Libraries spend millions of dollars each year buying books for their patrons. But while everyone knows about Amazon, not everyone knows about what their libraries have already bought for them.

So how in the world does an internet surfer find library materials?

There are several ways to go about searching for library materials via the internet. This article will examine the most effective approaches, ranging from simple to more sophisticated searches, that can help potential patrons find the needle in a haystack.

Of course, the first step for the knowledgeable would be to locate their local public library’s webpage and search that directly. All libraries that joined the 20th century, not to mention the 21st century, have their catalogs online and open for anyone to search. Anyone who doesn’t know the local library’s internet address can Google the name of the area along with the word “library” to find it. But if the local public library does not have the exact item sought, what library does and how can the item be located? Can Google and Yahoo! help? Yes, by searching WorldCat, OCLC’s global catalog of library materials. Since 2004, these information-providing behemoths — along with smaller concerns — have woven WorldCat into the World Wide Web.
Open WorldCat
The Marriage for User Convenience

In December 2003, OCLC, producer of WorldCat, opened its entire inventory (at the time more than 55 million records) to the internet search engine Google, appropriately naming the result Open WorldCat. Using what the search engines call harvesting, internet searchers can identify books and materials and locate them in WorldCat participating libraries. To date, Google and Yahoo! — which joined the Open WorldCat project in the summer of 2004 — have indexed almost 4 million of the more popular of WorldCat’s now 93 million records for harvesting through the internet. Users only need to input the title of a book and include “find in a library” or the phrase site: WorldCatLibraries.org (not in quotes). Entering the latter directs the search to the WorldCat database to retrieve all the records available for the same item and all the OCLC libraries holding the item. The matching results from WorldCat will appear first in the list of Google and Yahoo! results. The correct link in the results list will be apparent by the WorldCatLibraries.org or WorldCat.org URLs. The searcher will see the names of libraries that own the item listed in the descending distance order based on the entered ZIP code. Besides the library location and format of the item, the user may also see a link to the record in the library’s own online catalog and/or a link for Library Information. According to the OCLC webpages, WorldCat records are or will soon be available through 14 websites, including vendors such as Amazon.com, Alibris, and others. We also found links through several websites, including LibraryThing [http://www.librarything.com].

Different needs may involve employment of a variety of search strategies. For a search by subject rather than a specific title, casting a wide net of a keyword query brings back a mix of book and article titles relevant to the topic. Keyword searching is the most-common but the least-precise way to search. Results ranked by the relevancy algorithm of a search engine may place a few WorldCat records at the top of the results, but after that WorldCat records may be scattered throughout result pages. Even with the far more precise search on an author or even an exact title, the searcher should not limit browsing to merely the first page of search results. And as with any search of the internet, putting phrases in quotes does help a great deal in narrowing the results. When performing this kind of search, the most satisfying results occur when adding the phrase site: WorldCatLibraries.org to the search string. As opposed to the broader “find in a library” search, this query narrows down the results to only the WorldCat database, eliminating the need to pick through many pages to find the appropriate result.

For example, a search for war in iraq and “find in a library” returns 14,900 Google results and 1,480 Yahoo!

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results with WorldCat titles scattered throughout. But a search for war in iraq and site:WorldCatLibraries.org narrows that down to 1,310 Google and 107 Yahoo! results—all of them WorldCat records. This search engine approach to finding library materials works best whether searching using subject/keyword, author, or title. Always remember, however, a small print detail we found posted on a WorldCat webpage: “Note that Google and Yahoo! use smaller and varied subsets of WorldCat information focused on popular items, so you may see different results between them when using the same search terms” [http://www.WorldCat.org/sitesandtips/default.jsp]. This means results will differ depending upon which search engine you use.

If you do not find what you need using Google or Yahoo!, you may also want to try Ask.com, another Open WorldCat partner.

While using these “find in a library” and site: WorldCatLibraries.org strategies may work well for users searching for library materials, these strategies could hardly be called intuitive. Users will need to be taught the approaches, probably by librarians. Even after using one of the described search strings, Internet searches can provide a large, unwieldy number of results. A simple Yahoo! search for The Da Vinci Code, without the required search strings, for example, produced almost 10 million results, but not a single WorldCat result in the first 20 pages. For someone to locate an item in a local library, he or she either needs to know about the recommended search string or at least include the word “library” in the query. As an example, the day we searched for The Da Vinci Code with the word Library added in Yahoo!, we actually did get a WorldCat result in the top five. Unfortunately for us, it was the Polish translation, but still a WorldCat result. The identical search in Google was more successful. We actually found the WorldCat record in English as the third result. To cue the surfer to the library search possibilities, perhaps search engines need to add a Library option to their list of more ways to search.

