WorldCat Local @ University of Washington Libraries: Local Discovery and Delivery at the Network Level

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Next Generation library catalogs as one of the new services we would provide to our audience. However, one of the primary problems we saw with most that we reviewed was that they were very pretty wrappers around the same set of resources, the local library catalog. The main problem we saw was that users were in a distributed information discovery environment and a distributed delivery environment. Our goal was to consolidate discovery and delivery as much as we could, thereby improving the user's experience in finding and obtaining library resources.

In the spring of 2006, our library directory, Betsy Wilson, met with OCLC leadership to discuss the idea of a jointly developed research project that would use WorldCat as the platform for a suite of services that we could provide our users. In August, some of the University of Washington Libraries people went to OCLC headquarters for 3 days to have conversations about how we wanted an information delivery system to work and what the technical requirements were for this system to interact with our local integrated library system and with our consortium's library catalog.

Eight months later in April 2007, the University of Washington Libraries went live with the first working prototype, replacing the previous local library catalog default search with this new service, called WorldCat Local. In the past 16 months, the system has improved immensely, but is still a work in progress.

These are the points I want to present today. Why we developed WorldCat Local, discovery and delivery within WorldCat Local, the service and what effect WorldCat Local has made on our users and on our services.

WHY WE ARE DOING THIS?

We've long had concerns about how users find (or don't find) our rich array of resources and shifting trends in user's information seeking behavior.

There have been many conversations about the future of the library catalog, how to work at the network level, how to facilitate discovery to delivery. There have been a number of reports written including those by Karen Calhoun and the University of California Committee on providing bibliographic services, as well as the blogs of Karen Coyle and Lorcan Dempsey. There was also a Research Library Group symposium on "Discovery to Delivery".

OCLC is certainly in a position to work with Google and Microsoft and expose our data there in ways that individual libraries simply can't. A few months ago, an OCLC/WC widget was released for the Google home page. A Facebook application to search WCL has been created, and a customized one for Google is forthcoming. In developing these web-based applications we are making every attempt possible to get our services to where our users are. Don't require users to come to the library or to the library webspace, but put our services where there are needed and when then are needed.

One of the major initiatives of the Libraries Strategic Plan is "Enhance User Services" and we strive to do this by providing access to resources and services at the point of need and in the user's environment. We're hoping that WorldCat Local will be one of the tools

that will allow us to support information discovery and delivery and also support syndication of our resources to other user environments.

But the most import, our users have lives and we are not the center! Our users prefer to avoid pain and some of our systems and tools (not to mention the number of them) are so complex that they are painful to use. Some of our users satisfy themselves, that is, they spend no more energy than is absolutely necessary to get what they need, so they seek efficiencies.

They are diverse, and their needs are diverse. They need one thing one day and something else the next. We have attempted to build a tool that will meet their diverse needs.

Our resources consist of three catalogs, hundreds of databases, different interfaces and for each one you have to know all the little tricks for each one...

Google works for users and so they continue to use it. Perhaps these discussions also take place at your library, but I hear from other librarians why it's bad for people to use Google, "if only they knew how to find and then search our complex systems they'd get much better information." The reality is that users are reaching out to Google, Microsoft and Yahoo for their information needs and we have to change our systems to make working at the network level (of Google, Microsoft, etc.) a success for our users.

The last item bears repeating because library staff have different expectations and usually a pretty good hunch when something doesn't "seem right" with the data. A good percentage of our negative (and in some cases vociferously negative!) feedback has come from librarians and others in the profession. In many cases their criticism is correct, but for the users who now find it much easier to find and request items, it's a good system.

We have three separate discovery silos for returnables (by that I mean books, journals, CDs, maps...items that can be loaned), and there is no clearly marked path from one to the next and sometimes disagreement about the best place to start.

In addition, we have hundreds of databases and other sources of e-content we license for our users. How do we help the user navigate these complexities (especially in an unmediated environment where we can't stand behind them, telling them what to do and why).

The first idea was to consolidate the discovery source so that the user didn't have to learn about and decide between many potential sources, the primary ones being:

- ❖ The local catalog
- ❖ The consortium's catalog
- Citation and full-text databases, and
- **❖** WorldCat.org

OCLC was already positioning WorldCat to be a one-stop shop for not just books, but all media and citations. One simple search box takes advantage of that comprehensiveness.

We also had "delivery silos."

User can request items through the local catalog for pickup at a library convenient to them. But if the item is checked out from University of Washington, it can take up to two weeks for the item to be returned. Many users don't have that time.

