the most useful?
- Is there any other information or other options you would like to see in the Download function?
- Is there anything else you would like to see in the Download function?

TASK 15: Display of records; Mark items; Share records,

You have been asked to run a workshop on undertaking research projects for undergraduate students. You know that a good starting point is a book called Doing

your research project by Judith Bell, and need to search for the most up-to-date version. You also want to advise students how they can find a copy of this book.

You now want to provide a list of useful resources and references on undertaking research projects. Perform a search and mark any potentially suitable records.

You don't have time to look at each record in depth so you need to find out how to Save records to a file, and also email the selected records to a colleague for review.

Questions:

- Were you able to select or Mark records for future reference? If so, how?
- Was it clear to you what happens once you have 'Marked' the records?
- Do you think this is a potentially useful feature? Please give reason for response.
- Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac or other services?
- Are there any other features you would like added to a Marked list? (e.g. annotated records, tagging records with keywords, sorting records, multiple bibliographies what could be made public selectively?)
- Were you able to find the Download function and the option to print the records?
- Were you aware of the Download function? Would you find this a useful function?
- Which aspects of the Download function do you think are the most useful?
- Is there any other information or other options you would like to see in the Download function?
- Is there anything else you would like to see in the Download function?

Task 16: Find items; Display of records; Mark records; Book marking

You have been invited to speak at a conference on the History of the Film Industry and you want to focus your presentation on French cinema. View the full record of any suitable books and see if you can find two methods of marking or book marking offered via Copac.

Questions:

- Were you able to select or Mark a copy for future reference? If so, how?
- Was it clear to you what happens once you have 'Marked' the record?
- Do you think this is a potentially useful feature? Please give reason for response.
- Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac?
- Are there any other features you would like added to a Marked list? (e.g. annotated records, tagging records with keywords, sorting records, multiple bibliographies what could be made public selectively?)
- Were you aware of the option to bookmark records in Delicious? If so, do you feel it is helpful to be able to bookmark in this way?
- Are there other services for which you would like to have bookmark options?
- Were you able to find the Download function and the option to print the records?

-
- Were you aware of the Download function? Would you find this a useful function?
 - Which aspects of the Download function do you think are the most useful?
 - Is there any other information or other options you would like to see in the Download function?
 - Is there anything else you would like to see in the Download function?

Task 17: Find items; Display of records; Mark records; Book marking

You have been invited to speak at a conference on the History of the Film Industry and you want to focus your presentation on French cinema. Perform a search for items on French cinema and look for any video or sound recordings of films which could be used to illustrate your presentation. Mark any suitable records and see if you can email all your marked records.

Questions:

- Were you able to select or Mark a copy for future reference? If so, how?
- Was it clear to you what happens once you have 'Marked' the record?
- Do you think this is a potentially useful feature? Please give reason for response.
- Would you like to be able to retain and develop an online Marked list indefinitely as a personal bibliography containing records from Copac?
- Are there any other features you would like added to a Marked list? (e.g. annotated records, tagging records with keywords, sorting records, multiple bibliographies what could be made public selectively?)
- Were you aware of the option to bookmark records in Delicious? If so, do you feel it is helpful to be able to bookmark in this way?
- Are there other services for which you would like to have bookmark options?
- Were you able to find the Download function and the option to print the records?
- Were you aware of the Download function? Would you find this a useful function?
- Which aspects of the Download function do you think are the most useful?
- Is there any other information or other options you would like to see in the Download function?
- Is there anything else you would like to see in the Download function?

User Testing: Final Exploration of Copac (Post-Task)

Now that you have had a chance to explore Copac in a little more detail, please think again about your own areas of interest and conduct another search using a variety of Copac features.

Final Questions

- Were you able to find any information about your area of interest?
- What is your overall impression of Copac now that you have performed some tasks?
- Is there anything that you particularly like or dislike about the service in general?
- Are there any additional functions you would like included in Copac?
- Are there any other services you would like to be able to access from Copac?
- Are there any services you would like to be able to import Copac records to?

-
- Are there any similar services or systems you already use? And what is it that you like about them?
 - Are there any places from which you would like to be able to search Copac? e.g. Facebook.