Google Toolbar Finds Books

Installation of a browser’s toolbar can shift the searching for books into a higher gear. WorldCat records all carry links to downloading Google and Yahoo! toolbars for Firefox and Internet Explorer. A Google toolbar is also available for Macintosh users. Firefox has an option on an extension that can add WorldCat to the Search Bar menu. Google’s toolbar comes with an additional capability of a “context-sensitive AutoLink feature which converts an ISBN to a hyperlink leading to WorldCat library information for the item” [http://www.WorldCat.org/toolbars/default.jsp]. If a user accesses the Internet with a Google toolbar, Google will automatically search any webpage for an ISBN and hyperlink it to the WorldCat record for that book. There are a couple of tricks to doing this, such as making sure the AutoLink is enabled. A quick, informal survey around our library showed that none of those using the Google toolbar had noticed
Open WorldCat continued from page 25

this feature and had never used it to access WorldCat records. We tried it using our own OPAC as the guinea pig. Once we knew what to look for, we were impressed. Clicking on the Auto Link button on the toolbar identifies any ISBN on the page and highlights it. The Auto Link button automatically changes to a link called Show Book Info. When you use the down arrow, the ISBN appears with a direct link to the item in WorldCat.

You need to reset the default provider for the autolinking book information to WorldCat for that ISBN link to reach WorldCat libraries. Otherwise, it automatically defaults to Amazon.com.

By placing your cursor over the highlighted, hyperlinked ISBN and right-clicking, links appear for WorldCat, Amazon, Google Products, Barnes & Noble, and BookSense. Clicking on any of these links will take you to the item in these websites.

Google Books

Google has other permutations that searchers should learn. Searchers looking for the written word may find themselves more at home with Google Books [http://books.google.com] or Google Scholar [http://scholar.google.com]. The Google Books database contains materials from two sources: digitized books from the library partners and new books submitted by the publishers. Simply type in words, phrases, title, or author, and Google searches the full text of books for those words. If the book is out of copyright, or the publisher or copyright holder grants permission, users may be able to read the entire text online or download the item as their own ebook; in this case, library access is not even needed. But if an item is under copyright protection or if the reader simply prefers a book in hand, finding a copy in a library may still be the best option. In order to facilitate library searching, many Google Books’ results include a WorldCat link called Library Search. There is a caveat, however. Not every citation has a library link, and this is where it gets tricky. Google Books automatically populates search results with library links only for those books that have been digitized as part of the library side of the Google Books project [http://www.libraryjournal.com/article/CA6290431.html%20]. If the book comes from a publisher partner, the library links will not appear, only book ordering options. In order for the library link to appear in all results, you need to check the Library Catalogs option in the advanced search interface.

Using the advanced search option is a good way to focus a search in any search engine, but the Advanced Search in Google Books is especially helpful in locating library materials. There you can limit a search to books available in full text or only in limited preview and therefore probably more recent publications. The checked box for Library Catalogs limits the search to WorldCat, or any other major national catalog, depending on the worldwide location of the searcher. Titles in the results list are not clickable, but the library link will connect to the WorldCat record for the item. The record consists of five tabbed components: Libraries, Details, Subjects, Editions, and Reviews. Details gives a very brief description of the item, i.e., the format, fiction, nonfiction, etc. It also, along with Reviews, has a Web 2.0 component and offers a place for users to add their own notes, comments, reviews of the item, or a table of contents. Subjects give clickable Library of Congress Subject Headings for the item. The next tab gives a list of all editions in WorldCat for the same title.