Users can also request items through the consortium catalog (called Summit). If an item is available in the Summit catalog (but not at University of Washington Libraries), it's often faster for the user to get an item via the Summit delivery method (usually 2-3 days).

This distinction is *not* something that our users understand because it gets into policy issues surrounding local recalls and why should they need to know about the distinction.

We use ILLIAD for our Interlibrary-loan system and there are few "hooks" from other resources into ILLIAD. Even with the interlibrary-loan form linked on the home page, few users had an understanding of what it was or knew it was the next step to obtain something that wasn't available regionally.

We decided to use WorldCat as the basis for our services as it is the single most comprehensive database describing "library" resources of any database available.

Let's now talk about discover and searching.

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At the Libraries' home page, WorldCat Local is the default search box.



In this example, the student types the search: *Quinceanera*. The student could be looking for books or articles about the subject of *quinceanera* or he could be looking for the recent movie by that name.

Note that at this point, the student can limit his search to one of the formats listed on the tabs (books, DVDs, CDs, articles).

This is the initial results display. There are several things to note here.

First, the interface is in Spanish. The interface can be changed to one of six languages: German, English, Spanish, French, Dutch and Chinese.

Second, the entries are listed by location, so all University of Washington titles are listed first. We are surfacing the content that is easiest for the student to obtain. The default sort order can be changed to date, author, title or relevance (without location).

Note that this set of search results includes a review of a children's book, a novel, an academic book and a film on DVD. If the student is looking for a particular format or type of material, he can limit his search results by any of the facets listed on the left side of the display. These include author, format, date, language, discipline, genre and audience (juvenile/adult).

The student also has a link to view all editions and formats for a particular title (using FRBR) and can also go to an advanced search screen (which is honestly not much more advanced than simple search). One of the primary complaints we've received from library staff is that the advanced search is not robust. However, the service was designed for the end user, not for the librarian, and the existing library catalog provides robust searching.

This is a typical display for a book. The top portion of the display is referred to as the "bibliographic block" and contains basic information about the title. It also includes interesting features such as cover art (if available).

Below that is the fulfillment block. Item status and availability is listed here as well as options for obtaining the item. In this case, there are two copies that are currently available and the student can either go the library to physically get the book or they can request the item



to be pulled from the shelf and sent to the most convenient library location for them to pick it up.

This is also a display of the holdings of the other consortia libraries. The student can expand that display to see which other libraries in the consortium have the book available. If it was easier, the student could pick up and check out the book from a consortium library. This is especially useful for distance education students who may not have ready access to our library but are closer to another consortium library.

All of the availability information is scraped from the library's circulation system and displayed real-time. WorldCat Local is not a circulation system. WorldCat Local scrapes data from the display of the local library catalog and displays that location, call number and status information in the WorldCat Local display. This is an important point. WorldCat Local is not a replacement for a local library system but an interface that combines data pulled from WorldCat and data pulled from the local library system. Another way to state that it is that it is a localized view of WorldCat Local which provides local availability and requesting within the WorldCat database.



The bottom portion of the record display is similar to that in WorldCat.org (including some Web 2.0 features such as list making, review and tagging titles and sharing and bookmarking this title using a variety of Web 2.0 tools).

One other interesting feature of WorldCat is its implementation of FRBR. In any initial results display, only one edition of any work is displayed (the one owned by the library) with a link to display all editions and formats. This screenshot shows the result of clicking on the *Ver to-das las ediciones y todos los formatos* link for the title we were just looking at. You can see that record number 3 was the edition we were looking at (as it's the one held by the University of Washington). There are two other print editions, one audio book on CD and one edition in Braille. It is important to let the user know about all editions (not just the editions owned by the University of Washington) so that if there's a special need, the user can request an interlibrary loan for the edition they want.



Remember that the overall goal is to eliminate delivery silos and make it as easy as possible for the user to obtain the material they are interested in. When we force the user to go jump through hoops to obtain material, we always lose some users in the process.

We'll take a look at a few more examples so you get a sense of the variety of services that are provided depending on the items availability and its format.

Any item that is returnable (meaning it can potentially be loaned) gets one of two buttons displayed, either "Request Item" or "Request Item Through Interlibrary Loan." We'll take a look at both of these situations.