Appendix Two: Focus Group Schedule

Notes to the facilitator: Normal text is a note for the facilitator; bold text can be read out to the participants.

The purpose of the focus group is:

1. To share initial interpretations of the usability testing data and from these findings, discuss with the group whether they reflected their own personal experiences and views and whether we were misrepresenting the findings or missing something important from the results.
2. To gather views and preferences of potential functionalities offered by Copac, including examples and discussion of features offered on similar online services, for example Reviews offered by Amazon.

Information collected on the participants' information seeking activities, expectations and preferences for recent developments in features and functionality will be summarised and presented as a report to help inform Copac of the possibility for future development of its services to meet the information uses and expectations of its target group.

Start

Read out the statement on confidentiality, e.g.:

Opinions expressed will be treated in confidence among project staff for the purpose of the Copac Usability Study. 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 purpose of this session is to share our initial interpretations of the usability testing and to gather views and preferences of potential functionalities offered by Copac

The session should last for around 2 hours and we will provide refreshments.

Before starting, ask if anyone has any questions. If not, begin.

Explain that in the short space of time we have for this focus group, we would like to explore the following areas (also show on PowerPoint) (some issues that were raised in the focus groups were covered in enough depth):

Part One

The first part of this Focus Group is to share our initial interpretations of the usability testing to make sure we did not misunderstand or misinterpret any of your feed back. We will be covering the following areas:

- Overall impression
- Display of Copac functions
- Menu functions (e.g. download, history etc)

Part Two

For the second part of this session we are going to discuss some potential functionalities Copac might offer in the future:

- Personal annotations
- Reviews, Table of Contents
- Inter-library loan on Copac
- Links to other services
- Links to Copac from other services (e.g. Facebook, a personal web page)
- Future functionalities

Ice Breaker:

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 you are aware of and/or use Copac?

Now move on to the areas for discussion.

Overall Impression

In the user testing, participants described what they thought Copac offered:

Could you describe how you first found out about Copac and what (if anything) prompts you to come back to it (i.e. your motivations for using Copac)?

Demo (<http://copac.ac.uk/>) and discuss some of the features mentioned in the user testing regarding the Home Page:

- Information

Ask if anyone looked at the About section?

(demo if necessary: <http://copac.ac.uk/about/>)

Does this help you understand what Copac offers?

Ask if anyone looked at the Libraries section? (demo if necessary:
<http://copac.ac.uk/libraries/>)

What does this tell you?

Does this help you understand how Copac collects its records?

- News

Ask if anyone looked at News, and noticed Copac on Twitter
(<https://twitter.com/Copac> - demo)

What do you think about this?

Is it a useful feature for Copac to offer?

Would you want to contribute to it?

- FAQs

Ask if anyone read the FAQ section? (demo: <http://copac.ac.uk/faq/>)

How helpful do you find this section?

- Search

Ask for comments on the search display (e.g. Author, Keyword, Title, Subject):
<http://copac.ac.uk/wzgw>)

Is there anything you would like Copac to offer to help with your searching? (e.g. help with spellings, browsing option etc)

Move on to discuss some more of the Functions offered by Copac.

Copac Functions

- Display of Records

Most participants did not click on the pictorial depiction of the book when made available (demo this: search Au: Brophy, Title: academic library).

Did you see this icon?

If you did, why didn't you follow the link?

Now that you have seen a demo of where the link takes you, do you think this is a useful feature?

Most participants said they liked the full record display (although some thought is a little wordy) (demo).

Would you like to make any further comments?

- Holdings

Some participants were confused by the term 'Holdings information'

Could you describe what the term 'holdings' means to you? (If necessary, provide an explanation).

Please give any suggestions for how this function could be improved?

Use of Menu Functions

Go through the functions in the right hand menu and discuss what the menu terms mean, if they have used them, and how useful they were:

- New Search (demo and discuss)
- Download (demo and discuss)
- History (demo and discuss) – RSS feed option in particular
- Marked list (demo and discuss)
- Printer friendly (demo and discuss)
- Preferences (demo and discuss)
- Help (demo and discuss)

Could we also discuss the instructions that are given on the right (e.g. Notes, and Mark the record instruction).

