

OCLC Newsletter

JANUARY | FEBRUARY | MARCH 2005

A woman on the left is wearing a red cap and large red earrings, looking towards the right. A man on the right has white hair and is looking towards the left. The background is split into a red left half and a black right half.

GAMER BOOMER

Getting and keeping both generations happy

13 Public libraries pack a powerful \$\$\$ punch 17 WorldCat Collection Analysis debuts

Great American winemaking started in a library.

In 1933, Ernest and Julio Gallo needed a wine recipe to start their business. Where did they turn for help? **Their local library.**

There, they found the pamphlet "The Principles of Winemaking." They started to make wine, pursued their dream—and the rest is history.

Three generations later, Gallo wines earn worldwide acclaim as Matt and Gina Gallo carry the family dream forward.

Their small business has grown to create hundreds of jobs, thousands of opportunities and millions of satisfied customers.



YOUR PUBLIC LIBRARY IS A SMALL BUSINESS INCUBATOR

Public libraries continue to help entrepreneurs get their start. The investment you make in your local library helps small businesses. It also brings in additional tax dollars, raises property values and creates new jobs. In fact, studies have shown that:

for every \$1 spent on the library, a community sees an average of \$4 in return.

Who knows what Gallo success story is at your library, right now?

Go to www.oclc.org/roi/ to learn about the economic impact of library investment.



CONTENTS

JANUARY | FEBRUARY | MARCH 2005

COVER STORY

7 The Big Bang!

As Gamers and Boomers collide in one of the biggest culture clashes in history, society is being reshaped. What will the impact be on libraries? And how can libraries attract Gamers and serve both generations?

ADVOCACY

13 Public libraries pack a \$\$\$ punch

Today's public libraries are more than technology centers, book repositories, quiet reading spaces, coffee shops or busy community centers. They are engines that pump millions of dollars into local and state economies.

OCLC PRODUCTS AND SERVICES

17 WorldCat Collection Analysis debuts

The new service makes it possible to analyze and compare online the age, subject content and uniqueness of your collection with peer libraries.

DEPARTMENTS

4 FROM JAY JORDAN

5 UPDATES

13 ADVOCACY

15 TIPS AND TRICKS

16 OCLC LABS

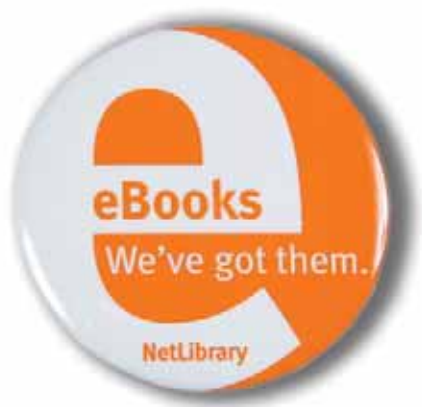
17 OCLC PRODUCTS AND SERVICES

19 OCLC RESEARCH

21 BY THE NUMBERS



New NetLibrary Subject Sets



**Significant savings
now through
June 20, 2005**

See the complete title lists at
www.oclc.org/info/subjectsets/



OCLC Newsletter

No. 267
ISSN: 0163-898X

Editor

Tom Storey

Managing Editor

Wendy McGinnis

Contributing Writers

Carrie Benseler, Brad Gauder,
Bob Murphy, Phil Schieber,
Alice Sneary

Layout and Design

Mark Uskavitch

Photography

All photos by Rich Skopin
unless otherwise noted.

OCLC Newsletter MC235
6565 Frantz Road
Dublin, Ohio 43017-3395 USA
1-800-848-5878

Send questions, comments,
subscription requests and
address/contact updates to:
oclcnewsletter@oclc.org

For more information about
OCLC, including contacts for
OCLC offices and affiliated
partners, visit the OCLC Web
site at: www.oclc.org

The *OCLC Newsletter*
(ISSN:0163-898X) is published
by OCLC Corporate Marketing
and is distributed at no charge.
Its contents may be reproduced
in whole or part provided that
credit is given.

All products and services named
in the *OCLC Newsletter* are
trademarks or service marks of
their respective companies.

Looking Ahead: An Ambitious Agenda

In October 2005, we will complete the migration of OCLC services to our new technological platform, a journey that we began in 2000. Back then, we shared with member libraries a strategy that called for us not only to build a new technological platform, but also to extend the cooperative through new membership categories, introduce new services, transform WorldCat and, ultimately, weave libraries into the Web and the Web into libraries.

Since then, we have begun interweaving libraries and the Web through programs such as Open WorldCat, which links people using search engines such as Google and Yahoo! Search to library catalogs and holdings, and the Yahoo! Toolbar, which is a free, cobranded toolbar that provides one-click access to Open WorldCat.

We have revised our governance structure and introduced new services such as Connexion, QuestionPoint, WebJunction, ILLiad, NetLibrary, CONTENTdm and other digitization/preservation services. In short, we have accomplished much of what we said would do in our 2000 strategic plan.

Now, we are developing an ambitious agenda for the future that builds on our new platform and our investment. Our updated plan is a result of an ongoing process that involves consulting with the Board of Trustees, Members Council, regional service providers, advisory committees, individual libraries and users, and OCLC staff.

Let me share with you our key objectives for 2006 and beyond, and projects that support these objectives.

Become as good at helping libraries manage digital collections as we have been at helping them manage print collections.

- Create in WorldCat and the OCLC PICA GGC Catalogue a knowledge base of serials available in electronic form and their holdings in libraries.
- Develop a link registry for maintaining links from within OCLC and OCLC PICA services to library OPACs and OpenURL resolvers.
- Launch OAI harvesting of metadata records.
- Support ingest of non-MARC 21 formats into WorldCat.
- Implement a terminology service to link WorldCat to authority files, DDC and other classification schemes, and thesauri.

Deliver OCLC and library services and collections at point of need.

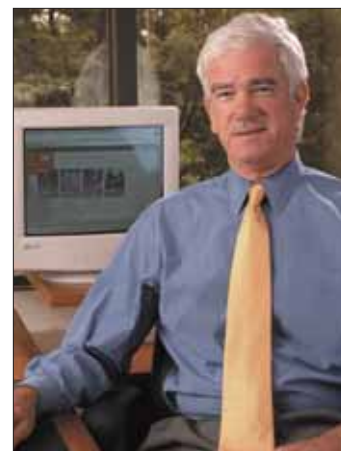
- Expand Open WorldCat with enhanced services, additional partners and new funding models.
- Syndicate delivery of OCLC cataloging records to large materials providers.
- Make OCLC services available through Web services for integration into other environments and applications.

