

**WorldCat Local at the University of California:
Usability Testing: Round Two, Fall 2009**

Findings and Recommendations from the UC-OCLC Fall 2009 Assessment Project

SUMMARY REPORT

Report Authors:

Arnold Arcolio,
User Researcher, OCLC

Sara Davidson
Librarian, UC Merced

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I. INTRODUCTION

In the fall of 2009, staff from OCLC and the University of California designed and conducted a second round of usability testing for a Next Generation Melvyl Pilot system based on WorldCat Local.¹ Test goals and objectives included:

- Assessing whether changes to Item Details pages that came out of the first round of testing provide a clearer path to electronic content
 - Verifying that participants can obtain electronic content through UC-eLinks or local 856 links
- Assessing changes to Item Details pages for access to print
 - Verifying that participants can obtain print materials through Place Hold or Request functionality
- Discovering whether specific search practices UC staff believe are important for scholarly researchers are supported by WorldCat Local or used by our test participants
 - Verifying that participants can successfully locate records for journals
 - Verifying that participants can identify items from a series based on a series search
 - Assessing how successfully participants can locate journals with changed titles
 - Exploring the circumstances under which participants would use call numbers in searching
- Determining how participants interact with results pages and full item display pages
 - Assessing participants' awareness of their preferred edition
 - Observing how participants interact with facets
 - Determining participant preference for navigation of search results
 - Determining whether test participants are successful in a two-step process for viewing detailed serial holdings
 - Verifying that the participants' bibliographic workflows are supported
- Exploring how participants think about local, group, and global scope
 - Exploring what locations academic researchers regard as local
- Exploring participant reaction to features introduced in prototypes
 - Determining participant reaction to tabbed search results, changed locations of links, and shortcut buttons

Test objectives were informed by several sources including earlier test results at UC and elsewhere, use cases developed by UC subject task groups and feedback generated from Next Generation Melvyl Pilot.

¹ The report from the first round of usability from 2008 is available at http://libraries.universityofcalifornia.edu/about/oclc_docs/WCL_Summary_03Sept2008.pdf

II. TEST METHOD

With the support of campus library staff², testing was conducted at UCSF (using <http://ucsf.worldcat.org/>) and UCSB (using <http://ucsb.worldcat.org/>). Test sessions involved one participant, a facilitator and remote observers; scripted tasks were followed by structured discussion, and each test session lasted approximately 90 minutes.

III. TEST PARTICIPANTS

Campus staff recruited a total of twelve test participants from the sciences -- graduate students, faculty, and research staff. UCSF participants included researchers from the health sciences, and UCSB participants were from the fields of physics and chemistry.

UCSF Nov. 10 and 12, 2009

graduate student, staff	Urology
graduate student	Bioengineering
faculty	Health Policy Studies
graduate student	Nursing
faculty	History of Health Sciences
graduate student	Biological and Medical Informatics
graduate student	Global Health Sciences

UCSB Nov. 17-18, 2009

graduate student	Chemistry
faculty	Physics
graduate student	Physics
graduate student	Physics
graduate student	Chemistry

IV. OVERVIEW OF FINDINGS

Findings have been organized into five sections roughly following a typical traverse: searching, identifying and selecting, obtaining physical copies, obtaining electronic content, and citation management workflow. Findings in these sections are based on live Next Generation Melvyl Pilot sites. A sixth section includes findings based on prototypes.

The most significant finding is that access to electronic resources is very substantially improved compared to our first round of Next Generation Melvyl Pilot tests, due largely to analysis and recommendations provided by UC about the priority of links. Further improvement in this area is still needed. Confirmation that participant performance obtaining print copies remains high after the relocation of some buttons is also very important. Confusion around the name and scope of the Journal Source index is an area where a small change could prevent a substantial number of consequential mistakes. Perhaps the most provocative finding concerns how some participants thought about a nearby group of libraries that are outside the local collection and maybe outside the system-wide collection too. This finding can only be suggestive, not definitive.

² Thanks to Michele Mizejewski (UCSF) and Lorna Lueck (UCSB) for help with creating tasks and identifying materials of interest in these subjects, good judgment in participant selection, diligent scheduling, and reliable equipment setup.