Go on to talk about some of the above menu functions in more depth:

- Marked list

Many said they would like to be able to export records from Copac into Endnote. This feature is actually provided by Copac (demo).

What do you think of the ‘visibility’ of this function?

What do you think about the instructions provided?

- Google Books

Most did not notice the link to Google Books/Google Review

Could we discuss what you think Google Books/Google Review offers.

(Demo) **Having seen what Google Books offers could we discuss whether this is a useful function for Copac to offer?**

If you think it should be offered by Copac, could you make some suggestions how this function could be improved.

- Delicious

Some noticed the link to Delicious.

Could we discuss what you think Delicious offers in terms of managing your Copac results.

(Demo) **Having seen what Delicious offers could we discuss whether this is a useful function for Copac to offer?**

If you think it should be offered, could you make some suggestions how this function could be improved.

What about using the RSS option instead to retain your search terms?

- Find it (demo)

Some were confused by the option to ‘Find It’ or ‘Find in JRUL’

What did you find particularly confusing?

How do you think this could be improved?

- Summaries and Reviews

Participants also mentioned that it would be good to have user generated reviews (like Amazon).

Do you think this would this be a useful addition to Copac?

Some commented that the summaries made the screen rather wordy.

Could you discuss further what you like and dislike about the summaries provided in Copac? (demo, e.g. Au: Brophy, Title: The academic library)

(Demo) Show examples of other sites with summaries, reviews etc (e.g. Science Direct).

Which ones did you like the look of most? And why?

- Download

The term 'Download' seemed to cause a bit of confusion (demo).

Do you think this is a useful function for Copac to offer? Please discuss further.

If you think it should be offered, could we have some suggestions for how this function could be improved (perhaps use another term).

Part Two

For the second part of the session, explain that we are going to discuss some potential functionalities Copac might offer in the future, in particular how Web 2.0 technologies might be incorporated into the Copac service:

Potential Functionalities

(If not already covered) Discuss the following:

- Personal annotations
- Reviews, Table of Contents, Suggestions
- Adding keywords, tag clouds
- Inter-library loan from Copac
- Links to other services from Copac (if yes, which?)
- Links to Copac from other services (e.g. Facebook, a personal webpage)

Functionalities offered by other services

Demo a selection of these and discuss what people like or dislike about the interface and features offered:

- Gower: <http://www.gowerpub.com/default.aspx?page=324> offers: ToC, introd., index, printer-friendly format.
- Amazon: <http://www.amazon.co.uk> offers: Reviews.
- University of Huddersfield library catalogue: <http://www.hud.ac.uk/cls-bin/cls.pl?c=98/24/18/19> offers; cloud tag for what others are searching, virtual shelf browser, useful links.
- Science Direct: <http://www.sciencedirect.com/> offer: email, export, open PDFs, open previews.
- Google Scholar: <http://scholar.google.co.uk/schhp?hl=en&lr=> offers: Cited by option, Related articles, View as HTML, Web Search, Library Search, BL Direct.

-
- British Library (beta) catalogue:
http://searchbeta.bl.uk/primo_library/libweb/action/search.do?vid=BLVU1&fromLogin=true&fromLogin=true offers: reviews, tagging, help with search, similar items.

Final comments

Would you like to make any final comments or observations?

Ask each group member to fill out the demographic tick-sheet, this will provide a picture of the make-up of each group.

Finally thank the group for their time.

Finish

Appendix Three: Usability Attributes Table

The following table provides an analysis of the User testing data under recognised usability 'attributes' such as those developed by Nielsen (2003) and Tsakonas and Papatheodorou (2006) (see footnotes 2 and 3, page 43) .