Become the premier e-content provider of choice for libraries, publishers, distributors and other organizations.

- Syndicate e-book delivery through additional channels.
- Add new types of e-content.
- Create seamless access to e-content.

Improve the way we deliver products and services.

- Discontinue transaction pricing and implement subscription pricing for interlibrary loan and cataloging services, thereby enabling libraries to streamline their workflows and take full advantage of OCLC services without worrying about transactions.
- Optimize effectiveness of distribution channels with U.S. regional service providers and distributors worldwide through improved coordination and communication, training, incentives and planning.



These key objectives comprise the major priorities in our development schedule for the foreseeable future. At the same time, we will continue to maintain and enhance our core services in cataloging, resource sharing and reference. We must continue, however, to look ahead, anticipate environmental shifts and adapt our strategy in order to preserve the long-term viability of the cooperative and provide ever increasing value to libraries.

Jay Jordan

OCLC President and Chief Executive Officer

Best of both worlds

IN JANUARY 2005, OCLC LAUNCHED the expanded QuestionPoint suite of reference services. This suite results from the merger of QuestionPoint and the 24/7 Reference service in August 2004. The foundation of the suite is a comprehensive reference management service that combines the best features of QuestionPoint and 24/7 Reference. The growing 24/7 Reference cooperative uses this foundation to offer libraries an affordable means for round-the-clock service delivery. Users from both communities now have access to the merged service through a common interface.

To learn more about the new service suite and to follow the transition activities of 2005, visit www.questionpoint.org.

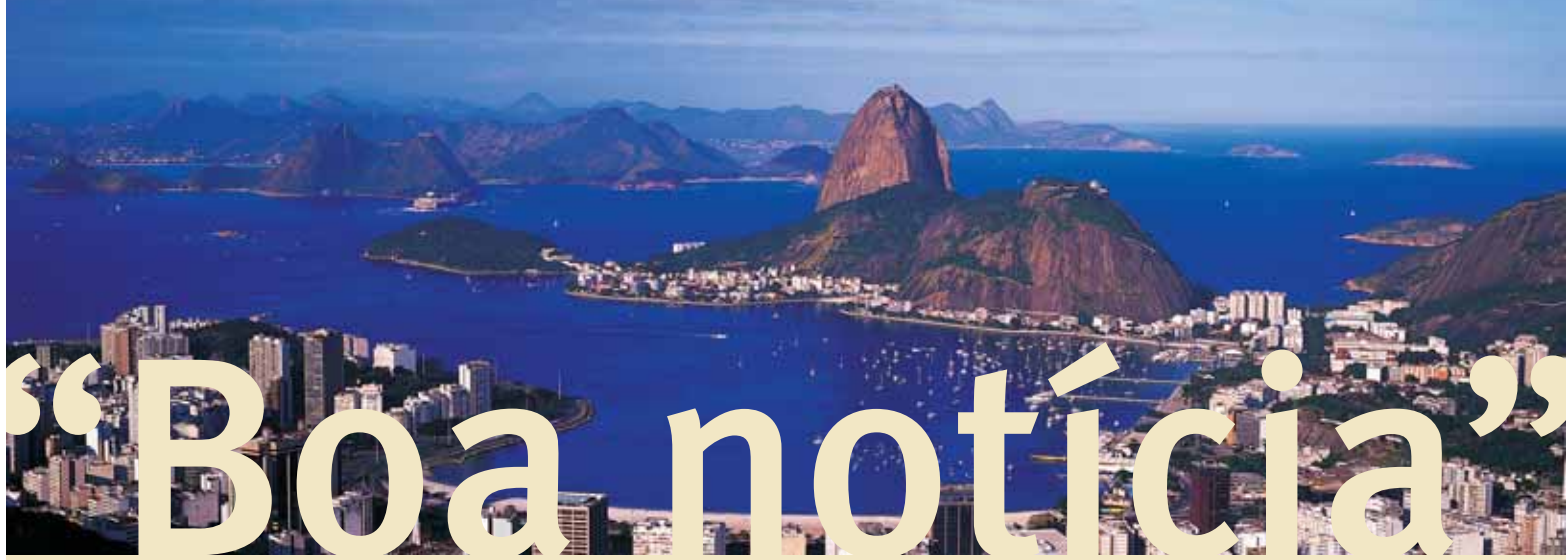


Making the case for libraries: OCLC's 2005 advertising program

OCLC HAS DEVELOPED AN ADVERTISING campaign on behalf of libraries, aimed at library budget decision-makers. The campaign consists of a series of national print ads and local, customizable posters. The ads appear outside the traditional library trade press, and the message promotes libraries, rather than OCLC or its services.

The campaign kicked off with two advertisements: one for academic libraries and one for public libraries. Visit the Web site to see the ads and then customize a poster to help raise awareness in your local community!

To download the ads and learn more about the program, visit www.oclc.org/advocacy/.



Records from Brazilian e-library added to WorldCat

About 40,000 records describing and linking to articles from 130 top Brazilian scientific and technical journals are now available in WorldCat, the OCLC Online Union Catalog. Scientists, researchers, students and other users can access these records and the corresponding article text at no additional cost via WorldCat on the OCLC FirstSearch service. The articles are in English, Portuguese and Spanish and are published in the Scientific Electronic Library Online Brazil. For more information, visit www.scielo.br/.

WebJunction receives new grants

From the Institute of Museum & Library Services

National Leadership Grant

WebJunction will develop a national clearinghouse for library education and training opportunities.

From the Bill & Melinda Gates Foundation

Spanish Language Outreach Program (Pilot)

WebJunction has partnered with four U.S. state libraries to provide local workshops that will enable library staff to better meet the technology needs of Spanish speakers in their communities.

Managing Public Access Computing (MPAC) Program

WebJunction will offer new tools and services that will allow public libraries to better sustain public access computing programs. Part of the MPAC program will be to create a skills-based learning program covering technology, resource development, planning, advocacy and training.