Searching

1. Test participants who wanted to find a record for a journal (rather than an individual article) did not know whether to choose the Journal Source or Title index on the Advanced Search page. Several participants selected the wrong index, Journal Source rather than Title and, therefore, failed to find the journal. (Screenshot A)

RECOMMENDATION: Change the name of the Journal Source index to Journal Title and change its scope to include records for serials as well as for individual articles.

2. When searching, participants repeatedly made attempts which they described as getting back to the beginning or starting over. When they wanted to begin a new search, several participants routinely clicked on the Melvyl name in the banner or used the back button to return to a place where they could, as they said, "start over." And at other times, participants were disappointed that search values did not persist on the Advanced Search page. Building on this impulse to do something special to begin a new search—and the associated expectation that otherwise some search values will persist—could be a way to provide some persistence in search values without the problems we've seen associated with "sticky" search values in the past.

"I'm just going to go back to the main page here for a second. Just to kind of reset everything." [clicks on Melvyl@UCSF image, then pulls down Search UCSF Library menu] (P2)

RECOMMENDATION: Provide a control for starting a new search. Then let some search values persist from the simple to the advanced search page.

3. In Advanced Search limits, participants had difficulties anticipating whether dissertations would fall under Format or under Content. More than half of participants (7/12) navigated to the Advanced Search page and searched with a limit. On the Advanced Search page, most of those (4/7) looked to the Format limit before they found the value Thesis/Dissertation in the Content limit.

RECOMMENDATION: Reconsider the distinction Format and Content and the values that are emphasized.

4. All participants were unable to find current issues of a journal using a superseded title even after the prospect of a title change was called to their attention. Several participants did describe past problems because journal titles had changed. When asked, none reported that the solution to this problem in the past was found in a library catalog. Instead, they mentioned colleagues and publishers' web sites. One participant described this case as unlikely because she is nearly always looking for specific articles, and has reliable information about the title of the journal at the time the article was published.

No change is proposed at this time.

5. The facilitator asked all participants if they searched by call number. Only one participant—a faculty member in physics—reported that he searched in a library catalog using a call number.

"Not in the last ten years" (P1)

"No. I never have a call number." (P10)

"No. It's too specific, too long, too tedious." (P12)

More evidence about who searches by call number and under what circumstances will be needed before a recommendation for change can be made.

Identifying & Selecting

6. Participants often preferred an edition other than the default edition, depending on the context of their search. Before participants were asked about edition preference, few wondered whether they would prefer the default edition or some other one; all simply followed the path to obtain the default edition. When the facilitator inquired about preferences, some participants expressed a preference for seeing the latest locally-held edition by default while others expressed a preference for seeing the latest edition overall. No participants expressed a preference for the current default, the most widely-held locally-held edition.

"My preference is to find the most timely and recent information. So not knowing that there's something available would make me think that it's kind of a failure of the search itself—a search that somehow let me down in not finding a more recent edition higher up in the results. But it seems like if I'm looking at the result for the particular edition, I might be alerted somehow that I've stumbled on something that's not the most current available information." (P2)

RECOMMENDATION: Show the most recent locally held edition by default. Call attention to some other important editions and formats such as more recent editions held elsewhere and more available editions held locally.

7. Test participants seldom found an available electronic version of a book when it was not the default version we showed. Most participants (8/12) concluded there was no electronic access to the book in question. Few (4/12) clicked on the View all editions and formats link and discovered the electronic version listed there.

*"I probably wouldn't have thought to look for that" (P11)
"Nothing would have let me to ask that question. [Is it available in electronic form?]" (P9).*

RECOMMENDATION: In the Get it online section of Item Details page, include links to online versions of other editions. Include messaging to indicate what different edition the link represents.

8. Participants reported that they would prefer a list of editions that is comprehensive rather than limited to local or group scope (as it is now when a search is limited to local or group scope). Participants expressed interest in being able to sort the list of editions by scope—local, group, global.

"The newest at the top holds the most prominence in my mind." "One thing I kind of wonder is what's available to me. There's a column here for 'Held by.' Timeliness of access to information is going to matter almost more to me than the edition itself. And so the ability to sort and find the thing closest to me is really going to be helpful." (P2)

RECOMMENDATION: Make the scope of the list of other editions and formats always global, with an option for sorting by local and group Library. [The option for sorting is now implemented.]

