

UC-eLINKS UCSD ASSESSMENT REPORT

UC-eLinks Redesign Project

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http://www.cdlib.org/inside/assess/evaluation_activities/docs/2007/elinks_ucsd_feb2007.pdf

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1 EXECUTIVE SUMMARY

The main purpose of the UCSD UC-eLinks assessment was to determine if the changes made to the UC-eLinks user interface improved the usability of the interface. Eight usability testing sessions were conducted on February 22-23, 2007 at UC San Diego in a Library Administration office in Geisel Library. Each session lasted approximately one hour.

The following are two major findings from this round of assessment:

1. Placing links into logical groupings improves usability, but current labels for groupings and links are confusing to users.
2. Students face many potential pitfalls in trying to reach online full text. The UC-eLinks window itself poses challenges. Furthermore, even if students successfully navigate through UC-eLinks to a publisher's site – for a variety of reasons presented in this report – there is no guarantee that they will obtain the full text article they were seeking.

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3 PURPOSE OF THE ASSESSMENT

The main purpose of this assessment was to determine the usability of the modifications made to the UC-eLinks window. A secondary goal was to learn about students' research workflow.

Key questions included the following:

1. Does the new design help users understand the various options in the UC-eLinks window?
2. Does the new design help users determine the best next step?
3. Does the new design improve the general usability of the UC-eLinks window?

4 PARTICIPANTS

For this round of testing, we recruited eight upper division undergraduate students at the University of California at San Diego by posting flyers in libraries. Because expert domain knowledge is not essential to achieving the goals of this round of testing, faculty were not actively recruited.

Year in School	Major(s)
5 th	Mathematics
2 nd	General Biology
Senior	Economics
Senior	Management Science
Junior	International Studies, Pre-med
5 th	Biology, Japanese Studies
4 th	Literature, Human Development
Senior	Political Science, Economics

5 METHOD

This round of usability testing consisted of eight task-based user interface testing sessions. Each one-hour session consisted of one participant, a facilitator, and an observer/note-taker.

5.1 ASSESSMENT DESIGN

5.1.1 INTERVIEW AND TASK-BASED USER INTERFACE TESTING

Each participant was greeted by the facilitator and made to feel as comfortable as possible. The facilitator explained the purpose of the test. Participants were assured that the system was being tested, not them. The facilitator summarized test procedures and instructed participants on the "thinking aloud" protocol. At the end of the introduction, the facilitator told the participants about their right to stop testing at any time and asked them to sign consent forms. Participants were then given a \$25 gift card for the campus bookstore.

For the first part of the session, the facilitator asked participants about their academic research experiences. Test participants were then asked to complete a series of tasks to the best of their ability. At the end of the session, the facilitator debriefed participants and gave them an opportunity add any comments. Afterwards, the facilitator thanked the participants for their efforts.

5.1.2 OBSERVATION

As each participant went through the interview and tasks, the observer took notes on the steps taken by the participant and any signs of frustration or satisfaction from the participant.

5.1.3 POST-ASSESSMENT DEBRIEFING

After the task-based portion of the assessment, the facilitator asked participants to share their overall comments about their experience and the system. The facilitator asked about any specific problems encountered during the test.

5.2 DATA COLLECTION METHODOLOGY

During task-based user tests, data was collected using observation and the “thinking aloud” protocol.

Qualitative data to be collected include the following:

- Any unexpected steps taken by the participant during each task
- Any indications of frustration or satisfaction from the participant
- Any opinions of usability or aesthetics of the system expressed by the participant

5.3 SCHEDULE

This round of testing took place February 22-23, 2007 at UC San Diego.

5.4 SCENARIOS USED IN SESSIONS

All scenarios originated in the ‘Quick Search’ tab of the CSA Illumina interface.

5.4.1 ONE ONLINE SOURCE

- “Platypus”
 - One source via SpringerLink. PDF link is half-way down right column.
- “Shaman Rituals”
 - One source with citation info in text boxes. Resolves to journal webpage, not directly to article.
 - 4 of 6 who were given exercise were successful.
- “Three Gorges Dam”
 - One source with citation info only in header. Resolves to journal webpage, not directly to article.
 - 5 of 5 who were given this exercise were successful.

5.4.2 TWO ONLINE SOURCES

“Harvest Celebration”

5.4.3 NO ONLINE SOURCES

“Nanotechnology”