Rural Libraries Sustainability Program

WebJunction will partner with U.S. state libraries to empower rural library staff to better manage and sustain public access computing programs.



Gamers

Time calls them Twixters.

Trendwatching.com calls them Generation C. ABC News calls them Millennials. But to John C. Beck they are simply the Gamer generation.

This generation, born after 1970 and raised on video games, is about four to five years away from dominating society, says Beck, President of the North Star Leadership Group, a management consulting firm, and Senior Research Fellow at the University of Southern California's Annenberg Center for the Digital Future.

The experience of games has molded a generation with these characteristics, according to Beck.

Motivated. Gamers are competitive and love a challenge. Winning is very important. They are motivated to contribute and to earn their way through whatever hurdles it takes. They believe that anything is possible and that they are capable of amazing things. However, they do not have an appreciation for doing things "just because."

Resilient. Failure isn't the end of the world; gamers have each failed thousands of times on the way to whatever success they have had with games. Crashing and burning isn't so bad, they believe, and persistence pays off in the end.

Confident. Gamers think of themselves as experts and want to tackle problems head on. They are used to being the hero and have a more positive outlook on life than nongamers. They are more flexible about change. They are ready to be great leaders.

Sociable. Since a lot of gaming is done with friends and over the Internet, gamers value other people and have a greater need for human relationships than other groups. They are great team players and are very loyal to the teams and organizations of which they are a part.

Analytical. Gamers learn from the games they play. By sampling so many different realities through games, they become very good at seeing problems in a deeper, strategic perspective and at handling risk and uncertainty. They believe that taking measured risks is the best way to get ahead.



THE BIG

As Gamers and Boomers collide in one society is being reshaped. What will

Prominent sociologists note that a subtle but large-scale shift is quietly taking place in popular culture today. About 77 million Baby Boomers, who have shaped and dominated society since the mid 1960s, are approaching retirement. And their influence on art, music, fashion, business, politics—almost every category imaginable—is waning to a new generation most aptly

Boomers

Born from 1946 to 1964, the Baby Boom Generation is about 77 million Americans, or roughly 28 percent of the current U.S. population. Their name was coined for the explosion in the birth rate after World War II, and they have been shaped by the Cold War; the space race; assassinations of John F. Kennedy, Bobby Kennedy and Dr. Martin Luther King; the Vietnam War; the civil rights movement; Woodstock; and Watergate.

In less than 10 years, the entire Baby Boom generation will be over 50 and set to revolutionize the meaning of retirement, just as they have led other social revolutions throughout their lives. Boomers still think of themselves as young and continue to seek adventure. They expect fulfillment in their careers and many expect to keep working past traditional retirement age.

Career-driven. Money, title and recognition are important to most Boomers. They are ambitious and want a stellar career, sometimes at the expense of family time, as evidenced by the high divorce rate among Boomers. Gamers, on the other hand, want freedom and flexibility, and work that has meaning.

Materialistic. Boomers were raised to expect more than their parents and they have been on a buying spree for most of their adult lives. Their estimated annual spending power is \$2.1 trillion.

Skeptical. Boomers have relatively little confidence and trust in some of society's major institutions, such as government, corporations and churches. They have doubts about the role of the U.S. on the global stage and a feeling that the U.S. is losing power around the world.

Independent. Boomers feel they are special and prize their individuality. Rules are made to be broken if breaking them leads to good experiences and personal growth. Unlike their conservative parents, Boomers disdain authority and traditional values.

Idealistic. When they were growing up, Boomers believed that a single human being could positively change the world. Today, they are ready to turn their golden years into an intense time of social activism, volunteerism and lifelong learning.

BANG!

of the biggest culture clashes in history, the impact be on libraries? BY TOM STOREY

called Gamers, those born after 1970 and raised on video games.

Gamers are very different from any generation that has come before them. And, with 90 million strong, organizations that don't understand or acknowledge them run the risk of becoming increasingly isolated and irrelevant.

Staying in the

game!

JOHN BECK

is the President of the North Star Leadership Group, a management consulting firm, and Senior Research Fellow at the University of Southern California's Annenberg Center for the Digital Future, a policy and research center devoted to studying new communication technology and its impact on individuals, communities and societies around the globe. He graduated summa cum laude with a bachelor's degree in East Asian studies and sociology from Harvard University, where he also earned his doctorate in organizational behavior. In addition to the Gamer generation, his research focuses on global leadership, e-commerce, media and entertainment, strategy development, group psychology and the impact of the Internet.

Beck stumbled across the importance of video games and the Gamer generation while working on his book *The Attention Economy*, where he discovered that Web sites with a game component capture and hold people's attention better than any other.

After a survey of more than 2,000 professionals and hundreds of interviews, he is convinced that video games are not an insignificant pastime played by spike-haired nerds but a

generation-shaping activity that, over time, will reshape behavior patterns, beliefs, arts, business, institutions—the entire culture. His book, *Got Game*, which he co-authored with colleague Mitchell Wade, explains the impact the Gamer generation will have on society.

Consultant and author Marc Prensky, who has written *Digital Game-Based Learning*, agrees that video games are changing the rules. "Today's average college grads have spent less than 5,000 hours of their lives reading, but over 10,000 hours playing video games. Today's students think and process information fundamentally differently from their predecessors."

Hollywood directors have noticed the impact of games as well and are giving them star treatment. To attract the gamer generation to the movies, video game characters are finding their way into movies, such as Lara Croft appearing in *Tomb Raider*.

How to create environments for Boomers and Gamers in your library

In the next five years, Gamers will be the dominant demographic for your libraries. Nonetheless, you don't want to do anything that will offend or chase Boomers from the stacks.

The key to securing and retaining these growing segments is giving each one what it wants. To serve and attract both Gamers and Boomers, Beck suggests:

Create zones in your library

Gamers are technologically savvy and can take in multiple streams of information while they socialize. They multitask! They need a space with all kinds of simultaneous activities—music, television, video streaming, computers. They thrive on all of the commotion. The Boomer zone should be much quieter. They need technology and service but not the noise.