	Home page and menus	Search	Display	Functions	Comments / interpretation
Understandability	<p>Nobody had looked the Libraries section . Most participants did not fully understand it, being under the impression that Copac collects everything</p> <p>Links to Copac from a university library led to the belief they would be able to find records that were held in their library.</p>			<p>The overwhelming view was that Copac needs to update its interface and to prominently display the different functions and services it offers.</p> <p>There are lots of useful functions, BUT are "hidden" within the pages of Copac - "<i>here and there and everywhere</i>", and thus functions are not very visible.</p>	<p>It is of fundamental importance that users are able to understand what they are searching. It needs to be clear that Copac only includes records from the contributing libraries and which they are.</p> <p>Users should be able to quickly see what functionality the service provides, and how these could be useful in the Copac context. The lack of visibility relies on the user knowing what to look for and a less than intuitive usage of the functionality found.</p>
Learnability	The About pages link is not	Availability (or not)		Many users had difficulty	The help or troubleshooting

	<p>prominent with no useful information for the task in hand. Users would prefer Copac to be intuitive and not have to read 'About' or 'Help' in order to use.</p> <ul style="list-style-type: none"> • Help or Troubleshooting pages should be simple, a bullet point list. • Display actual questions in FAQ rather than topic headings links. • Option to search on FAQs would be useful and provide link to top of list 	<p>of Boolean searching not covered in 'Help'.</p> <p>Users would like a Browse option to help select subject/ keywords, which would be particularly useful if an initial search failed to retrieve any results.</p>		<p>finding out how to mark records. And needed to resort to 'Help'</p>	<p>pages need to contain simpler instructions and re-organised to enable the user to quickly find or spot their particular question.</p> <p>For general use of the service users should not be expected to resort to help. Redesign should highlight the relevance of the functions and the appropriate use of labels, icons and placement should guide usage.</p>
Attractiveness: consistent & appropriate design	<p>The right hand side was usually ignored as considered to be where adverts are placed</p>		<p>In Brief Records use icons to indicate and separate each of the formats such as book, e, DVD, CD</p> <p>It might be useful to provide a drop down list of the various entries for a version of a record</p>	<p>The site isn't visually attractive with too much empty space and little use of colour to highlight, draw attention and distinguish/ group functions.</p> <p>Things on the right-hand side should have titles to make their purpose clear. The menu here should be re-positioned: there is too much space below it.</p> <p>The 'Printer Friendly' option</p>	<p>There are numerous design 'touches' to address site usability and functionality, e.g., ensure links and options are consistent</p> <p>In particular the details on the RHS of the page need to be clear with respect to their purpose and relevancy in the Copac context. Use of colour (or some other means of grouping functions) should be used to emphasise these as integral to the users overall</p>

			<p>The pictorial depiction of the record (e.g. book cover image) helped users recognise what they were looking for but the link (the same as the title link) could be better used (e.g. to 'look inside')</p> <p>Viewing the BL web page suggested it might be desirable to have expandable sections (e.g. compress lengthy details with just the heading/title on display as a link – to then be expanded ...</p>	<p>was only <i>sometimes</i> displayed in 'Full Record' view, but NOT in 'Marked list Full Record'</p> <p>Visibility and purpose of the Google Books and Preview function needed to be explained much more clearly</p>	<p>task of locating and using information available from Copac.</p> <p>Consider use of expandable sections and icons to indicate and separate different information on a record</p>
Errors	<p>The browser could be re-started by going to the Copac 'Home' page and starting over again, but this caused much frustration and delay</p>	<p>Copac was sometimes very, very slow in returning results.</p> <p>Also, sometimes it returned a 'no results' when there should</p>		<p>Very slow response when clicking the flag to 'mark' an item. Users may lose interest</p> <p>The Google Books was sometimes so slow to load the user had scrolled down the page and did not see it.</p>	<p>A slow response rate or no indication that a process is taking place will lead to errors being made or with users losing interest.</p>