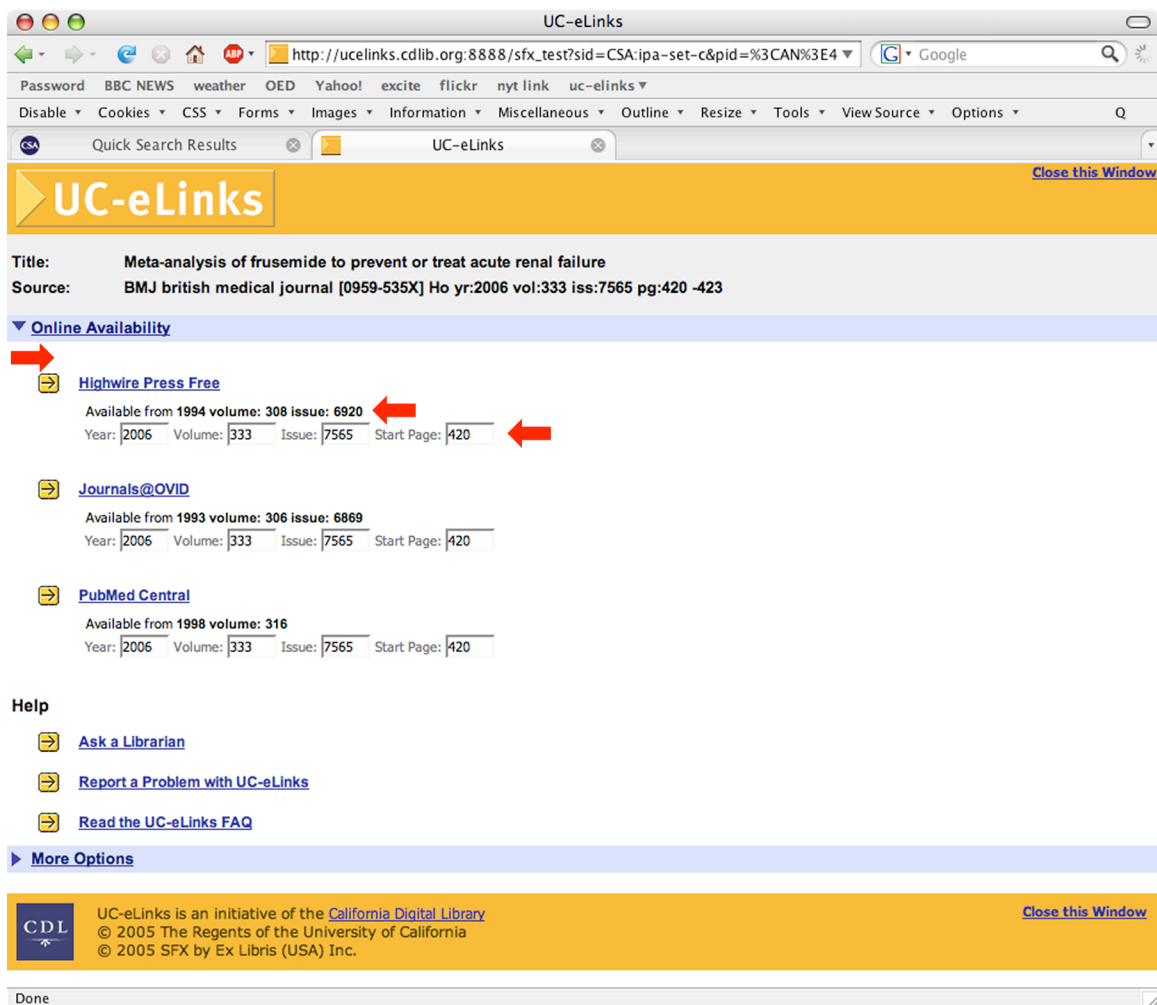
5.4.4 THREE SOURCES

“Acute Renal Failure”

6 USER INTERFACE FINDINGS AND RECOMMENDATIONS

6.1 ONLINE AVAILABILITY

Figure 1



6.1.1 OBSERVATIONS: TEXT BOXES

Users interpreted the information in the text boxes in the following ways:

- A way to change the article retrieved
- An indication that the link is an article: "Okay, I think it's an article, maybe, because it has year, volume, issue."
- Information about the citation

Some users were unclear how to proceed to the article indicated by the text boxes.

- "It tells me specifically where it is, like on page 63, you know, in this book, but they don't tell me how to get it.... If there was a tab here... that would lead me to it..." maybe a button that said 'go' or 'go see it'.

- "I don't know which one to click, whether this one [source link] or 'Online Availability'."

This user thought that the 'Online Availability' hyperlink would take her to the article. "Okay, that just closed the bar. This is a little confusing, actually."

6.1.2 OBSERVATIONS: "AVAILABLE FROM" STATUS TEXT

Status text produced much confusion among users. One thought it was distracting. Users interpreted status information in the following ways:

- "They're not all the same year, so published different at times."
- "What's this 1998 volume?... Not sure, this is 2006. What does 1998 mean?"
- "I don't know why all this information is necessary. All I want is the source, to actually see it: the content."
- "[This] looks like there's an online article of some sort that someone is actually using right now." (referring to 'Science Direct is unavailable in January...' notice)

6.1.3 OBSERVATIONS: MISSING "FULL-TEXT AVAILABLE FROM THE FOLLOWING SOURCES:" TEXT WHEN ONLINE SOURCES ARE AVAILABLE

This missing header would help users understand what the links are.

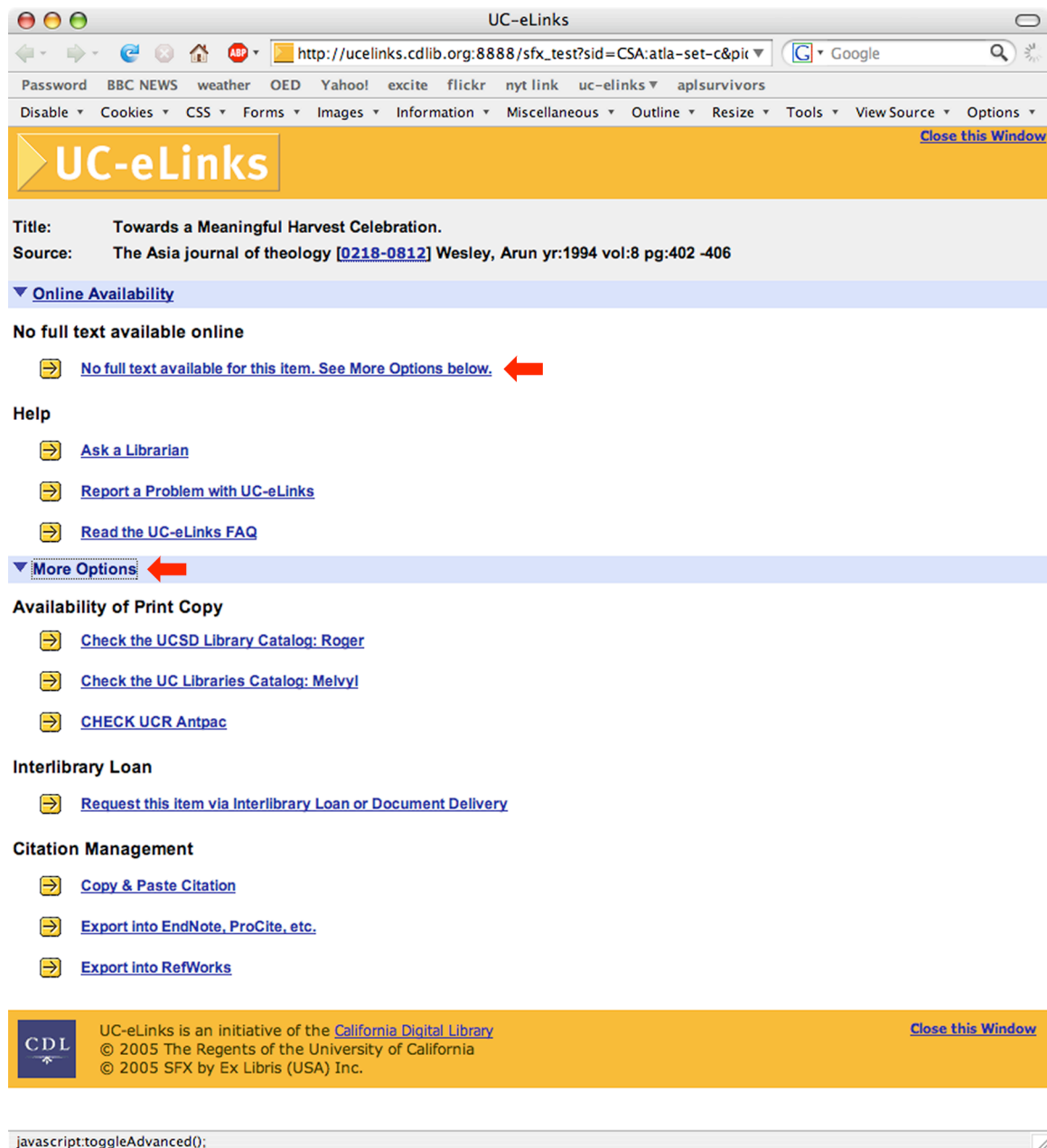
"Sometimes it says 'full text available here' and I'd be more likely to click on that link than another one."