Expand your AV collection

For Boomers, that means movie DVDs and audiobooks, as well as the traditional books, magazines, newspapers, videotapes, books-on-tape, CDs—the “staples” of your collection. Start adding video games and their strategy guides—the Gamers’ cheat sheets—to the mix to get Gamers in the library more often.

Know each culture Can you “power up” or “level out?” That’s common video game lexicon. Are you up to speed on the hottest new game? Try a few games to see what they are like and why they are so compelling. How well-versed are you on the latest trends in health care and financial planning? Those are common Boomer interests. Research and study both of these generations. Know their interests and characteristics.

Go global You can feed that global curiosity of both generations with information from your print collection that helps them understand the world. Most of the high quality international resources in your collection are not digitized, so users can't get them from the Internet.

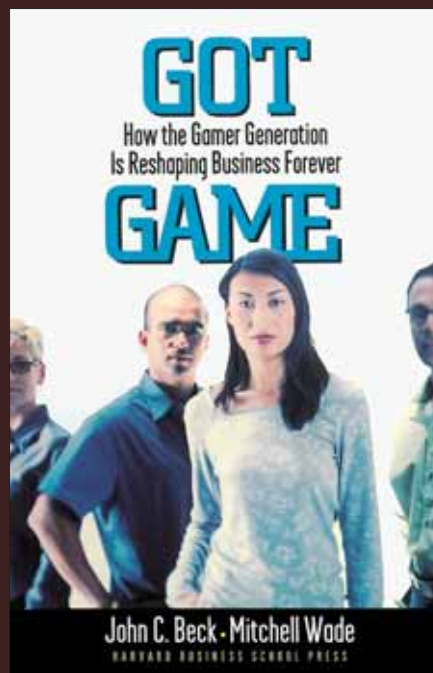
Be a guide Leaders and bosses are not to be trusted is what Gamers learn while playing video games. Boomers also have a healthy distrust for authority. Position yourself as strategy guides and not gatekeepers to help Gamers and Boomers win, something that's important to both.

Personalize your Web site

This is very important to the Gamer generation but also will serve Boomers well. Update your site often; Gamers are drawn to constant change. A search experience at your digital library that's as exciting and as personal as the experience in video games will attract them. In addition, Boomers also are becoming accustomed to personalized online services due to their experiences with search engines and Amazon. Create an area for Boomers with topics that

interest them. Develop interactive capabilities to allow Boomers to connect with each other.

Be attentive This is easy for librarians, where service and open access are part of their core values and everyday practice. Gamers and Boomers both demand attention. Don't hide behind the reference desk. Take a retail approach. Proactively approach Gamers. Ask if you can offer them materials to supplement what they are using or reading. For Boomers, show them the range of electronic resources you have that can complement their needs.



Zone in on your users

Gamers need social space. Boomers need “a third place.”

Toddlers need storytelling terrain. Seniors need quiet areas. Everyone needs technology. And many want coffee! Opened in September 2004, the new 144,000-square-foot Evansville Vanderburgh Public Library, Evansville, Indiana, creates space for each of these audiences. The library has a Teen Zone for Gamers complete with a bank of computers, outlets for laptops, a collection of audiobooks and a network for wireless and PDA devices. And it's right next to the Cup and Chaucer café and garden. The library also has activity rooms, a technology center, a children's story area, a popular materials section and a quiet study rotunda. Other newly opened libraries, such as Seattle Public and Salt Lake City Public, also have built special spaces to accommodate the wide range of users libraries serve.



Throw a LAN party

To embrace Gamers and bring them into the Santa Monica Public Library in California, Miguel Acosta, Principal Librarian, Information Management, organized a LAN (Local Area Network) party with the help of the library's Teen Advisory Council. The idea was to connect with this new generation and begin grooming them as future library users. The success of the party led to poetry slams, animated festivals, Yu-Gi-Oh tournaments and a number of new members of the Teen Advisory Council.



Send a librarian an SMS



Boomers and Gamers love hand-held electronic devices, so they would fit right in at Curtin University of Technology, Perth, Australia. Students, faculty and staff there are using cell phones and Blackberries to reach their favorite librarians. A new "SMS a Query" service lets them send text-based messages of up to 160 characters to librarians from anywhere, at anytime. SMS stands for Short Message Service. Deputy Librarian John Frylinck says early student feedback praises the service as an easier, cost-effective way to find an answer to a simple query. "Since the student population at Curtin has clearly embraced mobile phone culture and SMS technology, SMS a Query offers another way of servicing a large client base."



Public libraries pack a powerful \$\$\$ punch

They mean big bucks for their states, communities

BY TOM STOREY



Today's public libraries are more than technology centers, book repositories, quiet reading spaces, coffee shops or busy community centers. They are engines that pump millions of dollars into local and state economies.

That's the conclusion of two recently released studies by the University of South Carolina and the State Library and Archives of Florida. Using surveys, interviews and economic modeling, the two studies showed the sometimes forgotten financial impact that libraries have and how important they are to creating jobs, raising wages and improving the financial well-being of a community and state.

Florida

Among the findings from the Florida study:

- In Florida, public libraries return \$6.54 for every \$1 invested in them. The value of libraries is \$2.9 billion, based on library wages and spending and the cost of replacement services and lost local spending. Federal, state and local funding is \$449 million.
- One job is created for every \$6,448 spent on public libraries from public funding sources. That means an estimated 68,700 jobs were created in 2004, generating wages of \$5.6 billion.
- Gross regional product increases by \$9.08 for every \$1 of public support spent on public libraries.
- For every \$1 of public support spent on public libraries, income (wages) increases by \$12.66.
- Whether they use libraries for personal, educational or work-related purposes, residents indicated that they saved 57.6 million hours and \$2.4 billion.
- Public libraries provide a direct economic benefit of \$6 billion per year to Florida's

communities and population, based on an average benefit of \$97 per 62 million uses by businesses, educators, students and the general public.

■ In 2003/2004 there were 68.3 million in-person visits to public libraries in Florida and at least 25.2 million remote Internet connections to public libraries.

In addition, Florida's public libraries stimulate an economic ripple effect valued at \$4 billion, the study says. This includes direct in-state expenditures by public libraries for books, periodicals, electronic equipment and resources, as well as large capital projects, such as library construction and renovation.

