Searching Google for scholarly content

Google, the leading Web search company, now offers a search tool specializing in scholarly content. The launch of Google Scholar on Nov. 18 set off a firestorm of reactions, speculations, and discussions among libraries.

Google's enormously successful Web Search has long caused librarians to think hard about how to develop their own search and retrieval interfaces. Google Scholar encroaches deeply into the academic world by providing a search environment for scholarly literature.

Google Scholar joins an increasing arsenal of specialized search interfaces.

Simplicity attracts users

Google Scholar sports the uncluttered no-frills interface that propelled the other Google search products to dominance. A simple box invites the searcher to type in search terms, returning a clean list of results that include the title of the work linked to its representation on the Web, authors, description, and its source.

Tumble Talking Books ready to e-rumble

Another company has entered the ring along with OverDrive and netLibrary in the digital audio book competition for the hearts and ears of librarians and their patrons. Tumble Talking Books is launching a new digital audio book service Jan. 1, 2005.

Although Tumble Books, a division of Tumbleweed Press, Inc., has been a leader in the nascent market of e-books for grade-school-aged children, Tumble Talking Books will concentrate on works of fiction and nonfiction for adults.

Where both OverDrive and netLibrary have based their digital audio book services on the Windows Media Audio (WMA) file format, Tumble Talking Books has decided to go with Flash, which requires Flash Player (Version 7 or higher) from Macromedia.

Like Windows Media Player from Microsoft, Flash Player is preloaded on most new computers, or it can be downloaded for free from the Macromedia website. Macromedia claims that Flash is the world's most pervasive software.
platform" because it is installed on more than 98% of Internet-enabled desktop computers worldwide.

Ron Zevy, president of Tumbleweed Press, reports that the opening day collection for Tumble Talking Books will contain 2,000 to 2,500 titles, of which about 80% will be unabridged.

Tumble Talking Books is offering libraries an interesting pricing and access model. The content will be delivered exclusively as streaming audio, which means that only a computing device currently connected to the Internet will be able to deliver the audio content.

Users will not be able to download a digital audio book for offline listening, transfer it to a portable player, or burn it to CD. The user interface probably will be similar to TumblePad, the current interface for Tumble Books, its e-book collection for K–4 graders.

Libraries can subscribe to a certain sized collection for a year. The minimum-sized collection is 100 titles. The titles that comprise the collection, however, can be selected and swapped from the master collection of titles available through Tumble Talking Books.

If a title in the rented collection is not being used much, or if its circulation is long past its peak, it can be replaced with another title. The rental cost will be about $20 per title per year, but the company has no restrictions on the number of users—including simultaneous users—who can access any given title.

Discounts opportunities abound, based on the size of a library's rental collection (up to a 45% discount for a 400-title collection). Discounts also include prorations for additional titles purchased in the middle of a subscription year, multiple-year subscriptions, multiple subscriptions to various Tumble collections, and so on. Evidently, libraries within a consortium cannot share a collection, but group purchasing discounts are possible, too.

If all this tumbling (Tumbleweed Press, Tumble Books for kids, and Tumble Talking Books for adults) has you dazed and confused, there's more. TumbleReadables, a collection of large print e-books, also was launched in October. The collection contains classic and recent fiction and nonfiction for adults, young adult novels, children's books, and high interest/low-reading-level books intended for older teens and adults learning to read.

Software has been developed that enables the reader to easily vary the size of the font up to 34 points using a slide bar that produces immediate results, including reformatting the text. TumbleReadables uses the same subscription-based, swappable collection model offered through Tumble Talking Books.

To help subscribing libraries manage all this tumbling and swapping, the Tumble team has developed an administrative module named—you guessed it—TumbleAdmin.—Tom Peters

VTLS selects TDNet for link resolver

VTLS, the library automation company that offers the Virtua integrated library system, will partner with TDNet to provide an OpenURL-based link resolver to its library customers in late 2004.

TDNet, a company specializing in electronic journals management, launched TOUR (TDNet Open URL Resolver) in August 2003. The TDNet resolver will be offered as an optional extension to the Vectors iPortal from VTLS, the Web-based OPAC for Virtua.

Link resolvers have grown to be an essential component of an academic library’s infrastructure for providing access to electronic content. Link resolvers provide a more manageable approach toward the problem of maintaining links among resources by creating them dynamically based on the context of the user.