6.1.4 RECOMMENDATIONS:

1. Add the "Full text available from..." introductory heading.
2. Add a 'Go' button next to each source.
3. Remove the hyperlink from 'Online Availability'.

6.2 MORE OPTIONS

Figure 2



6.2.1 OBSERVATIONS: 'NO FULL TEXT AVAILABLE FOR THIS ITEM. SEE MORE OPTIONS BELOW.' HYPERLINK

Due to the placement of the 'Help' section, users mistake the help items for 'More Options', which is collapsed by default. Several users stated that they expected to find only a search box under 'More Options'.

- "It says no full text available online... and it says see more options available below, which is like help options, so then I'll be really discouraged."

- "When it says more options, I don't know if that's more options under help – to get more help in other ways besides these three."
- "I would click where it says 'see more options below', or I would click on the more options link and see if it gives me a search box."

6.2.2 OBSERVATIONS: THE 'MORE OPTIONS' SECTION

One user observed that the 'More Options' section is only necessary if an online version of the article is unavailable.

"It's kind of weird that we have to click on the more options page. Why is this collapsed? Why don't they just *give us* the more options page?"

Another user stated that she would not have clicked on 'More Options'. She observed that expanding the 'More Options' section by default would "make that more readily available... but then that would clutter the page...."

One user reported seeing the link, but she didn't think to click it. "I didn't think they'd have this kind of thing down here.... Maybe they would have one search option... other browsers have 'search Google if you cannot find it'."

"I think that because it was a blue link in a blue bar it doesn't really stand out."

6.2.3 RECOMMENDATIONS:

1. If no online full text articles are available, then expand the 'More Options' section automatically.
2. Change hyperlinked text to "No online full text available for this article. See the 'More Options' section below."
3. Move the 'Help' section to the bottom of the page or to the right-hand column.
4. Make the 'More Options' link more visually prominent.

6.3 COLLAPSING SECTIONS

6.3.1 OBSERVATIONS:

One user thought that the ability to collapse the 'Online Availability' section was unnecessary.

"I wouldn't think you would need to close this either, because it would be so convenient to have everything shown on one page"

Others expressed appreciation for the ability to expand and collapse sections on the screen. They felt that this prevented the screen from looking cluttered.

Two users navigated to the current production version of the UC-eLinks window during the course of their sessions. They expressed the following thoughts:

- "I think this [production version] is probably easier to use because it has these text descriptions here and people know what to do. But they should have the categories. It's all just jumbled in and unsorted here."
- To paraphrase the other user, "In the old menu, all that bold and unbold is distracting. I prefer the grouping to the huge list. The old page could have dividers and be grouped."

6.3.2 RECOMMENDATIONS:

1. Examine labels on the development version of the UC-eLinks window and add more descriptive labels where appropriate.
2. Keep the grouping idea, but re-examine the types and contents of the groups.
3. Logical groupings and clean user interface design may reduce the need for the ability to collapse sections.

6.4 HELP

6.4.1 OBSERVATIONS:

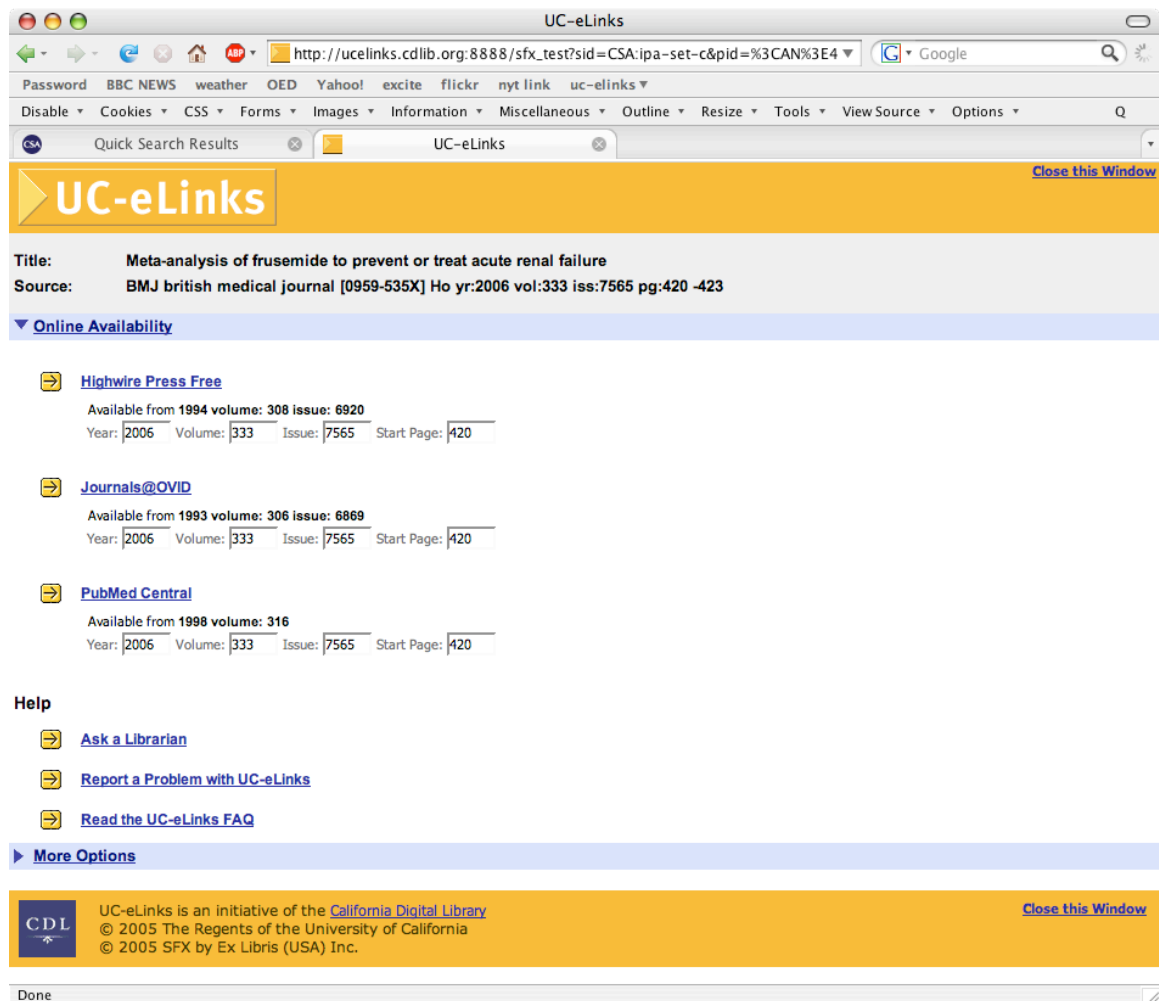
- "In this case it's easily visible because there's only one option.... Maybe we could move so people can actually notice and utilize those options.... [I] would move it to the right top.... People don't typically scroll down unless they're highly motivated."
- "I think help should be all the way on the bottom," because all the contacts are usually on the bottom on other websites. "After you go through everything on the page, *then* you ask for help.... I think that's really helpful – Frequently Asked Questions – because that's what I usually do."