More than 2,380 individuals and 169 organizations participated in the groundbreaking study, which was the first of its kind ever completed in the state. It was conducted by: José-Marie Griffiths, Dean and Professor, School of Library and Information Science, University of North Carolina at Chapel Hill; Thomas Lynch and Julie Harrington, Director and Assistant Director, Center for Economic Forecasting and Analysis, Florida State University; and Donald King and Christinger Tomer, Research Professor and Associate Professor, School of Information Services, University of Pittsburgh.

To view or download the study, go to dlis.dos.state.fl.us/bld/roi/index.cfm.

South Carolina

The University of South Carolina study values the impact of the state's public libraries at \$347 million. Faculty members from the School of Library and Information Science conducted this study in two phases. The first phase involved surveying 3,689 general library users, 161 businesses, 298 job seekers and 172 personal investors to determine their perceived value of the library. In phase two, researchers placed a dollar value on library services, based on usage statistics from the State Library, to determine the economic benefit to the state.

Key findings from the study:

- South Carolina's public libraries return \$4.48 to the state's economy for every \$1 invested in them.
- South Carolina's public libraries pump \$347 million into the state's economy; the state spends approximately \$77.5 million on public libraries.
- South Carolina's public libraries provide \$102 million and \$26 million annually in circulation and reference services, respectively.

■ South Carolina's public libraries bring nearly \$5 million to the state from federal and private sources.

■ About half of the businesses surveyed use the library as a primary resource for business and research information; three quarters of them said that the library contributed to the success of their businesses and that not having access to a public library would have a negative impact on their operations.

■ Business owners reported saving up to \$5,000 by getting information (economic data, government regulations, legal and technical information, as well as information on management, marketing and sales) from the library.

■ About 90 percent of general users said that libraries improved overall quality of life and 47 percent said they help increase local property values.

■ Nearly half of the personal investors surveyed said that investment information from the library definitely contributed to their financial well-being.

The project was developed by the School of Library and Information Science at the University of South Carolina in collaboration with the South Carolina Association of Public Library Administrators and the South Carolina State Library. Researchers were: Daniel D. Barron, Director; Robert V. Williams, Professor; Stephen Bajjaly, Associate Professor; Jennifer Arns, Assistant Professor; and Steven Wilson, Research Assistant.

The study can be downloaded at www.libsci.sc.edu/SCEIS/home.htm. ■

According to the study, Florida's public libraries stimulate an economic ripple effect valued at \$4 billion.



Deep linking from Open WorldCat to your library's catalog

Deep linking enables Web users to link from search results (in Yahoo!, Google or other partner sites) to the Find in a Library interface in Open WorldCat, and then directly to the item's record in their library's online public access catalog (OPAC).

Deep linking represents the last link in the Open WorldCat chain, getting Web users outside the library environment from their broad Internet searches all the way to the initiation of circulation activity at the holding institution.

Creating "deep links" is fast and simple to do. To ensure deep links to your library's OPAC, you should register the appropriate URL link structure for the OPAC; FirstSearch libraries can do this quickly in their administrative module, while libraries without FirstSearch accounts can register by using the Open WorldCat feedback form, available at <https://www3.oclc.org/app/openwc/>.

The downloadable deep linking tutorial explains how to set up deep linking and includes a chart of URL structures for various Integrated Library Systems (ILS).

Download the Open WorldCat deep linking tutorial at: www.oclc.org/worldcat/open/deeplinking/openworldcat_deeplinking.pdf

Library staff can track the amount of online traffic driven to their resources from the Open WorldCat interface on the statistics site at www.stats.oclc.org.

Libraries that have WorldCat holdings but currently do not have a subscription to the WorldCat database on FirstSearch must purchase an unlimited subscription to keep their holdings visible in the Open WorldCat interface beginning July 1, 2005.

For more information about the Open WorldCat Program and deep linking, visit www.oclc.org/worldcat/open/.

OCLC, Safe Sound Archive to work together to digitize and preserve audio collections

Access through Open WorldCat will enhance visibility and use

OCLC and Safe Sound Archive have signed an agreement to provide digitization services for libraries' audio collections, including digital reformatting, archiving and improved access through Open WorldCat. **The new partnership will provide a convenient, integrated digital audio archive solution through OCLC Content Conversion Services and Safe Sound Archive.** The first project is a pilot for Columbia University to digitize 203 hours of sound recordings and 11,864 typewritten pages of interviews from the *Notable New Yorkers* oral history collection.



The collection contains interviews with individuals such as: Edward Koch, U.S. Public Official, Congressman and Mayor of New York City from 1977–89; Bennett Cerf, Publisher and Founder of Random House; and Frances Perkins, U.S. Secretary of Labor from 1933–45 and the first woman to serve in a Presidential Cabinet.

“Through the partnership with Safe Sound Archive, OCLC is able to extend its service offerings to audio preservation. OCLC can now provide seamless preservation service by reformatting all collection components,” said Christine Guenther, Senior Digital Project Manager, OCLC Preservation Services.

“Historically, OCLC has primarily served libraries, while Safe Sound Archive has worked with archives and libraries. Through this partnership we are able to provide a broader range of services to many more audiences and collections,” said George Blood, Principal, Safe Sound Archive.

For more information, visit www.oclc.org/preservation/ or www.safesoundarchive.com/.

OCLC WorldCat Collection Analysis debuts

Libraries can run collection analysis online with easy access to 58 million records and nearly 1 billion holdings in WorldCat

BY BOB MURPHY

The new OCLC WorldCat Collection Analysis service makes it possible for library staff responsible for collection management to analyze the age and subject content of their own collections, compare their collections with those of peer libraries, and compare, as a group, the level of overlap or uniqueness of their collections.