Here's the novel we were just looking at. There are copies at our two satellite campuses but no copy at the main campus. Instead of requiring the user to go to one of the satellite campuses to get the book off the shelf, the student can request the item. Because there are copies available in the University of Washington Libraries, clicking the "Request Item" button will send the user to the local catalog requesting system where the user finishes his request, just as he would if he



had requested it directly through the local library catalog. Because there is a local library copy, the Request Item button initiates a local request.

Here's the record for one of the other titles in our first set of results.

In this case, it's the same "Request Item" button. But because there are no copies available at the University of Washington (as our copy is on hold), the request will go to the Summit requesting system and the student will receive a copy from a Summit library. This is quicker service for the student as it takes about three days to get an item from another Summit library but two weeks to recall an item that's already being circulated. Even though the button text is the same, the request is routed to the most appropriate source depending on whether there is a local copy available. Before WorldCat Local, the user had to know about the Summit catalog and place their request in that catalog rather than in the local catalog. Now all this happens behind the scenes.



For titles which have been digitized as part of the Google Books project, a link to Google Books also appears. For older titles that are outside of copyright, this will connect to the full-text of the book, free of charge. For more recent books, it will connect to a limited preview which can help the student decide whether they want to request the book (or the preview might be sufficient to meet the student's information need).

This record also shows additional links (in this case for a publisher description and author biography). If there are links in the local catalog record (including links to full-text), they will also be displayed in the WorldCat Local record.

The student finds a book not held by the University of Washington or Summit Libraries. This is a children's book about quinceanera so it makes sense there are no academic libraries that have it in their collections. When there is not a copy of the book available locally or through Summit, the "Request Item Through Interlibrary Loan" button is offered.

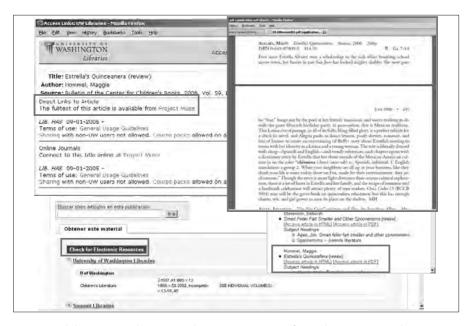


When the student clicks on that button, they are taken to the interlibrary loan request which has the book information already filled out. The student provides additional requesting information (including how much they're willing to pay and when to cancel the request) and then submits the request.

In this case, instead of making the user find and completely fill out the request form, WorldCat Local routes the user to the form and fills out as much of the form as it can.

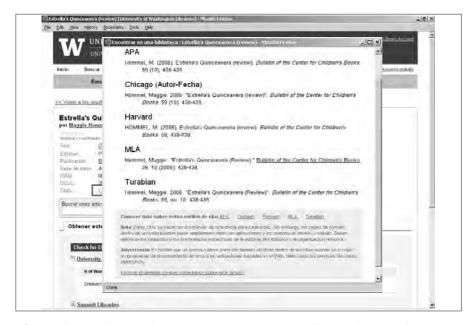
Returning to our initial search results, here's a book review for a children's book. Note that WorldCat Local identifies this as an article and it states that the University of Washington Libraries has this article. Since the library catalog doesn't contain articles, how does WorldCat Local know this article is in our library's collection?

Whenever an article is displayed, WorldCat Local checks the ISSN of the article against the OCLC serial record. Since we have holdings attached to the OCLC serial record, WorldCat Local assumes we have the article in our journal collection.



In addition to showing the University of Washington and Summit holdings for the serial, an article display will always include a button labeled "Check for Electronic Resources." Clicking this button will send the user's session to the library's link resolver. If the stars are all aligned and the link resolver acts as it's supposed to, the link resolver will offer a link to the full-text article.

Displaying all of this on one PowerPoint slide does make it appear complicated, but we have saved the student an amazing amount of time by keeping them within the same discovery/delivery environment. The student does not have to identify and search a separate book review database, the student doesn't have to look up the journal title in the catalog to see if the library owns the journal, the student doesn't have to go to the A to Z list of electronic journals, the student doesn't have to pay that much attention to the citation information. Instead the student follows a series of links that (after four clicks) ends up with the full-text of the article displayed in front of him. There is a lot of work going on behind the scenes here. But why



force the student to have to navigate it manually? With every hoop we make the user jump through, we lose at least some users.

Now let's take a look at some additional features.

The student can export citations for articles and other materials into EndNote and RefWorks. In order to help with citation, there is also a citation service that takes the elements in article citation and formats the citation in five different citation styles for the student to cut and paste.