9. When searching for items in a series, participants were not confident that they had found only items in the series. They looked for and would have been served by series titles on brief search results. Some participants went on from the search results page to Item Details pages to look for this information.

*"I don't know which are in the series." (P10)
"Kind of useless to have to click through all of these." (P11)*

RECOMMENDATION: Include series statement in brief search results.

10. Some participants stated a preference for certain values in the Format facet—Book, Article, and Journal—to appear first, no matter how infrequently they might be in a search result, even though these participants preferred predominance order for other facets, for example for the Author facet. Participants often mentioned PDFs when they were discussing format. Some participants reported that they did not know what "Internet resource" would mean.

RECOMMENDATION: In the Format facet and the Format limit on the Advanced Search page, put the values "Article," "Book," and "Journal" at the top of the list.

11. Few participants expressed a desire to navigate from one Item Details page to the next without returning to the search results page. Instead, participants reported assessing that brief results list and selecting a few specific items. Some participants demonstrated opening a new browser tab as they clicked on selected items from a search result. This method of result handling (which preserves the context of the whole list while assembling an easy-to-navigate set of things of interest) might be used with any list. It doesn't depend on the features of the specific site, but on the browser's features.

"I definitely sort of pick and choose." (P8)

"I usually don't use the next button. My preference is to be able to see." (P12)

No change is proposed at this time. Comments from these test participants are only suggestive. We would need more evidence in order to know what user behaviors are most common and what change might be beneficial.

12. Blank thumbnails looked unloaded to some participants. (Screenshot B)

"Just looking at this result [thumbnail image]—it's kind of a placeholder for what might be a little screenshot of what is going on. They all seem to be blank on the page, which makes me think that the page isn't working properly." (P2)

RECOMMENDATION: Redesign the placeholder cover image for articles and books to make it look less like an image that has failed to load.

Obtaining Physical Copies

13. Participants successfully found and used Place Hold or Request buttons to obtain needed items. All participants correctly reported availability of checked-out items. Most participants (8/12) clicked on the Hold button when the local copy was unavailable. The rest (4/12) clicked on the Request button, describing it as their preference. (Screenshot C) Most participants (10/12) clicked on Request for an item in the UC system-wide collection not held in the local collection. Most participants (9/12) clicked on Request for an item not held in the local or UC system-wide collection.

No change is recommended based on the results of this test.

14. Half of test participants were impeded by a two-step process for viewing detailed serials holdings. Only half of participants clicked on a View item details link to see local availability information. (Screenshot D)

RECOMMENDATION: Recommendations have already been made, based on recent tests at academic libraries in Illinois, to reduce the occurrence of this button when possible.

Paths to Electronic Content

15. Previous changes to the Item Details page—gathering links to electronic content, reducing the number of alternatives, labeling and promoting local links, and collapsing non-local links—substantially improved participant performance in getting access to electronic content.

All participants used a UC-eLinks button when it appeared. Most participants (9/12) used a local 856 link for a journal. None expanded or clicked on links from "Other libraries" when they were present. Participants expressed more confidence in local links to online content than in links to online content from "Other libraries."

However, several participants reported that the path to electronic content seemed long ("*two clicks*"). Several expressed an expectation that there would be something on the search result page they could click on which would produce, on the next page, a PDF of an article.

"One of the things that is kind of troublesome about this is now I've clicked I think three times to get this far [to the UC-eLinks page] and I'm not even at an article yet. Some of the other places I tend to search it takes one click maybe to get somewhere." (P2)

RECOMMENDATION: Continue to make the path to electronic content shorter and more predictable.

16. On Item Details pages, one participant expressed discomfort with the lack of visual consistency between the "Find a copy online" section and "Find a copy in the library" section. (Screenshot E)

RECOMMENDATION: Align the style of the "Find a copy online" and "Find a copy in the library" sections of Item Details pages so that the style of "UCSF Library" (for example) in the "Find a copy online" section matches the style of "University of California Libraries" in "Find a copy in the library" section. Consider whether the items under these headings that most deserve the user's attention and action—buttons or links—can be made more parallel between the two sections.

Citation Management Workflow

17. Most participants reported using EndNote to manage citations and sometimes the full text PDFs associated with those citations.