Arriving at a WorldCat Library

The Libraries tab is the first screen a searcher sees when clicking on a title link from a web search. As explained earlier, the results on the Libraries page are sorted by geography, giving the closest library first. The record will give a location at the top of the screen based on WorldCat’s identification of the IP of your computer or your internet service provider. Check the default location at the top of the WorldCat record. It may not always be accurate, but you can change it. The first time we used it, it automatically and correctly gave our location as Northridge with the correct ZIP code. Our university has a static IP range and we were on campus at the time. But that is not how it works when using an internet service provider with dynamically generated IP addresses such as AOL, where the IP range can differ every time you surf the net, misinforming WorldCat about your geographical location. Also, we found that if you access the internet using a virtual private network (VPN), the ZIP code field is automatically left blank and reported as an error in indicating location.

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You can easily correct this by filling in the desired ZIP code. And, of course, in this mobile world, you may want to insert a ZIP code for another geographic area, one you intend to visit, for example, or one where a beloved relative lives, computer bereft and longing for a book to read.

Destinations of the links for libraries holding an item may vary. In some cases you may be taken directly to the item in the library's catalog; in others, you may only reach the catalog search screen and have to redo your search. It all depends on whether a library has registered its deep-linking URLs, i.e., those that connect directly to the record in the catalog, with OCLC. If so, users will go to the individual item; if not, they will have to redo the search in the library's catalog.

The libraries shown on the list of holding institutions can be any library that belongs to the OCLC subscriber program and meets the requirements for the holdings exposure. For the most part, subscribing institutions will be public, college, or university libraries. Public libraries are often the best bet if a searcher is looking for an item to check out. However, if the local public library system has one main branch as well as many branches, only the entry for the main library may appear in the search results, not necessarily the branch holdings. For example, a search for the book *Freakonomics* listed the Los Angeles Public Library 19 miles away. Checking the record in LAPL's OPAC though, we found an available copy of the book at our local branch literally across the street from us less than a quarter-mile away. On the other hand, Burbank Public Library was fifth on the list and only 12 miles away, which is all well and good, but one must work, live, or attend school in the city of Burbank to be eligible for a library card there.

Obviously, the reason why the holdings of branch libraries do not appear in results is that libraries usually have centralized cataloging with one record in WorldCat under the holdings symbol for the main library. Although OCLC has a provision for group libraries to show their holdings in all branches, the affiliation in the group needs to be defined as such in the OCLC subscription. Clearly, not all libraries utilize that option. So users should get into the habit of digging below the surface of the initial WorldCat record to determine if a library has the item at a local branch.

Another reason why a nearby library may not appear as an option stems from how OCLC creates the revenue stream to support Open WorldCat and Worldcat.org. In order for a library to show its holdings to the web world, it must subscribe to OCLC's FirstSearch, a suite of reference databases. If it does not, even though the library uses OCLC for cataloging and places its holdings there, those holding will not appear in WorldCat search results. So what is a potential library patron to do? Well, for starters, do not take the list of participating libraries or their distance at face value. As pointed out, the item may be in a library right across the street. Branch information is easily found by clicking on the name of the library. The key is knowing, or finding out, which library is closest and accessible. The physically closest library may not allow outside users to circulate materials or even allow on-site use. These issues may prove the largest source of frustration in using search engines to locate an accessible library book.

If the user comes from an IP-recognized connection of a library that fully participates in WorldCat, i.e., subscribes to FirstSearch, an orange box, Search my library, appears in the upperright corner of the record linking directly to the item record in FirstSearch. Why is this important? FirstSearch provides a host...
Periodicals? Not So Much!

What happens if the searcher is looking for a journal?

This situation has more caveats than book searching. Similarities end with the print journals and manually cataloged electronic journals. Given that the aforementioned conditions for the holdings exposure are met, these materials would be discoverable in WorldCat. However, an increasing number of libraries outsource electronic journals management to companies including Serials Solutions, Ex Libris, etc. The volume and volatility of the online journal packages make it prohibitive for libraries to place their holdings in OCLC. Therefore, the only places where the searcher could find those materials are the library’s catalog or electronic journal A-Z list, assuming the library does not subscribe to OCLC’s eSerials holdings service. This relatively new addition to the suite of OCLC services is based on the partnership of OCLC with ejournal management vendors. Free for libraries, the service does require registration and setting up interlibrary loan preferences. Once a month, OCLC receives the library’s electronic holdings information from a commercial partner and activates new titles or deletes ones that dropped out of aggregations.