6.4.2 RECOMMENDATIONS:

1. Move the 'Help' section to the right-hand column or bottom of the page.
2. Develop an extensive FAQ.

6.5 MULTIPLE SOURCES

Figure 3



6.5.1 OBSERVATIONS: ADVANTAGES

- "This, without having to open a new window, you can also navigate to another journal if you don't like this one; apparently, this is all journals online... looks like a great resource."
- "It's good to have different options, because if one doesn't work, you have two more to look at." But if they're all the same thing it's not very useful.
- "It make me feel like if one doesn't work out, then I have a default."

6.5.2 OBSERVATIONS: THE DISADVANTAGE: CONFUSION

When presented with multiple sources for a full text, online article, users first try to determine whether or not the options refer to the same thing.

"[I'm] kind of confused that there's two, when the title and source are just one.... Seems like the exact same thing, these two things... but different links.... I think they will be the same thing. It's just I don't

know why there's two separate... maybe a different publisher, possibly."

Several users stated that they would probably click on all options to verify that they were the same article. When asked whether it was useful to have different options for the same article, many users expressed the following sentiment:

"I guess the question would be are there differences between the articles. If it's just the same journal article written in three different places, then I don't know if it would make a difference because it's the same article."

Once users determined that the options referred to the same article, several assumed that there had to be a reason for the multiple listings.

- "They all could be the same. Let's try clicking on one, see which one gives the more reliable document.... If there were three or more, they should have parentheses with 'This is different'."
- "I would start with the one that's listed first, just because I don't know if they do it by preference.... Since this is listed first, this might have more information on what I'm looking for.... Well, I'm thinking there's a reason why they gave me these three, instead of listing these two and this one under more options.... These three must be important enough for me to look at."

Other users tried to simplify matters by choosing one source, either because of placement at the top of the list or because of name recognition.

- "I would just go to the first one; I can't distinguish which one would be more accurate or better."
- "I would pick Oxford University Press, just because it's... big. You find it so many places."
- "They usually had several links, but the one that I usually use would be SpringerLink, because they often had the full-text and it wasn't as difficult to get to."

6.5.3 RECOMMENDATION:

Help users make sense of multiple options by adding more descriptive text or helpful tips in mouse-overs. For example, sources could be labeled 'a', 'b', 'c', etc., with short instructions given at the top of the section.

6.6 LABELS

6.6.1 OBSERVATION: UC-ELINKS HEADER

One user stated that the page header was too prominent and that emphasis should be on the title and content instead.

6.6.2 OBSERVATIONS: MORE OPTIONS

"There are more options, but what kind of options?"

Users expressed confusion about this label. Some users expected the following items to be under 'More Options':

- More search options, e.g. Google or an Advanced Search
- Links to similar articles

6.6.3 OBSERVATIONS: INTERLIBRARY LOAN

Several users noted that the label “interlibrary loan” may be confusing to many students. A few suggested more descriptive alternatives, such as the “Request these materials” or “Pick up book/article at this location”.

"The title might throw you off a bit.... ‘Interlibrary loan’ might not mean much."

6.6.4 OBSERVATIONS: MELVYL VS. ILL

Several users were confused about the difference between Melvyl and ILL.

"Interlibrary loan? Isn't that basically Melvyl?... I thought interlibrary loan *was* Melvyl."

Because of the perception that Melvyl and ILL serve the same function, one user wondered why both Melvyl and ILL were listed in the UC-eLinks window and if it was necessary to go through both of the links.

6.6.5 OBSERVATIONS: ONLINE AVAILABILITY

At least one user was unsure about what the ‘Online Availability’ section provided.

"It doesn't really tell me. It says ‘Online Availability’, but I don't know if that means it's available online right now for me to see."

Another user noted, "When you're doing research I love seeing the word ‘available’."

6.6.6 OBSERVATIONS: AVAILABILITY OF PRINT COPY

"There's availability of a print copy, which I think is really cool, because you don't have to read it online, you can get a hard copy of it."

One user was surprised that the Roger link searched Roger using the information from the article's citation; he had expected to have to enter the information himself.

When the Roger and Melvyl links led users to useful information, users found them helpful. However, when the search failed, it left users confused and discouraged.

6.6.7 OBSERVATIONS: CITATION MANAGEMENT

Almost all participants were unfamiliar with citation managers.

"I don't use that other stuff. I usually just do it myself. It's pretty painful."

One user who clicked the ‘Copy and Paste Citation’ link stated, “I guess I expected to actually find what I needed from the article, or maybe search and find where that came up.” Another surmised, "This looks like it's a legal way of copy and pasting from articles or whatnot."

6.6.8 RECOMMENDATIONS:

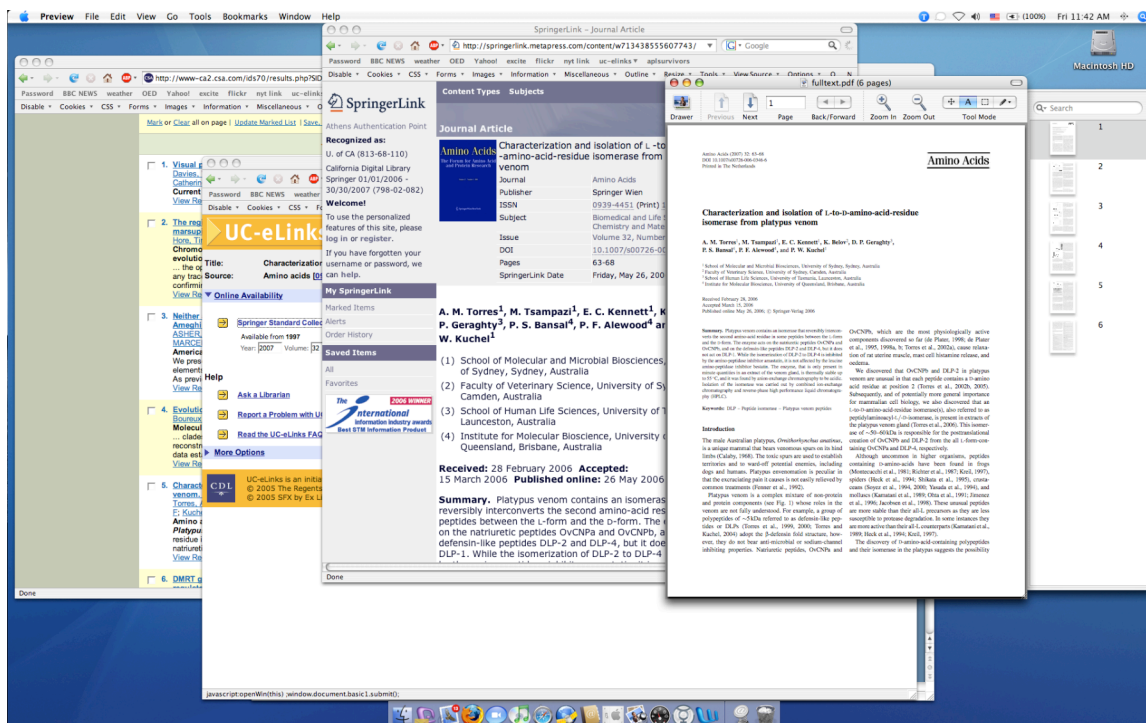
1. Reduce the size of the UC-eLinks header.
2. Create more descriptive labels for major sections.