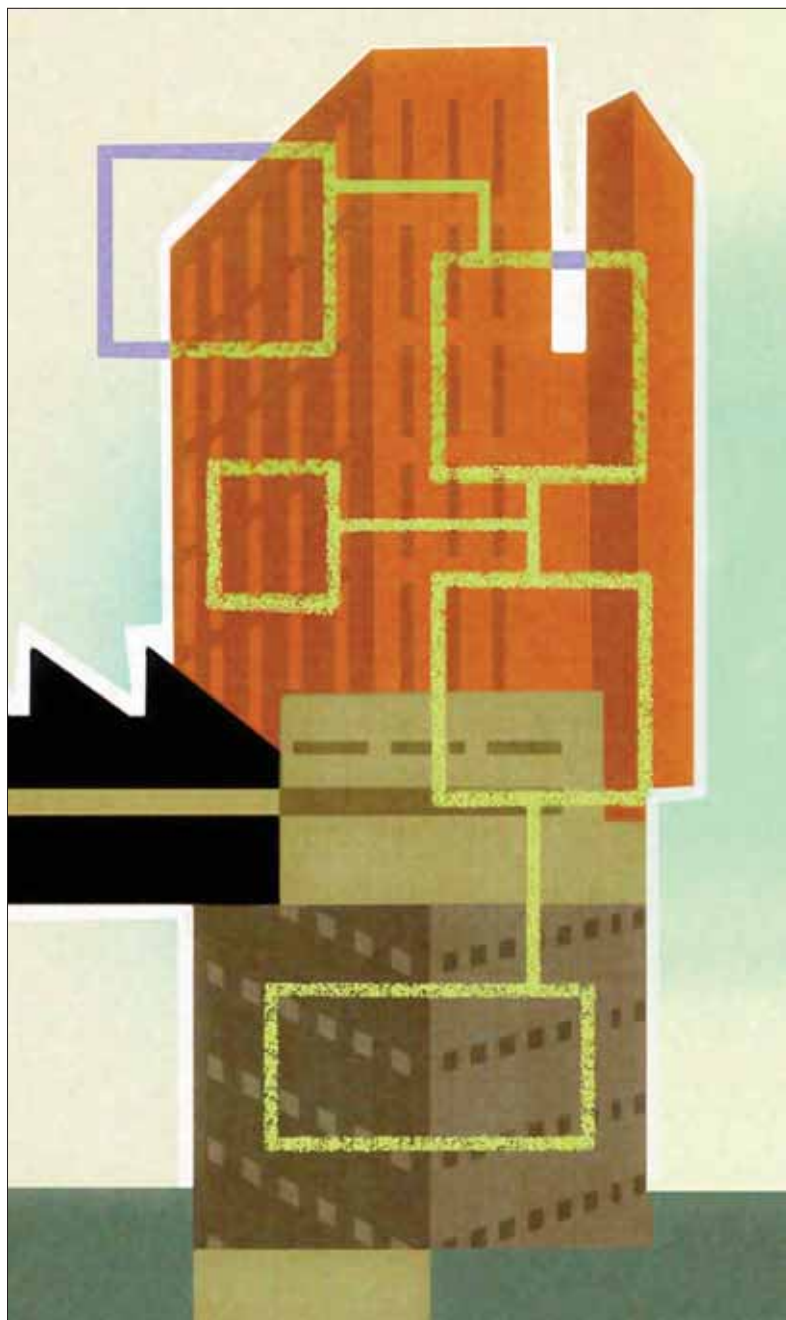
The new service is designed to provide the most cost-effective way to routinely evaluate collections. It enables library staff to communicate collection decisions to faculty, boards of trustees and administrators, as well as demonstrate financial needs and responsible stewardship of library acquisitions, budgets and collections.

“The WorldCat Collection Analysis service is incomparable in the library community because it leverages the cooperative effort of thousands of librarians around the world who have built—and are continuing to build—WorldCat,” says Phyllis Spies, Vice President, OCLC Collection Management Services.

WorldCat is the world’s richest database of items held in libraries, comprising more than 58 million records that represent nearly 1 billion holdings. The WorldCat database grows at the rate of one new record every 10 seconds. The OCLC WorldCat Collection Analysis service provides tools for libraries to mine the deep, rich database that thousands of librarians worldwide collectively maintain as part of their daily workflow.

The WorldCat Collection Analysis service allows library staff to view and analyze the age and content of their own collections by subject, and compare their library’s holdings with the holdings of peer libraries, and limit the analysis to specific subject areas. For example, an academic library considering an Italian language program might compare its collection to other college libraries already offering such a program. Or, a public library might want to demonstrate the strength of its small business management collection by comparing its holdings with those of peer libraries.

For groups, the service provides an affordable way to evaluate group collections and validate cooperative collection activities. The service allows libraries to review collection gaps, the degree of overlap of their collections



with others and their uniquely held titles. The results are provided in formatted reports.

The OCLC WorldCat Collection Analysis service is now available to any library with its holdings in WorldCat that also subscribes to WorldCat through the OCLC FirstSearch service. Libraries that would like to use the collection analysis service but do not currently have holdings in WorldCat can load their records into WorldCat at no charge.

From the staff view of the FirstSearch interface, library staff can perform a variety of collection analysis and

collection management tasks in real time once a comparison project has been set up. In the past, collection analysis projects could take months to complete. OCLC can set up a project for a library within 24 to 72 hours, depending on the scope of the job. Once the project is set up, collection analysis can be completed online, instantaneously, through WorldCat.

“Librarians and staff need to know what they have in their collections, and they need to know where there might be gaps in their collections,” says Glenda Lammers, Product Manager, OCLC WorldCat Collection Analysis. “They need to know what materials they have in common with libraries that are part of their group, and they need to know what unique items they have to offer. If libraries know exactly what materials are accessible to them, then they are better able to decide what they need to buy, digitize or preserve.”

WorldCat Collection Analysis software is centrally hosted at OCLC, offering subscribers a low-cost, easy-to-

The WorldCat Collection Analysis service leverages the cooperative effort of thousands of librarians around the world.

use system technically supported by the OCLC Customer Service Division and Network Services staff.

The OCLC WorldCat Collection Analysis service is available for all libraries and all collections, regardless of the types of materials to be analyzed, the type of library or the integrated library system used. A library that subscribes to the OCLC WorldCat Collection Analysis service may compare its collection to any library that maintains holdings in WorldCat.

Over the last year, OCLC has been working closely with libraries to develop the collection analysis service, and librarians have been enthusiastic about its potential.