Many libraries have taken advantage of the service, which became available in the fall of 2006, in order to expose their collections to users doing research on the web. However, since this ISSN-based service works only for ejournals that have an ISSN, it omits many newspapers and other periodicals without ISSNs. In addition, users cannot see the coverage years available at the library from the WorldCat record unless they keep clicking through to the record level in the online catalog or holdings information on the library website. Users of libraries that do not have the eSerials service may never know what they are missing. This puts an added burden on libraries to ensure that their collections are searchable to the fullest extent from popular web interfaces, where the search results are taken on faith by today’s average user.

Of enhanced services that WorldCat does not. In comparison, FirstSearch offers a more detailed description of the item, access to interlibrary loan and other fulfillment services, export of the citation to bibliographic management software, and emailing of search results. Also, the record on FirstSearch is more likely to have a link resolver capability, taking the user through the authentication process to full text available from the library’s licensed databases.

Another great feature is Library Information, the link provided from the WorldCat list. The target of this link varies among the different libraries. For our institution, the link goes to our Library Hours page; for others, it goes to the library homepage. While helpful, pointing potential library users to the hours of the library still requires the user to go the extra step or steps to find out about circulation privileges. And honestly, even librarians who work with online catalogs and library webpages on a daily basis can have difficulty navigating unfamiliar library webpages. The first time. Occidental College, listed as the 9th closest library on one of our test searches, probably had the most useful library information page. It took us to a page that spelled out specifically not only who was eligible to use the library, but also who their partners and consortia are and how to get a library card if you are associated with any of the participating institutions [http://departments.oxy.edu/library/services/users/other/index.html].

It was so nice not to have to hunt around for user privileges information or search out the library’s webpage for further information. Links to the library information are entered by OCLC or submitted directly by the libraries through the FirstSearch Administrative module.

Some records include an Ask a Librarian link. On the average, we estimated only about 10% of the libraries listed had such a link. Most links appear to send the searcher to an email reference page or to provide a list of ways in which to contact a librarian, i.e. via email, chat, or telephone reference. Unless a library submits its own URL for its online service, only those participating in the OCLC QuestionPoint reference chat service have the Ask a Librarian link appear automatically. Those linked to an email reference service or virtual chat were all open to the public. None of them required proof of residency or a library card. We were even able to chat online with a librarian in Birmingham, England, using the links from WorldCat. So late night book worms can get research or library-related assistance from a librarian anywhere in the world. Call it librarians without borders 24/7.

What if you found a book but it’s checked out or nowhere near you and you don’t feel like traveling? Buy it! You can do that too
Another feature available from Google Scholar connects the user with library resources

Google Scholar

Do you need an article or book chapter from a solid, reputable source? Valuable, credible citations and sometimes full text can be located using Google Scholar [http://scholar.google.com]. Google Scholar is another variant of Google that searches academic resources. Some results in Google Scholar search may link directly to articles or book chapters through Google Books.

But how? Books, book chapters, and scholarly articles can be located in libraries or online without having to know about the "find in library" search string so critical in regular Google or other search engines. In fact, adding the "find in library" string caused us to retrieve zero results every time. This is a tricky issue. A savvy internet surfer may be familiar with the "in a library search" and assume that the search would be the same in Scholar. We were shocked when we searched Scholar using the search string and retrieved zero results every time. By definition, Google Scholar is designed for scholarly research and therefore has already provided for the user's need to find a nearby library holding the physical copy of the book. To that end, Google has implemented the Library Search program [http://www.google.com/librariancenter/articles/0612_0l.html]. The feature automatically populates book search results with the link to WorldCat, subsequently taking the user to the record in the OCLC bibliographic database described earlier. The user needs do nothing for this linking to occur, as it is supplied automatically. However, the library option can be deactivated in Google Scholar preferences.

Another feature available from Google Scholar connects the user with library resources.

The Library Links feature works with library link resolvers to connect searchers to the full text of online articles. This feature is not automatic; libraries must configure the service with Google Scholar. The library informs Scholar about its electronic holdings contained in its link resolver's knowledgebase. If an online article is available to the library's users, the link resolver provides a link that will take the user straight to the full text of the article. For on-campus users, this will be a seamless process without the need to set up the library in Google Scholar preferences. Off-campus users must configure their affiliation with a library and then go through the process of authentication via the proxy server or use a VPN connection to gain access to the full text.