6.7 WINDOW MANAGEMENT

6.7.1 OBSERVATIONS:

"I don't like clicking through different windows like this, it's kind of a pet peeve of mine. I don't like sifting through these windows. There's already four windows on the computer."

Figure 4



To manage the multiple windows generated by UC-eLinks, some users used tabs to reduce the number of open windows on the desktop. Others stated their preference for a single window with the ability to use the 'back' button.

- "I'm so used to clicking back, than having all these different windows pop up."
- "I like to remember where I've been and just hit the back button.... I'm used to just using the back button."

6.7.2 RECOMMENDATIONS:

1. As much as possible, preserve 'back' button functionality in windows.
2. Reduce the number of windows that pop up.

7 GENERAL WORKFLOW FINDINGS

7.1 AWARENESS OF SERVICES

7.1.1 UC-eLINKS

Of the eight participants, two reported having used UC-eLinks prior to their session and six reported never having used UC-eLinks. Six had heard of UC-eLinks and one had never heard of UC-eLinks.

Awareness	Prior Use
Heard of UC-eLinks: 6	Used UC-eLinks: 2
Not heard of UC-eLinks: 1	Not Used UC-eLinks: 6
Unknown: 1	

The lack of awareness of UC-eLinks and what it does is a major stumbling block for students doing research.

"From here [the CSA search results page], my first reaction would be to click on the title instead of UC-eLinks, because most people aren't familiar with that."

After using UC-eLinks during a session, one participant stated, "Once we know about UC-eLinks and that it's available, we can use all these features." Another suggested that a poster next to computers that said, "Use this [UC-eLinks] for your journal research" would help students learn about UC-eLinks.

7.1.2 REQUEST/ILL

Since all of the participants had used Roger to find books for papers, more students had heard of and used Request.

- 5 have heard of or seen Request/ILL and have used it
- 2 have heard of or seen Request/ILL, but have not used it
- 1 has neither heard of or used Request/ILL

7.1.3 MELVYL

Because of a general lack of understanding of what Melvyl is and the fact that Request appears within Melvyl, at least half of the participants equated the two.

- 7 of 8 stated that they knew what Melvyl is
- 4 of 8 were confused about the difference between Melvyl and ILL
- 1 of 8 was not confused
- The issue of the difference between Melvyl and ILL did not arise for 3 of 8

7.2 LEARNING THE ROPES

7.2.1 OBSERVATIONS:

All participants in this assessment reported first learning about online journals from professors or librarians associated with courses they had taken. Several students stated that they learned how to write research papers in the "Making of the Modern World" course series. One participant explained that for most of those courses, her class went to workshops in the library, where they learned how to use Roger, RefWorks, and the Databases A-Z list. In one workshop, a librarian taught students how to search databases, such as PsycINFO and PubMed, and how to refine their search terms.

Another participant recalled a professor directing her to the Bibliography of Asian Studies. There, she found a citation and “had to go on Roger to look for it”. She noted, “It was kind of complicated. I don’t think I would have known how to do that unless I worked at library.... I think regular students would not know to go here [Databases A-Z] to begin with.”

7.2.2 RECOMMENDATION:

The students in this assessment benefited from instruction in UC-eLinks and related concepts. Professors and librarians should continue to introduce UC-eLinks in their courses and workshops and educate students on the services and options offered in the UC-eLinks window.

7.3 CURRENT WORKFLOW

7.3.1 STEP 1: GATHER GENERAL INFORMATION ON THE INTERNET

Wikipedia

In addition to using Google and Yahoo to look for background information on topics, several participants reported using Wikipedia extensively, especially in the beginning of the research process. These students did not cite Wikipedia as a source in their bibliography. Rather, they used Wikipedia “to look up terminology because it’s readily available.... It’s not detailed information; it’s just general information.” One student reported that one of her professors “uses Wikipedia a lot – to look up terms and words.”

Students use Internet search engines and resources like Wikipedia to help them manage information overload.

"There’s so much information out there. Wikipedia... helps to narrow down what you’re looking for because there’s just so much stuff out there."

Amazon

Students turn to Amazon.com because of the features it provides for learning about books and “because sometimes Amazon.com and other retail stores have more variety of different books, of popular sources.” Furthermore, participants reported experiencing greater success searching for sources on Amazon than in the library OPAC.

“Once I found [some] books [in Roger], I went to Amazon.com and... looked for [additional] books there, copied and pasted the authors and titles, and searched for them on UCSD....Some of them we actually had at Roger, but I guess I couldn’t find them with just my keywords that I used.... Finding the actual title was a lot easier than to search on Roger and other library things....”

7.3.2 STEP 2: FOR ACADEMIC RESOURCES, CHECK ROGER FIRST

Participants stated that once they have gathered general background information and are ready to conduct academic research, Roger is their starting point. One participant reported that "Roger has been the most useful for me, just because it really narrows down your search."

7.4 IDEAL WORKFLOW FOR OBTAINING JOURNAL ARTICLES

In an ideal world, students would be able to search for articles, click on one link, and have the correct full text appear immediately 100% of the time. Although we do not live in an ideal world, students still expect this process to be easy and to make sense. Pointing to the Elsevier ScienceDirect link in the UC-eLinks

window, one participant voiced the expectation: "I think it will take me to the page that has whatever I'm looking for. It's just going to show me these pages: 148-152."

As another participant explained, "Once you click on that link [UC-eLinks] – because there's already so many steps you have to go through – I think that if it were immediately available it would make it that much more efficient for students to access information."