"Three things I do to keep track of material I may read in the future. The most common is making a bookmark on my computer of a particular web page or a source of that information. A second thing I might do is...just keep a list in Amazon, an Amazon wish list... there's a central place that I have a list that's available online, something where I have credentials, and I've already gone through the hassle and the hoops of setting up a And then the third thing is I have like some desktop software that helps me manage the things I either use in research or that are things I want to read." "When I'm writing a publication that may shift to something more like Endnote...because there isn't really a competitor that can challenge it. So it's not by choice." "Endnote has lots of functionality, but it constrains the workflow that I have. It forces me to adopt its convention of

thinking. "Registration and trying to remember where things are stored are two things that make something difficult." (P2)

No change is recommended based on the results of this test.

Prototypes: Localness

We used prototype pages to explore what participants saw as local and how they thought about access beyond the local collection. We presented four levels of holdings: local, UC Libraries, California Libraries, and Worldwide Libraries. This way of arranging things did not quite fit with the expectations and behavior our test participants reported. No participants expressed interest in a "California Libraries" level. Some participants—at UC San Francisco, but not at UC Santa Barbara—expressed interest in knowing what was "nearby."

The views of test participants at UC San Francisco can be paraphrased this way:

1. I can get an item in a few minutes by walking to it on my campus.
2. I can get an item today or tomorrow by driving across town, or to the next town, whether the item is in the UC system or not.
3. I have to request the item and it comes sooner because it is from the UC system-wide collection.
4. I have to request the item and it comes later or less reliably because it is from outside the system-wide collection.

The views of test participants at UC Santa Barbara did not include a level of access to nearby collections. Beyond the local collection, the next level of access was the UC system-wide collection.

If holdings were not on campus, participants did not regard them as local. Items in off-campus storage facilities (e.g. NRLF) fit with participants' expectations for the group (UC Libraries) level rather than the local level.

Libraries near enough to be within driving or public transit distance fell into a single category whether or not they were part of the UC system. For these locations, participants wanted to know details about item availability since they might travel if a copy were available. The further-away locations within the UC Libraries group were viewed as a different category. For this category, availability was not interesting since participants would not travel to obtain a copy. Instead, participants reported that they would request a copy and rely on someone else to determine where the item would come from.

Participants expressed confidence that items from within the system-wide collection would be delivered more quickly and reliably than requests for items from outside the system-wide collection.

RECOMMENDATIONS: Libraries configuring WorldCat Local should consider including in Level 1 only collections physically located on campus. OCLC and UC should investigate staff and user views about the utility of defining a "nearby" level at various campuses. Do staff need to define which non-UC institutions should be included or excluded at this level? Does the physical radius vary from campus to campus? Alternatively, if a "near" level 2 is not supported, then the sequence of libraries within the group level on Item Details pages should be by distance, with the nearest expanded and the rest collapsed.

V. SCREENSHOTS

Searching

Screenshot A:

The screenshot shows an "Advanced Search" interface. At the top right is a blue "Search" button. Below the title is a grey bar with the text "Enter search terms in at least one of the fields below". The main search area contains several input fields: "Keyword:", "Title:", "Accession number:", "Author:", "ISBN:", "ISSN:", "Journal Source:", "Keyword:", "Subject:", and "Title:". A dropdown menu is open over the "Journal Source:" field, listing "Keyword:", "Subject:", "Title:", and "Year:". The "Year:" option is highlighted in blue. Below the search fields are several filter options: "Libraries Worldwide" (dropdown), "Year:" (range input with "e.g. 1971" and "e.g. 1977" examples), "Audience:" (dropdown set to "Any Audience"), "Content:" (dropdown set to "Any Content"), "Format:" (dropdown set to "All Formats"), and "Language:" (dropdown set to "All Languages"). A second blue "Search" button is located at the bottom right of the form.

Identifying & Selecting

Screenshot B

The screenshot displays a library search interface. At the top, there is a navigation bar with 'Home', 'Search', and 'UCSF Library' menus. A search bar contains the text 'transfer rna genes in pieces' and a 'Search' button. Below the search bar, it indicates 'You are searching Libraries Worldwide' and provides an 'Advanced Search' link. On the right side of the search bar, there are icons for 'Print', 'Share', and 'Ask a Librarian', along with a 'WorldCat (Sign In)' link.