Rather than relying on a single hardcoded URL, a link resolver forms the link from the metadata transmitted on an OpenURL combined with knowledge of what resources are available to the user based on the library’s subscriptions. Link Resolvers have been widely adapted by academic libraries. Almost all library automation vendors offer a link resolver as part of their suite of products marketed to libraries. Some of the companies use technology they own and developed locally, and others have partnered with other companies. The following timeline illustrates how each ILS vendors approached its link resolver offerings:

- Ex Libris (USA), Inc., was the first to enter the market with SFX; initially developed at University of Ghent but it is now exclusively developed and sold by Ex Libris. SFX is by far the market leader in this product group.
- Endeavor Information Systems Inc. launched LinkFinderPlus in June 2001 based on technology it developed.
- Innovative Interfaces, Inc., announced WebBridge in June 2001 based on technology it developed.
- Sirsi Corp. began offering Sirsi Resolver in October 2003, based on technology licensed from Openly Informatics.
- Dynix Corp. initiated a partnership with Serials Solution December 2003 for the technology behind its Horizon Link Resolver.
- In November 2004, VTLS, Inc., began offering a link resolver for its Vectors iPortal based on technology developed by TDNet. — MB

WEB SERVICES UPDATE

Developments continue related to the adoption of Web services by library technology providers. Previous issues of SLN have reported on the Vendor Initiative for Enabling Web Services, or Views, initiative chaired by Carl Grant of VTLS. New developments have occurred since October 2004.

The membership of the initiative continues to expand, with Sirsi Corp. joining in early November 2004 and Auto-Graphics in late October. These latest two join VTLS, Inc.; Endeavor Information Systems Inc.; The Library Corp.; Talis; Fretwell-Downing; Muse Global; NISO; Index Data; and Dynix Corp.

Some recent activities of the initiative include creating its website, conducting a survey among the membership on current and planned use of Web services, and planning for the group’s first implementation of a Web service, which will perform authorization and authentication.

Although the Views membership now includes 11 of the major players in library automation, it’s not a comprehensive group. Notably, Innovative Interfaces, Inc., one of the largest companies has not joined. That is not to say that Innovative has no interest in Web services.

In September 2004, Innovative implemented a product called Inventory Express that relies on Web services to facilitate communications between a library’s Millennium acquisitions module and the ordering systems of library vendors. In November, Innovative extended the reach of Inventory express through a Web services link between Amazon.com and Millennium to greatly simplify the process of buying books from that supplier and adding them to the catalog.

Both the efforts of the Views consortium and the independent development of Innovative demonstrate Web services as an increasingly important component of library automation infrastructure. — MB

Although the generic Google interface indexes all known information on the Web, Google Scholar targets content construed as scholarly, including articles, peer-reviewed papers, technical reports, theses, and dissertations. As these items are incorporated into the Google Scholar indexes, it extracts the citations or references within the articles and posts them as separate entries.

These citations provide access to additional content, some of which may not be available on the free Web. Some items cited may be print only. For these items, searchers will rely on traditional avenues—such as their local library—for access to the actual content.

**Citations frequency counts**

Like its sister search products, Google Scholar ranks results according to relevancy so that the items most closely related to the query appear at the top. The search engine calculates the relevance based on the content of the full text of the article, when it’s available, the author, the source of the article, and how frequently it has been cited in other articles.

In scholarly literature, one measure of the importance of a work involves the frequency with which it’s cited by other scholars. Google Scholar mines the references to calculate and display the number of times each article is cited, providing a “Cited by” link that can be clicked to display the works that refer back to the item. Citation frequency increases the relevancy of a work, making it more likely to be placed highly within a result listing.

The interface lacks advanced search features to limit results or modify queries. Users can only specify “author.” Limiting by date range, subject category, or other qualifiers is not possible. The Google approach relies on highly effective relevance ranking of results rather than complex search qualifiers.

**Books found too**

Google Scholar goes beyond articles. Content found in books finds its way into Google Scholar through records provided by OCLC’s Open WorldCat project, a seminal collaboration between OCLC and two search engine companies, Google and Yahoo.

By exposing OCLC’s database of cataloging records and holdings to the harvesting processes that build the indexes for Google and Yahoo, users can find a vast number of books through these popular search engines.

Through the holdings information in the records and specialized linking technologies, OCLC also provides the ability for a searcher to find what nearby libraries own the item. The Open WorldCat pilot project begun in the summer of 2003 provided access to 2 million of the most popular titles. With the resounding success of the pilot, OCLC exposed the majority of its 57 million titles by the end of November 2004. (See sidebar story.)

**Who will pay?**

Google gains practically all its income from advertising, placing sponsored links or text adds in search results, and targeting the placement of ads according to the user’s query. Google Scholar, at least initially, will not include ads. But given Google’s status as a publicly owned for-profit company, reprieve from commercial gain will not likely be permanent.