8 NEGOTIATING ROADBLOCKS

8.1 LACK OF AWARENESS: KNOWING TO CLICK THE UC-eLINKS BUTTON

8.1.1 OBSERVATION:

Students possess the ability to learn and develop habits quickly. After completing their respective sessions, a few participants stated that they now knew to click UC-eLinks to get to an article. They acknowledged that they had not known that "there was another step to getting the article." If they wanted an article, now they know to click UC-eLinks. But, they wouldn't have thought of it otherwise.

8.1.2 RECOMMENDATION:

The students in this assessment benefited from instruction in UC-eLinks and related concepts. Professors and librarians should continue to introduce UC-eLinks in their courses and workshops and educate students on the services and options offered in the UC-eLinks window.

8.2 MANAGING EXPECTATIONS: KNOWING WHAT UC-eLINKS WILL AND WON'T GET YOU

The current system requires students to go through UC-eLinks to get to articles. However, there is no guarantee that they won't have to do more work once they click through to the next site.

"I like that it says 'Select full text available from Gale Group InfoTrac', so I would think that I can click this to maybe access the whole article.... And then, I'm disappointed because there's no article, still."

8.3 RELIANCE ON MEMORY

The academic research process requires good recall. Allowing researchers to rely more on recognition than recall would improve their search experience.

- "I have to go and look for the article. Mine was written in 1987.... It's hard for you to know exactly what you have to remember to find the article."
- "I also found it hard that once I found the source, and then I wanted to go back to it again, and I forgot the keyword. It's hard to find again, because it has to be exactly the same or I got different results."

In one testing scenario where a source link did not lead directly to the desired article, users had to remember citation information from the UC-eLinks window and use it to find the article on the publisher's site. One user had difficulty finding this article on the publisher's site, because she was looking in the wrong volume – 46 instead of 49.

8.4 LACK OF FAMILIARITY WITH PUBLISHERS' NAMES

The use of publishers' names in the 'Online Available' section confused users. The students did not know what they were. Users did not realize that the hyperlinked publishers' names would lead to articles.

- "I assume, well, it's the journal article, but it's at SpringerLink, which I've never heard of before. I'm not sure what *that* is."
- "Elsevier ScienceDirect doesn't really mean much to me."

8.5 NO FULL-TEXT ONLINE

8.5.1 OBSERVATION:

For many students, 'no full text available online' is a major decision point. Either they continue their search for this particular article, or they abandon this article and look for one that does have online full text available.

- "So, it looks like it has the journal entry, but it is not available online.... This would be when I would look and see if they have it in our library.... I think, I would probably try Roger and then if I couldn't find anything I would try Melvyl."
- "UC-eLinks definitely doesn't have it.... I would go back and go to another article." [*User closed the UC-eLinks window.*]

8.5.2 RECOMMENDATION:

Help guide students to Request by adding instructions and changing the label 'Interlibrary Loan' to something more action-oriented and descriptive. (See Section 5.6.8.)

8.6 SUCCESS IS DIFFICULT TO RECOGNIZE. STUDENTS LOOK FOR CLUES.

8.6.1 PDF = FULL TEXT

Users equate PDFs with full text. If a PDF comes up, they assume it's the article.

"This looks like it's the whole journal article. It's in Adobe Acrobat Reader, so it must be the whole article."

8.6.2 A HIGHWIRE EXPERIENCE

During one task, a user examined a HighWire article page and then resorted to CTRL+F [the find command] to look for "full text" on the page.

8.6.3 A PUBMED CENTRAL EXPERIENCE

"Aack! A lot of numbers! This is volume 334, and it has a table of volumes and different dates. This is a really long page."

This PubMed Central page required users to click [+] icons to expand sections of the user interface to navigate to individual articles. One user expressed frustration while trying get to the full text of an article.

"Ugh, do I have to register in order to access the actual article?... Maybe this is the full text, but I'm not really sure.... It doesn't *tell* you

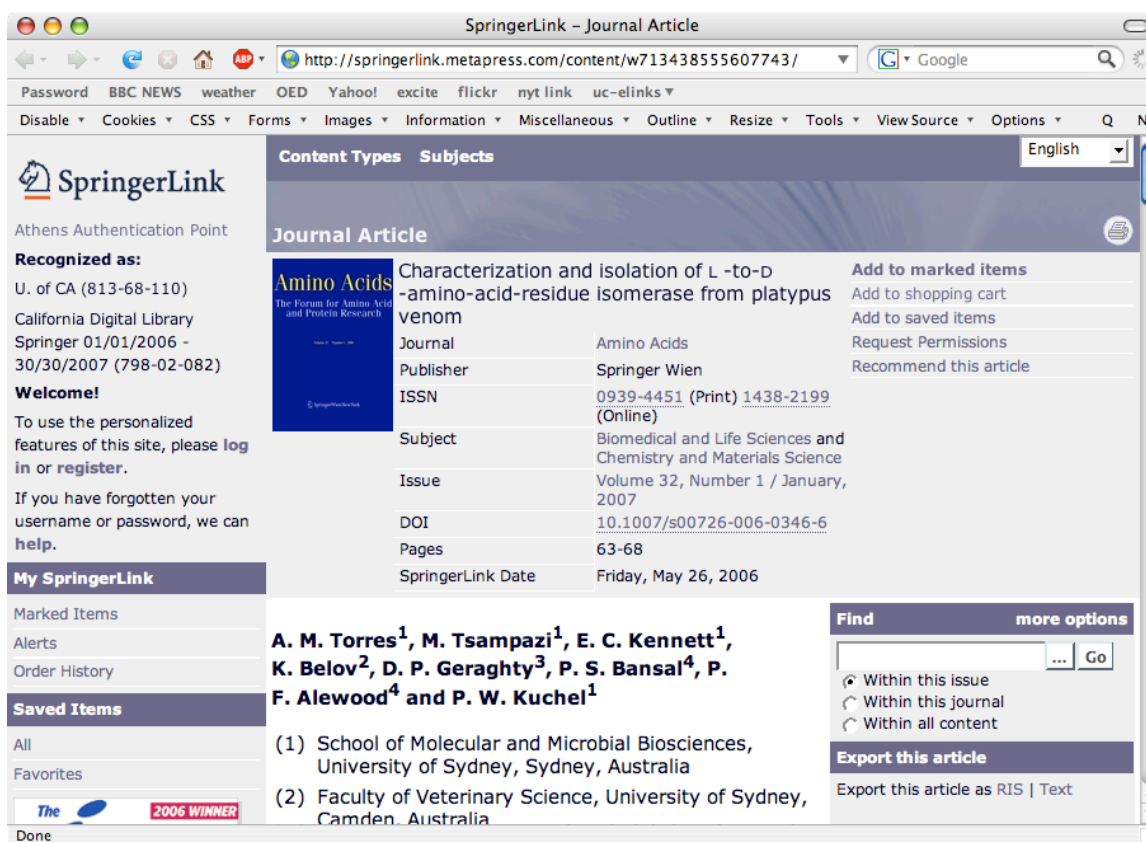
that's it's the full text.... Maybe this is a condensed form, I'm not sure."