Below the search bar, the search results are displayed. The results are limited to 'Libraries Worldwide' and are sorted by 'Relevance Only'. The search results show 24 results in 38 seconds. The first five results are listed below:

1. [Transfer RNA genes in pieces.](#)
by L Randau, D Söll
Article
Language: English
Publication: EMBO reports, 2008 Jul; 9(7): 623-8
Database: From MEDLINE®/PubMed®, a database of the U.S. National Library of Medicine.
Held by: UCSF Library
2. [Transfer RNA genes in pieces](#)
by L Randau, D Söll
Article
Language: English
Publication: EMBO REPORTS, 9, no. 7, (2008): 623-628
Database: British Library Serials
Held by: UCSF Library
3. [Transfer RNA genes in pieces are an ancestral character.](#)
by Di Giulio M
Article
Language: English
Publication: EMBO reports, 2008 Sep; 9(9): 620; author reply 620-1
Database: From MEDLINE®/PubMed®, a database of the U.S. National Library of Medicine.
Held by: UCSF Library
4. [Transfer RNA genes in pieces are an ancestral character](#)
by M Di Giulio
Article
Language: English
Publication: EMBO REPORTS, 9, no. 9, (2008): 620-620
Database: British Library Serials
Held by: UCSF Library
5. [Transfer RNA genes in pieces are an ancestral character](#)
by Di Giulio M.
Article
Language: English
Publication: EMBO Reports, v9 n9 (2008 09 10):
Database: Copyright 2009 Elsevier B.V. All rights reserved
Held by: UCSF Library

On the left side of the search results, there is a 'Refine Your Search' panel. It includes filters for 'Author' (Di Giulio M (3), Roe Fh (1), Rosen Linda (1), Randau Stephen Peter (1)), 'Format' (Article (20), Internet Resource (4)), 'Year' (2008 (2), 2008 (10), 2007 (2), 2001 (2), 1988 (2)), and 'Language' (English (10)).

Obtaining Physical Copies

Screenshot C

Everything conceivable : how assisted reproduction is changing men, women, and the world (Book, 2007) [UCSF Library] - Mozilla Firefox

http://ucsf.worldcat.org/oclc/73994503?referer=brief_results

Home Search UCSF Library

elvy@ucsf

Pilot

You are searching Libraries Worldwide | [Advanced Search](#)

[Return to Search Results](#) [Cite/Export](#) [Print](#) [E-mail](#) [Add to list](#) [Share](#) [Permalink](#) [Ask a Librarian](#)

Everything conceivable : how assisted reproduction is changing men, women, and the world

Author: [Liza Mundy](#)
Publisher: New York : Alfred A. Knopf, 2007.
Edition/Format: **Book** : English : 1st ed [View all editions and formats](#)
Summary: Skyrocketing infertility rates and the accompanying explosion in reproductive technology are revolutionizing the American family and changing the way we think about parenthood, childbirth, and life itself. In this work of investigative reporting, journalist Mundy captures the human narratives, as well as the science, behind what is today a controversial, multibillion-dollar industry, and examines how the huge social [Read more...](#)

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Find a copy in the library

This item is not currently available at UCSF Library.

UCSF Library

Get it in the library [Place Hold](#)

0 of 1 available

Location	Status	Call number	Notes
Parnassus: Books - 4th Floor	DUE 12-16-09	RG133.6 M86 2007	

University of California Libraries

Get it from this library group [Request](#)

7 group libraries own this item

WorldCat

Find it in libraries globally [Request](#)

Worldwide libraries own this item

Obtaining Electronic Content

Screenshot D

The screenshot shows a web browser window displaying search results for "Clinical infectious diseases (eJournal / eMagazine, 1992)". The page is organized into several sections:

- Links to this item:** Lists two UCSF Library entries: "v.24, no. 6 (1997, June)" from University of Chicago Press and "v.14(1992)- [Latest 5 years not available online]" from JSTOR.
- Find a copy in the library:** This section is expanded to show results from UCSF Library, University of California Libraries, and WorldCat.
- UCSF Library:** Shows "3 copies" available. A table lists the following items:

Location	Status	Call number	Notes
Parnassus: Journals - 1st Floor	✓ v.14(1992)-	W1 CL 717 For current year check 3rd Floor, for Bound volumes check 1st Floor	
San Francisco General Hospital Library: Journals	✓ v.10(1994)-, v.45, no.11 (12 01, 2007)	NO CALL NUMBER FOR SFGH	

A red box highlights the "View item details" link for the San Francisco General Hospital Library entry.
- University of California Libraries:** Shows "9 group libraries own this item" with a "Request" button.
- WorldCat:** Shows "Worldwide libraries own this item" with a "Request" button.
- Details:** A collapsed section at the bottom.