Google isn’t likely to corner the market for long in the realm of public search engines devoted to scholarly content. With competition intensifying in the search engine arena, others will join the fray soon.

Not surprisingly, the launch of Google Scholar sparked discussion on many library-oriented discussion lists and blogs. Since
its meteoric ascent in popularity, librarians have been concerned that many students and other researchers rely excessively on Google, accepting “good-enough” resources for their queries, consisting primarily of unauthenticated resources available on the free Web. The combination of the addictively simple Google interface paired with high-quality scholarly content skyrockets the concern.

At the least, Google Scholar raises the bar for user-friendly search and retrieval for scholarly content. If it gains the same degree of popularity as the other Google search services, it stands to challenge the basic models for providing access to electronic content that have been evolving in libraries for the last three or four years.

Competing with libraries

How well will the current offerings found on library websites hold up to this competition? One of the hottest technologies for libraries in the last few years involves metasearch environments that provide a simpler interface for searching a library’s collection of electronic content. With Google Scholar as a benchmark, will library patrons be satisfied?

The technology behind Google Scholar also may not bode well for the various abstracting and indexing (A&I) products. Librarians may be nearing the time when automatically generated indexes produced through harvesting match those available from the traditional A&I services. Will the availability of high-quality indexing services through the likes of Google Scholar reduce the commercial value of traditional A&I products to commodity status?

Google Scholar is just a newborn. Though it delivers impressive results, it isn’t comprehensive relative to the entire body of scholarly literature. Google Scholar doesn’t bypass the need for libraries to purchase electronic scholarly resources for their users. It doesn’t provide free access to anything that otherwise requires access by subscription.

As noted by Thomas Dowling on the WEB4LIB list, Google Scholar dodges the “appropriate copy” problem that libraries have been striving to solve for at least three years. Given lots of instances of any given item of content, Google Scholar isn’t able to direct a user to the version that’s actually available to the user by virtue of his or her library’s subscriptions. The genre of link resolver applications (SFX, LinkFinderPlus, WebBridge, and so on) emerged to solve this problem. A reasonable resolution to the appropriate copy issue will greatly enhance the power of Google Scholar.

Google has a history of transformative applications of technology. Its entry into scholarly literature challenges librarians to develop more compelling models for searching to compete with in a world changed by Google.—Marshall Breeding

Contact: Google Scholar, http://scholar.google.com
OCLC Open WorldCat, www.oclc.org/worldcat/open

Yahoo toolbar adds OCLC

In November Yahoo and OCLC released a new browser toolbar plug-in that simplifies Web access to a subset of the WorldCat database, other FirstSearch databases, and other services from OCLC.

After a user downloads the new toolbar and runs the executable file to install it in Internet Explorer (Version 5 or higher) on a computer running Windows 98, 2000, or XP, he or she can enter a search terms in the toolbar input box, and then click the OCLC icon on the extreme left to execute a search.

From the summary results, users can select a single bibliographic record. When the user inputs a ZIP code, the search engine adds a list of nearby libraries holding the item in question.

This collaborative effort is part of the Open WorldCat program, which is designed to make bibliographic records and libraries holdings information more accessible through Web search engines and online booksellers. Although the current subset of the WorldCat database contains less than 5% of the full version, that percentage will increase over time.—TP

Contact: Yahoo!/OCLC Toolbar, www.oclc.org/toolbar/default.htm
Open WorldCat, www.oclc.org/worldcat/open/default.htm
DREW draws up VR database

Although many in the library profession continue to ponder and debate the usefulness and enduring value of knowledge bases comprised of virtual reference (VR) questions and answers, such as the Knowledge Base from QuestionPoint, R. David Lankes and his colleagues at Syracuse University in New York are busy constructing a database that will pull in Q&As from a variety of VR services and platforms. DREW will serve both as a resource for primary research into how human intermediation in information seeking works in virtual reference environments, as well as for practical information supporting management decisions and strategic planning. It will provide both traditional reports and interactive tools.

When Lankes spoke at the VRD (Virtual Reference Desk) Conference in November, he expressed his hope that DREW, a schema for archiving reference transactions, will complement NetRef, the NISO standard for the in-process management of reference transactions across multiple services and platforms.

Contact: Tutor.com, www.tutor.com
eGain, www.egain.com
QuestionPoint, www.questionpoint.org

The entire virtual reference vendor community appears to be facing the choice between a browser- or application-based system.