Because not all libraries have their own link resolvers, Google Scholar is working with Ingenta and EBSCO to provide automatic links for their customers who don't have link resolvers. Once implemented, the links will work like the Library Search program, requiring no action on the part of the user or library to connect to the full text of Ingenta and EBSCO articles. Ingenta, an information technology provider, has launched a new reference linking initiative with JSTOR, the online scholarly journal archive. The partnership is intended to allow licensed JSTOR users accessing full-text articles on Ingenta to link from references in Ingenta to the corresponding full text held in the various collections in JSTOR's archive. The result of Google Scholar working with Ingenta is already evident through links to JSTOR articles. Ingenta has a partnership with this database enabling the user to access full text through a single search.

This is a tricky issue. A savvy internet surfer may be familiar with the "in a library search" and assume that the search would be the same in Scholar. We were shocked when we searched Scholar using the search string and retrieved zero results every time. By definition, Google Scholar is designed for scholarly research and therefore has already provided for the user's need to find a nearby library holding the physical copy of the book. To that end, Google has implemented the Library Search program [http://www.google.com/librariancenter/articles/0612_0l.html]. The feature automatically populates book search results with the link to WorldCat, subsequently taking the user to the record in the OCLC bibliographic database described earlier. The user needs do nothing for this linking to occur, as it is supplied automatically. However, the library option can be deactivated in Google Scholar preferences.

Figure 7. "Buy. Don't borrow?"

Figure 8. Google Scholar meets WorldCat, e.g., http://scholar.google.com/scholar?hl=en&lr=&q=time+travelers+wife.
WorldCat.org and What's Next?

Prior to the summer of 2006, a searcher had to be an OCLC customer or go through an affiliated library to search the entire WorldCat database. At the time, most WorldCat searchers were probably librarians or library patrons and not the ordinary web surfer searching from home or the office. Two years after the Open WorldCat beta test began, encouraged by its success, OCLC opened up http://www.WorldCat.org to the public at large. The complete WorldCat database of more than 1.1 billion holdings, previously open only to subscribers, is now available for any user to search. It features all the same capabilities and links as Open WorldCat, but with a far larger number of results. Unlike Open WorldCat, you must search directly on the WorldCat.org site, not through Google or Yahoo. WorldCat is the largest library network in the world, so chances are your local libraries are members, and, if not, you can still locate an item for interlibrary loan.

You can also purchase books through WorldCat.org, as you can through Amazon.com when you locate a WorldCat item using Google Books. When you search WorldCat.org directly, a second link appears below the Amazon link, which allows the user to purchase the book through the book distributor Baker & Taylor. The best part about buying the item through this service is that OCLC will make a small donation to the buyer’s library of choice. You can choose a single library or libraries in general: “Choose a specific library, and a percentage of your final purchase is credited toward that library’s OCLC service charges. If you do not choose a library, the amount is applied to a general OCLC fund that supports the Find in a Library search site” (http://www.WorldCatLibraries.org/wcpa/top3mset/7432879/). This is the best of both worlds. A researcher can opt to support his/her local library by visiting it and checking the book out or purchase the book and still support the local library. Currently, an Amazon.com purchase supports only the general fund, but if the service proves successful, OCLC will add the library of choice option there too.

In May 2007, OCLC announced a pilot project called WorldCat Local. Recognizing the issues involved with using WorldCat and the difficulty of determining accessibility of an item once located, OCLC’s new service allows participating libraries to customize their WorldCat capabilities. It will “provide libraries the ability to search the entire WorldCat database and present results beginning with items most accessible to the patron” (“OCLC to pilot WorldCat local,” C&RL News, May 2007, pp. 287-288). Items located in the local library will meld with those in shared, consortial collections and, ultimately, the whole WorldCat collection. If it works, this could solve the large problem of accessibility with Open WorldCat and ease the frustration of finding an item you cannot access. A library patron will know upfront if an item is available for use locally or through a library consortium, with all the advantages of an online catalog, OCLC expects to have a seamless functionality incorporating searching, circulation, and other locally maintained services. The program is currently in the beta-test phase at the University of Washington Libraries; subsequent pilots will take place at Peninsula Library System in California and several public, school, and academic libraries in Illinois. This exciting development could solve many of the issues we have discussed. It will be interesting to see how WorldCat continues to evolve. It looks like the world is changing, and WorldCat is changing with it.