Screenshot E

Find a copy online

Links to this item

UCSF Library (1)

[v.7\(2000\)-](#)
Taylor & Francis via informaworld. Restricted to UC campuses

Other libraries (3)

[metapress.com](#)

[firstsearch.oclc.org](#)
Address for accessing the journal using authorization number and password through OCLC FirstSearch Electronic Collections Online. Subscription to online journal required for access to abstracts and full text

[firstsearch.oclc.org](#)
Address for accessing the journal from an authorized IP address through OCLC FirstSearch Electronic Collections Online. Subscription to online journal required for access to abstracts and full text

[Hide all links from other libraries \(3\)](#)

Find a copy in the library

A physical copy of the item is not in circulation at UCSF Library, but you may be able to access this item online.

University of California Libraries

Get it from this library group Request

9 group libraries own this item

UC Berkeley Libraries	check availability for this item
UC Davis Libraries	check availability for this item
UC Irvine Libraries	check availability for this item
UC Merced Library	check availability for this item
UC San Diego Libraries	check availability for this item

VI. TEST TASKS

Tasks at UCSF

- 1) You're interested in the book *Essential Bioinformatics* by Jin Xiong. Can you get it?
- 2) You want to see articles from recent issues of *Anthropology & Medicine*. Can you?
- 3) You are interested in an article called "Transfer RNA Genes in Pieces." Can you find it?
- 4) You're interested in the book *Everything Conceivable: How Assisted Reproduction is Changing Men, Women, and the World* by Liza Mundy. Can you get it?
- 5) You want an article that appears in the journal *Clinical Infectious Diseases*, volume 37, issue 10. Can you get it?
- 6) You're interested in the book *A Flourishing Yin: Gender in China's Medical History, 960-1665*. Can you get it?
- 7) You're interested in early twentieth-century views of sex differentiation. A colleague has mentioned a book about hermaphroditism by H E Jordan. Can you get it?
- 8) You're interested in the *Handbook of Neonatal Intensive Care* by Merenstein and Gardner. Can you get it?
- 9) You were once interested in *An Introduction to Biomaterials* by Scott A Guelcher. Now you'd like to see if other books in the same series are interesting to you. Can you find other monographs from this same series?
- 10) You've seen an article from a 1998 issue of the journal *Immunology Today* and you're curious about the contents of recent issues. Can you get them?
- 11) Can you find some recent dissertations on pharmacogenomics?

Tasks at UCSB

- 1) You want to use the book *Modern NMR Techniques and Their Application in Chemistry* by Alexander Popov. Can you get it?
- 2) You want to see articles from recent issues of *Transactions of the American Mathematical Society*. Can you?
- 3) You are interested in an article called "Distributed Chaos Revisited" by Piotr Oprocha. Can you find it?
- 4) You're interested in the book *VLSI Design of Wavelet Transform: Analysis, Architecture and Design Analysis*. Can you get it?
- 5) You want an article that appears the journal *Physics of Plasmas*. The article appears in volume 4, number 4. Can you get it?
- 6) You're interested in the book *A Flourishing Yin: Gender in China's Medical History, 960-1665*. Can you get it?

- 7) You're looking for an animated feature called *Newton in a Bottle: Physics for Kids*. Can you get it?
- 8) You're interested in the *Mathematical Methods in Risk Theory* by Hans Buhlmann. Can you get it?
- 9) In the past, several items in the Ellis Horwood Series in Chemical Science have been of interest to you. You now wonder what other books are in the series. Can you find other books from this series?
- 10) Can you get the most recent issues of the *Journal of the Chemical Society. A, Inorganic, Physical, Theoretical*?
- 11) Can you find some recent dissertations on metabolic enzymes?