If the library has any digitized collections (either using ContentDM or following an OAI standard), OCLC will harvest the metadata and images from those collections and create records in WorldCat for each individual image.

Princess Angeline was the daughter of Chief Sealth, the Native American leader that the city of Seattle was named after. Searching on her name retrieves records for digitized photographs of her from our archives. In this way, we are surfacing archival content which previously very few people knew about.

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- ❖ When you click on the thumbnail image, you are taken to the digital image in the libraries' digital collection. At this point, the user is now in the libraries digital collections where they can search for more images (p. 267).
- * Avobe an example of the "Did you mean...?" feature which is common in web applications. Without this, a careless American student might think there's been nothing published about *quinceanera*.
- Users can also rate resources and submit reviews. The rating appears in the record... (p. 269).
- ...and the reviews appear further down in the record display under the "Reviews" tab. In addition to user-submitted reviews, a library can also include links to Amazon.com (which provide access to Amazon reviews) (p. 269).









- This is an example of syndication. The HTML code for the WorldCat Local search box has been made into a widget that this user has added to his iGoogle page...(p. 270).
- ... and this student has added the widget to his *Facebook* page. In making this available, we are attempting to offer services within the user's environment (p. 270).

However, there are some considerations.

Remember, WorldCat Local uses the WorldCat database as its "universe." Thus any record sets which are not represented in WorldCat will not surface in WorldCat Local. The primary large English-language sets are Early English Books Online and 18th-Century Collections Online.

Because WorldCat Local uses the OCLC master record, any local record edits that a library has made are not accounted for in WorldCat Local. At the University of Washington, we have added genre headings to hundreds of video recording and DVD records. None of these are reflected in WorldCat Local. Also, any authority processing that you locally undertake is not reflected in WorldCat Local.

Because WorldCat Local primarily relies on the OCLC record number to identify the local catalog record there are some records for which local status and availability will not be available. This includes records needing retrospective conversion, on-order or in-process brief records and other local/brief records including non-contributed content.

In addition, OCLC is still having some problems surfacing e-content in WorldCat Local. Workaround have been figured out for eSerials, but unless you have a subscription to NetLibrary or you individually catalog the titles in your eBook collections, much of your eBook content will not appear in WorldCat Local.

Nevertheless, there are also important advantages:

- ❖ Simple search box which searches materials at UW, in Summit and other libraries worldwide.
- * UW holdings float to the top, followed by Summit, then WorldCat libraries.

- ❖ Materials held outside the UW and Summit are apparent to users without further searching/changing interfaces.
- ❖ Displays availability of UW/Summit materials.
- Provides hooks into the appropriate delivery stream for materials (either UW/Summit/ILL)
- Includes article metadata not available in our catalogs
- Finds research articles, and through our link resolved, provides access to full-text online
- ❖ Builds on the existing worldcat.org interface, so we have faceted browse, FRBR-ized results sets, citation formatting, cover art, relevancy ranking of results, user-contributed content, ability to build and save lists, and the multi-lingual interface
- Retains UW look and feel, including links back to "Your Library Account" and our online reference services
- Able to take advantage of non-Roman script that has been added to OCLC records.
- One of the major wins is reducing the number of "dead ends" with regards to discovery/delivery options. Next steps should always be clear to the users so that they don't feel lost.
- Built and improved based on user feedback

Moreover, an increase in borrowing was noted. 59% increase in consortial borrowing. Interlibrary loan borrowing was up 101% last year. Book requests up 223%. Large increases in media, and popular materials. So how do we cope with these increases? For the short term, we've increased interlibrary loan staff to cover the services. For the long term, we're investigating ways to streamline the service and ways to provide resources through programs such as "purchase on request" as well as attempting to integrate reference services, collection development and interlibrary loan in ways that can minimize duplicate work.

Likewise, more searching is being done in WorldCat Local than it was done in the local catalog. The decrease in local catalog searching makes sense as we changed the default search box from the library catalog to WorldCat Local. But even so, there has been a significant increase in the number of searches going through the search box.

WorldCat Local is also our second highest request source to the link resolver (just below Web of Science). In the first quarter 2008, 31,000 full-text articles were surfaced through WorldCat Local with no corresponding reduction of use in other full-text databases. These are 31,000 additional articles which we are now delivering electronically which we hadn't been prior to WorldCat Local implementation.

Overall, the general feedback we have received has been very positive, although there were experienced users who had problems navigating the system and were upset by the lack of advanced searching.