		have been hits./			
Ease of use	Include a Search box on the Home page for a quick search (instead of having to click to another page)	<p>In the Brief Record page no one found how to refine their search: it isn't evident except on mouse roll-over</p> <p>Delicious / saving search terms for re-use would be useful but prefer to be able to do from within Copac</p>	<p>Most liked the full record display</p> <p>They particularly liked the summaries and felt that all the details displayed were useful.</p> <p>Others commented that there was not enough information, with possible additional information such as a table of contents, or a list of references.</p> <p>Although they liked the reviews, participants felt that a link to something like Amazon reviews and Amazon star ratings would be preferable in terms of volume</p>	<p>Want to retain marked list for future use. And, to be able to export marked records into a reference management tool e.g. – Endnote, but did not find out how to do so within Copac.</p> <p>Some would like to be able to share their marked lists. May be useful to have Copac provide suggested alternatives or recommended titles (e.g. "If you like this,...").</p> <p>They liked the ability to email the records or to save them to file. May want to add notes to a saved record or "edit the email before sending it".</p> <p>Extra functions such as Google Books and Google Preview, Delicious, RSS, exporting to Endnote should all be placed together with a clear indication of what they offer and how they could be used in a Copac situation. The purpose of the functions were not clear, and ignored</p>	<p>Consensus was that Copac provides a good service for searching and locating quality resources and should not try to change too much. It should be more visible, especially as a link from academic institutions. Its links to other services should be grouped together and displayed in a way to indicate what is useful to the Copac user.</p> <p>Users should be able to refine and save their searches more readily. Guidance in using the subject and keyword searches (possibly by browsing functionality)</p> <p>The full record display is useful and additional information such as ToC or Cited by may be useful in a 'detailed view'</p>

			and reliability to a Copac rating system.	on the assumption it was an advert.	<p>It is clear 'marked list' is liked and that this sort of service could be extended: to export records, save personal annotations (e.g to build a reading list), use for recommendations, a 'Forum' for users to share comments, reviews, news. ILL</p> <p>But the Copac interfaces need to be improved. Consistency was considered to be of major importance. As was the prominence given to Copac's extra functionality and guidance in their usage provided through effective design.</p>
Navigation - ease traversing interface (use of menus, bars	Difficult to get back to the Home page, as no link at the top as expected, the only way seems to be via the Copac icon at the bottom		No attention was paid to things on the right-hand side of the page on the	Participants were shown the Menu of functions on the right of the page (New Search, Download, History, Marked list, etc). Many had not really	No major navigation issues, dominated by the issue of things on the RHS

etc)			<p>assumption that these were adverts.</p> <p>The Google Books link with a picture, in particular, went unnoticed.</p>	<p>considered - or even noticed - this list, and felt it should be placed elsewhere on the page.</p>	
Terminology - Comprehend		<p>'Main Search' considered as unusual terminology, most sites using the term 'Advanced Search', or 'More Options'</p> <p>Several participants were confused by the terms 'subject' and 'keywords', wanting to know what the difference is.</p>	<p>Participants understand and wanted 'Refine Search' from the Brief Record page but not found</p> <p>Link back to 'Brief Records' from Full records not spotted. Suggested terminology was 'Results list'.</p> <p>Most of the participants liked the Holdings display, although the terms 'Location'</p>	<p>Nobody noticed the mark a record .</p> <p>Terms used to describe the functions were deemed confusing – e.g., what does 'History' mean / why RSS appears in History and how used?</p> <p>The term 'Download' was not understood to indicate the functions contained within it: those functions would be better if directly accessible from Records pages. ... as in other sites looked at with the options ('Email', 'Print' and 'Save to . .' - Delicious, Refworks and Endnote) on</p>	<p>There are several areas for the improvement of the terminology to better indicate functionality.</p>

			<p>and 'Holdings' were considered confusing. It was felt that a more general term could be used, "For availability in XXX library . . .".</p> <p>Export to a reference management tool should be one of the Download functions (though term 'Download' should not be used).</p>	<p>the record under the title 'Keeping this item' were noted as being very much preferable to the 'Download' option on Copac</p> <p>The icon, language and purpose 'Find in JRUL' icon was not at all clear</p>	
--	--	--	---	---	--

CERLIM
Centre for Research in Library and Information Management
The Manchester Metropolitan University

Department of Information and Communications

Geoffrey Manton Building

Manchester

M15 6LL

Tel: +44 (0)161 247 6142

Fax: +44 (0)161 247 6979

www.cerlim.ac.uk