The pricing model for the new system will be based on the size of the population served. No launch date was announced, but Fallon is looking at the first quarter of 2005.

By moving from a browser-based platform to a desktop application, Tutor.com will become less reliant on the use of Microsoft Java. Fallon expressed concern over how long Microsoft will continue to support its Java client.

Although the new application will require end users of a virtual reference service to download the application to experience the full functionality, the new application should be more accessible to all users of a virtual reference service, including those patrons who are blind or visually impaired.

The entire virtual reference vendor community appears to be facing the choice between a browser- or application-based system. Browser-based systems do not require a patron software download, but increasingly are raising accessibility, advanced functionality, and sustainability concerns. Application-based systems require a download but promise better accessibility and progress.

eGain also serves as the foundation for 24/7 Reference, another leading virtual reference system that recently merged with QuestionPoint, a division of OCLC. At the 24/7-QuestionPoint User Group Meeting at the VRD Conference, Jeff Penka from OCLC observed that eGain continues to be a good platform on which virtual reference systems can be built, and that QuestionPoint has no definite plans at this time to move away from the eGain platform.—TP

Contact: Tutor.com, www.tutor.com
eGain, www.egain.com
QuestionPoint, www.questionpoint.org
NEW SIGHTING OF E-BOOK READING DEVICE

Reports of the death of dedicated e-book reading devices have been persistent, but they may be premature. Like Haley’s Comet but with a short erratic orbit, the Rocket eBook dedicated reading device originally launched in the 1990s by NuvoMedia (now defunct) and revered by many as the best of class in the shaky, perhaps quixotic category of dedicated reading devices, keeps coming back for new sightings.

In the first three years of this century it appeared as the RCA Gemstar REB 1100 device, then as the 1150. That sighting faded abruptly in June 2003 when Gemstar exited the e-book market. Other dedicated reading devices with similar acronyms and numbers, such as the REB 1200 and GEB 2150, also swirled about in the heady days of the e-book movement.

As of late 2004 a new company, eBookwise, a subsidiary of FictionWise, is again selling a version of this legendary device as the eBookWise 1150. Because FictionWise is one of the leading retailers of e-book content, plenty of content is available for loading on the various generations of this recurring comet.

The revived 1150 has all the features and functionality of its predecessors, including:

- 5.5 inch (measured diagonally) grayscale LCD touch screen
- Backlit screen with adjustable brightness and contrast
- Long battery life (up to 15 hours with each charge of the rechargeable battery)
- USB port and internal modem for easy downloading of content
- 8 MB of internal Flash memory for content storage, expandable to 128 MB
- Embedded dictionary
- Bookmarking, highlighting, and notetaking
- Various fonts and font sizes
- Rotatable display (portrait and landscape)

The list price for the eBookWise 1150 has been set below $100. Shipping and handling adds $10 per unit, but as of November 2004 a $20 coupon for FictionWise content is available. The device is available for sale only in the United States and Canada. If your library already owns and circulates earlier versions of this device or its cousins, you can have hope for a successful migration to extend the useful life of these devices.

eBookWise indicates that owners of the REB 1200, GEB 1150, and GEB 2150 models should be able to undergo a firmware upgrade that makes the devices able to accept encrypted eBookWise content.

If owners of these legacy versions continue to access owned content from the old Gemstar e-book bookshelf (which reportedly will be shut down sometime during the summer of 2006), be aware that once you perform the firmware upgrade you no longer will be able to download content from the Gemstar bookshelf.

Libraries that own the original Rocket eBook device or the REB 1000 are not so fortunate. These devices cannot be upgraded to accept encrypted e-books from eBookWise. These digital grandsires will, however, accept unencrypted e-books from eBookWise, which are clearly marked in the eBookWise catalog as Rocket-compatible.

Another encouraging aspect of this most recent sighting is that personal digital files, such as Microsoft Word documents, RTF (rich text format) files, HTML files, plain text, and Rocket Editions (with the file extension .rb) can be loaded once again on these dedicated reading devices. That ability was true, too, in the days of the original Rocket eBook, but disappeared during the Gemstar era. Making PDFs (portable display files) display well on dedicated e-book reading devices remains a tough nut to crack, and PDFs cannot be displayed on the 1150.

eBookWise also reports that it is working on one or more next-generation e-book reading appliances, but more than a year will likely pass before they appear, if ever.—TP

Contact: eBookWise, www.ebookwise.com
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Google vs library competition growing?

Smart Libraries Newsletter

Smart Libraries Newsletter delivers hard data and innovative insights about the world of library technology, every month.

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