8.7 STUDENTS HAVE TROUBLE FINDING FULL TEXT LINKS ON PAGES.

The following is a screenshot of a SpringerLink article page. Note the visual clutter and the layout of the page, as well as the prominently placed 'Add to shopping cart' link. (See Figure 5.) Most participants had difficulty locating the link to full text on this page. A few never did.

"There's a lot of links. I'm not sure which to click.... This looks like you have to buy it."

Figure 5



Scrolling further down the page reveals a full text link. (See Figure 6.) Note, however, that 'PDF' is not the hyperlink. Instead, users must click 'Entire document'.

Figure 6

The screenshot shows a web browser window titled "SpringerLink - Journal Article". The address bar displays the URL: <http://springerlink.metapress.com/content/w713438555607743/>. The browser's toolbar includes various search engines and utility links. The page layout features a left sidebar with navigation options like "My SpringerLink", "Marked Items", "Alerts", "Order History", "Saved Items", "All", and "Favorites". The main content area displays the article title: "A. M. Torres¹, M. Tsampazi¹, E. C. Kennett¹, K. Belov², D. P. Geraghty³, P. S. Bansal⁴, P. F. Alewood⁴ and P. W. Kuchel¹". Below the title, four affiliations are listed, numbered 1 to 4. A red arrow points to the fourth affiliation: "Institute for Molecular Bioscience, University of Queensland, Brisbane, Australia". The article's reception dates are shown: "Received: 28 February 2006 Accepted: 15 March 2006 Published online: 26 May 2006". The summary text begins with "Summary. Platypus venom contains an isomerase that reversibly interconverts the second amino-acid residue in some peptides between the L-form and the D-form...". The right sidebar contains a "Find" section with search options, an "Export this article" section with a link to "Export this article as RIS | Text", and a "Text" section with a "PDF" link. A red arrow points to the "PDF" link. Below the "PDF" link, there is a note about the document size: "The size of this document is 177 kilobytes. Although it may be a lengthier download, this is the most authoritative online format." and a link to "Open: Entire document".

SpringerLink Date Friday, May 26, 2006

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Summary. Platypus venom contains an isomerase that reversibly interconverts the second amino-acid residue in some peptides between the L-form and the D-form. The enzyme acts on the natriuretic peptides OvcNPa and OvcNPb, and on the defensin-like peptides DLP-2 and DLP-4, but it does not act on DLP-1. While the isomerization of DLP-2 to DLP-4 is inhibited by the amino-peptidase inhibitor amastatin, it is not affected by the leucine amino-peptidase inhibitor bestatin. The enzyme, that is only present in minute quantities in an

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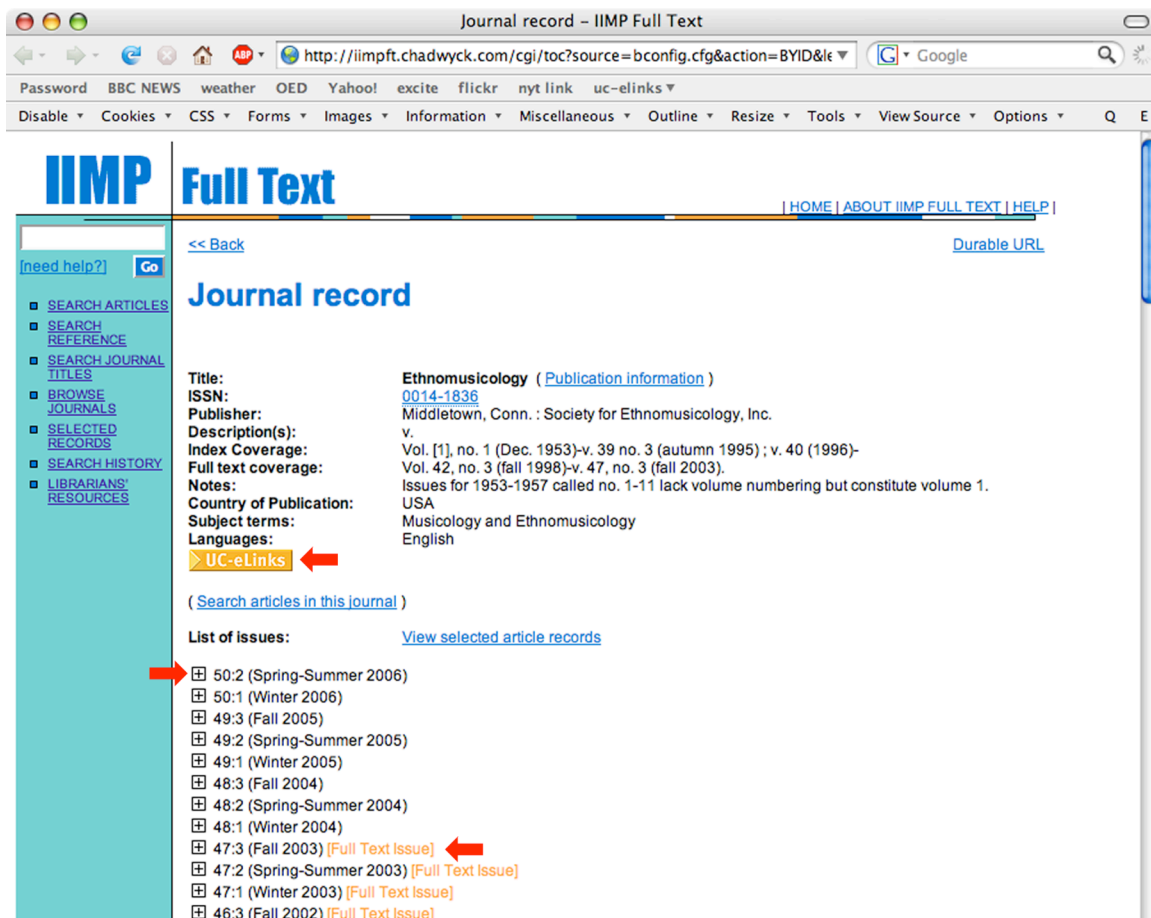
Text
PDF
 The size of this document is 177 kilobytes. Although it may be a lengthier download, this is the most authoritative online format.
 Open: Entire document

8.8 STRANDED ON A JOURNAL'S HOMEPAGE: "THEY'RE MAKING US DO THE WORK!"

In the "shaman rituals" task, the UC-eLinks window offered a full text link with text boxes that showed the citation information for the desired article (as in Figure 1). Clicking on the link led users to the webpage shown in Figure 7. Users then had to navigate to the article by using the citation information from the UC-eLinks window.

"I thought it was kind of confusing to get to the actual article itself. Because when you click something specific you expect it to take you to the actual article.... But sometimes you have to work a little harder."