“The response has been overwhelming,” says Ms. Lammers. “Collection analysis has always been an extremely labor-intensive project—it’s time consuming and ultimately can be very expensive. There are not many automated tools available for analyzing and comparing collections to peers. Libraries want an automated tool that can do this for them quickly, and the WorldCat Collection Analysis service can do this—and more.” ■



Experiments with a small supercomputer

With fail-over and load balancing software, these clusters could become reliable enough for many services in the future

BY THOMAS B. HICKEY, Ph.D., Chief Scientist, OCLC Research

Over the last year OCLC Research has been experimenting with the application of parallel processing to searching and processing large files of bibliographic records, such as those in WorldCat. For this we acquired a 24-node computer configured in what is known as a Beowulf cluster. This type of configuration is becoming very popular for scientific computing because it's cheaper to connect many small machines together than to build a single machine with the same computational power. We have found that this type of machine works just as well for bibliographic processing. In this, we are following the lead of Google and other large-scale Web search and gaming engines that employ similar configurations.

A small supercomputer may sound like an oxymoron; how can a 'supercomputer' be 'small'? The main

searching, but, more generally, we have found it to be useful for virtually any work with large numbers of bibliographic records. WorldCat now contains well over 55 million records, even accounting for records that have been deleted and merged over the years. Since our cluster has 24 separate nodes with a total of 48 processors, we typically get 30-fold speedups in processing, and occasionally much more than that because the entire database can be cached in main memory.

A 30-fold speedup means that processes that previously would take a month can be done in 24 hours. Tasks that took a day now take less than an hour. One of the more dramatic speedups is to extract records based on a sequential scan of the whole database. That can be done in three seconds, rather than 20 minutes.

The organization of the cluster consists of one *head* node that controls all the others and manages all outside

Breaking WorldCat up into 69 pieces results in less than a million

difference between our computer and some of the largest computers built for scientific computation is that our machine has 24 nodes in it rather than the thousands of nodes the largest commercial machines have. To put this in perspective, however, our machine has approximately the speed of the fastest machine in the world ten years ago (which probably cost about one thousand times as much as ours!).

We obtained the machine to investigate parallel text searching. At OCLC we have always searched our databases in parallel, but in as few pieces as we could. In this project we took the opposite approach—to break our database into as many pieces as we could, search each at the same time, and then deal with the coordination needed to return a single result to a searcher. We are finding this works very well for

communication; 23 *compute* nodes, each with 4 Gigabytes of memory and two Xeon CPUs; and a Cisco gigabit switch that enables the nodes to communicate.

Beyond text searching, where we've been able to do well over 100 searches per second using open-source tools, we have been doing much of our FRBR work on the cluster.

FRBR stands for "Functional Requirements for Bibliographic Records," an IFLA report that, among other things, describes an approach for grouping records into 'works.' For example, searching a work-based database for Shakespeare's *Hamlet* might retrieve a whole set of records, each of which is a different edition (or expression in FRBR terms). Our work has been primarily in identifying those works quickly and reliably and understanding the relationship that



records that each processor needs to cope with, greatly easing many tasks.

library authority files have with FRBR sets.

The processors in the cluster are 'hyperthreaded,' a technique used by Intel on its Xeon chips, so that logically each of the physical chips appears to be two logical processors, giving us a total of 92 logical CPUs on the 23 compute nodes. Typically we use three of those logical processors, reserving one for communication with other nodes. Breaking WorldCat up into 69 pieces (three per node) results in less than a million records that each processor needs to cope with, greatly easing many tasks. Our 'FRBRization' of WorldCat can now be done in less than an hour, and searches can be completed in milliseconds.

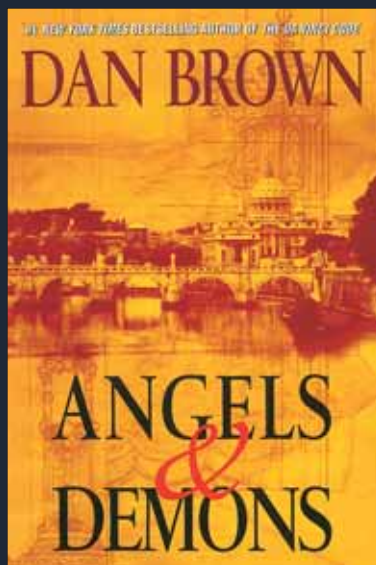
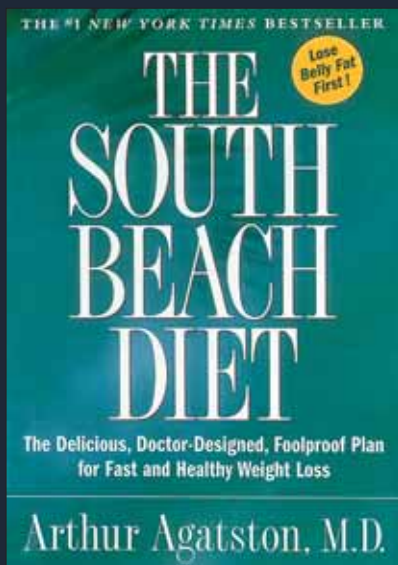
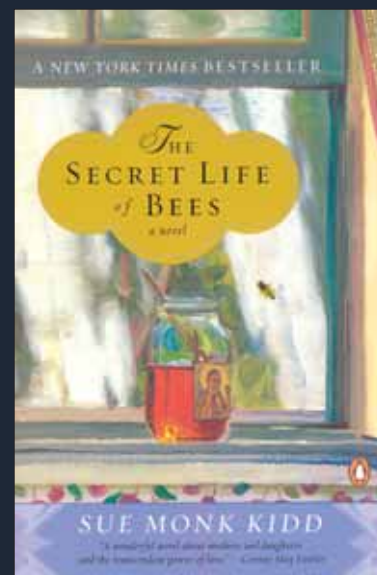
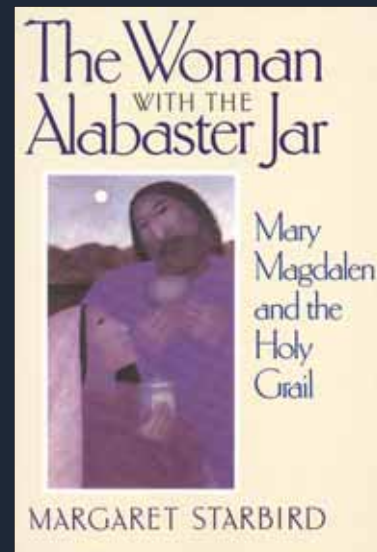
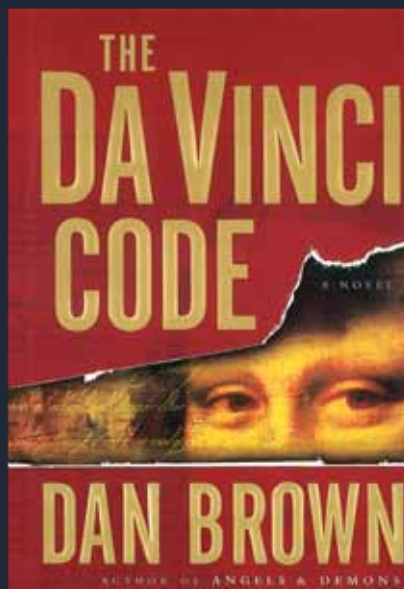
So, why isn't all bibliographic processing done on such machines? There are at least two main reasons. The first is that this sort of configuration is relatively

new, and relatively few sites deal with the tens of millions of records that make this level of parallelism important. Another issue is that Beowulf clusters are designed more for speed than reliability. Google has pioneered technology in this area with redundant file systems and data centers, but since they do not use standard cluster software, this is not available in the open-source Linux cluster distribution we have been using (called ROCKS). Reliability is less of an issue in a research context, but our experience (once we got past some 'teething' problems) is that the cluster has been very stable. As part of our research we are looking at ways that we can duplicate our data across nodes. With fairly simple fail-over and load balancing software, these clusters could become reliable enough for many services in the future. ■

Books and journals most borrowed using the OCLC Interlibrary Loan Service September 2003–February 2005

Books

- 1 *The Da Vinci Code: A Novel* Dan Brown
- 2 *Natural Cures 'They' Don't Want You to Know About* Kevin Trudeau
- 3 *New Soldier* John Kerry
- 4 *Doyle Brunson's Super System: A Course in Power Poker* Doyle Brunson
- 5 *Angels & Demons* Dan Brown
- 6 *The Woman with the Alabaster Jar: Mary Magdalen and the Holy Grail* Margaret Starbird
- 7 *Power vs. Force: The Hidden Determinants of Human Behavior* David R. Hawkins
- 8 *Free Monday to Pay Your Bills* Matthew Lesko
- 9 *The Secret Life of Bees* Sue Monk Kidd
- 10 *The South Beach Diet: The Delicious, Doctor-Designed, Foolproof Plan for Fast and Healthy Weight Loss* Arthur Agatston



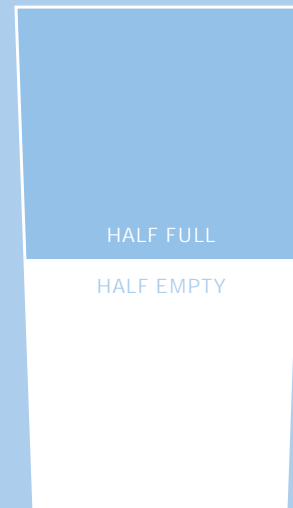
Journals

- 1 *Personality and Individual Differences*
- 2 *Social Science & Medicine*
- 3 *Journal of Interpersonal Violence*
- 4 *Early Child Development and Care*
- 5 *Journal of Clinical Psychiatry*
- 6 *Journal of the American Academy of Child and Adolescent Psychiatry*
- 7 *International Journal of Eating Disorders*
- 8 *Psychological Reports*
- 9 *Journal of Social and Personal Relationships*
- 10 *Biological Psychiatry*

Got Freud?

OCLC offers a broad selection of e-content for library users who need resources on psychology and related subjects. These resources include three databases from the American Psychological Association on the OCLC FirstSearch service; several hundred thousand WorldCat records on psychology and related subjects that are linked to library holdings worldwide; extensive content in other FirstSearch databases such as MEDLINE and ERIC; 2,400 NetLibrary eBooks; and 310 e-journals. Web users will also discover materials offered by WorldCat and NetLibrary through the Open WorldCat program.

Visit www.oclc.org/netlibrary/, www.oclc.org/audiobooks/, www.oclc.org/electroniccollections/ and www.oclc.org/firstsearch/ for more information on these resources.



Highest OCLC record number (as of March 12, 2005)	58,460,070
Languages in WorldCat	458
Total OCLC Interlibrary Loan requests (as of April 1, 1979)	143,534,376

Watch WorldCat grow—a new record and 13 new holdings are added every 10 seconds: www.oclc.org/worldcat/grow.

Format	Number of records	Percentage of total	Locations of items cataloged
Books	45,936,770	83.79%	870,822,101
Serials	2,631,498	4.80%	28,377,292
Visual materials	1,818,886	3.32%	17,564,782
Maps	799,239	1.46%	3,946,086
Mixed materials	245,112	0.45%	254,419
Sound recordings	1,910,388	3.48%	21,851,178
Scores	1,263,335	2.30%	9,564,480
Computer files	221,568	0.40%	1,039,290
Totals	54,826,796	100.00%	953,419,628

as of January 2005

The OCLC cooperative

Governing Members	8,653
Members	18,250
Participants	26,744
Libraries outside the United States	10,332
Countries and territories served	96

OCLC will be exhibiting at the following events >



Washington Library Association
Spokane, Washington
April 20–23, 2005

British Columbia Library Association
Burnaby, British Columbia
April 21–23, 2005

Saskatchewan Library Association
Saskatoon, Saskatchewan
April 21–23, 2005

Montana Library Association
Billings, Montana
April 23–26, 2005

Alberta Library Conference
Jasper, Alberta
Apr 28–May 1, 2005

Manitoba Library Association
Winnipeg, Manitoba
May 2–4, 2005

Maryland Library Association
Ocean City, Maryland
May 4–6, 2005

CONPAB
Veracruz, Mexico
May 24–27, 2005

Atlantic Provinces Library Association
Halifax, Nova Scotia
May 26–29, 2005

Check the OCLC Web site for a complete list of upcoming conferences.
www.oclc.org/education/events/



OCLC Newsletter
6565 Frantz Road
Dublin, OH 43017-3395
USA

Non-profit Org.
U.S. Postage
PAID
Columbus, Ohio
Permit No. 5391