Figure 7



Reflecting on this exercise, one user expressed the following thoughts:

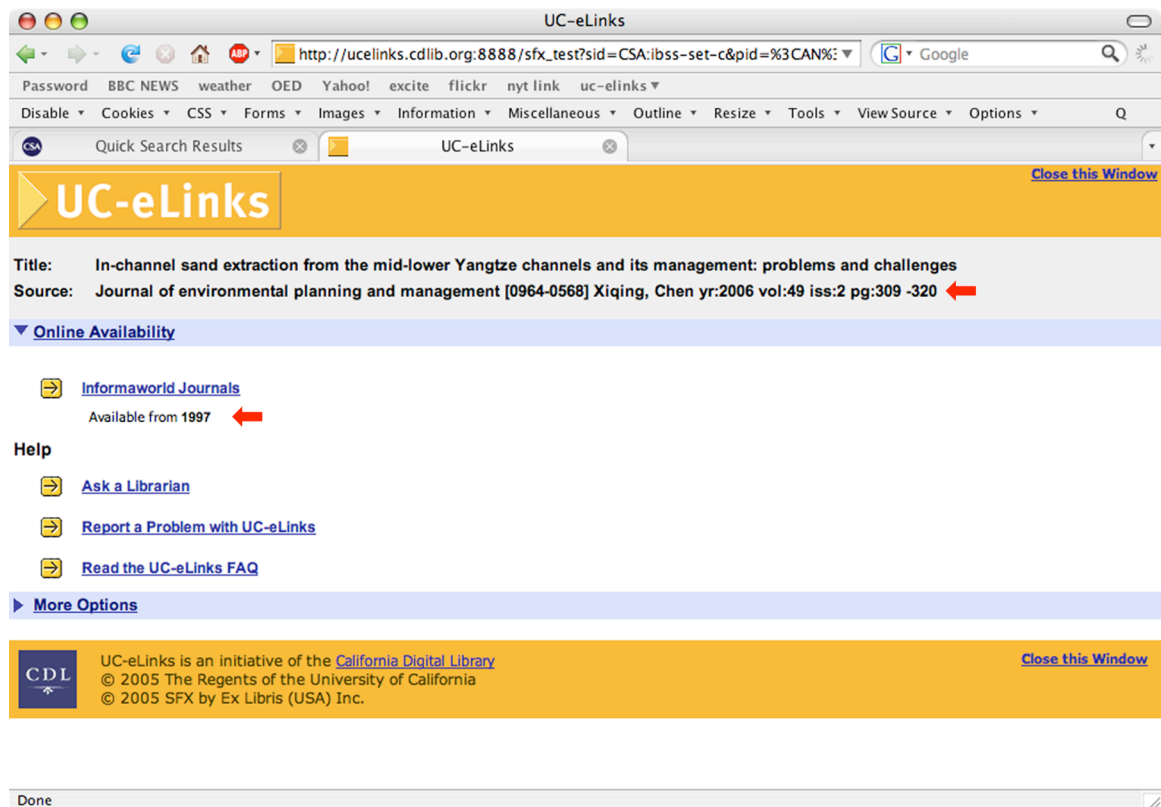
"I think it [process] was a bit confusing. But maybe it's just me because I'm just not tech savvy.... Sometimes this happens when you search things on UC-eLinks... it takes you to a page where you have to search for the journal again." [I] will try to search, but.... "If it's too convoluted and I can't understand it, then there's nothing I can do."

8.9 STRANDED WITHOUT AN OBVIOUS ROADMAP

As with the “shaman rituals” task, the “three gorges dam” exercise led users to a webpage that looked similar to the webpage shown in Figure 7. However, for this exercise, the full text link UC-eLinks window did not have text boxes with the article’s citation information. (See Figure 8 below.)

A few users found the citation information under the header and used it to navigate to the desired article. One, who did not see this information, used the publisher’s search function to find the article.

Figure 8



9 DISCUSSION

This round of assessment provided valuable insights into students' experiences with online journals, as well as feedback about the UC-eLinks user interface. Although there were several last-minute cancellations, we were able to conduct all eight scheduled sessions due to the resourcefulness of our onsite liaison, Candy Funakoshi.

Despite the difficulties they encountered, students recognized the value of the service UC-eLinks provides.

"I think it's very useful if you know what you're looking for and you know what these things are."

As for the question about whether to resolve directly to the source, until we can guarantee 100% success and ease of use with third-party (publishers') websites, UC-eLinks will serve an important function in the process of academic research.

10 APPENDIX: ASSESSMENT OBJECTIVES

1. **Determine whether users understand the meaning of the labels used in the UC-eLinks window.**
[This objective deals with verifying the language used in the labels.]
2. **Determine whether users understand the functionality of the options listed in the UC-eLinks window.**
[This objective concerns users' familiarity with services, such as Request.]
3. **Determine whether the groupings in the UC-eLinks window make sense to users.**
[Since the ultimate goal of the user is to get to an article, the UC-eLinks window must present options to the user in a way that is logical to the user.]
4. **Determine what elements of the UC-eLinks window (if any) aid in helping users decide on a course of action.**
[The UC-eLinks window is not a destination for the user; it is a pit stop. As such, the UC-eLinks window must help direct users to their destination as quickly and easily as possible.]
5. **Determine whether users have a game plan for searching for/dealing with licensed content. Determine their starting point and usual strategy for research.**
[Do users know enough about the process of accessing licensed content to have developed a plan, e.g., what to do if there's no full text online and the campus library doesn't have a copy? Or, is UC-eLinks just another webpage that they have to go through? If full text is not available online, do users check their campus catalog or Melvyl first or do they jump straight to Request?]
6. **Determine users' definition of success with this type of task. Determine whether users recognize when they've been successful.**
[Verify what users want from their interaction with the UC-eLinks window.]
7. **Determine users' typical next step after an unsuccessful effort. Discover rationale for next steps.**
[What do users do when they don't get what they want? Do they try again or abandon UC-eLinks? Does the UC-eLinks window give them any guidance on what to do?]
8. **In instances where an online resource is available from a *single* provider, determine whether users have a preference for including the UC-eLinks service options menu before resolving to the target source versus resolving directly to the target source.**
[In the event that full text is available online from only one source, would users prefer to be taken directly to the resource? Is this preferable only if the user is taken directly to the article?]
9. **Determine what users would do if a full text link resolved directly to the target source but failed to take them to the full text.**
[If the UC-eLinks window were bypassed and users landed directly on a page that did not have the full text they were seeking, what would they do?]
10. **In instances where an online resource is available from a *multiple* providers, determine whether users prefer including the UC-eLinks menu or resolving directly to one of the target sources?**
[Given more than one choice for full text, do users care which full text option they see?]