We are pleased to provide this overview of our work for calendar year 2013. Further information can be found on our website at www.oclc.org/research.html. We welcome interaction: contact us at OCLCResearch@oclc.org with specific questions or comments. In particular, we are open to suggestions about new projects, collaborations or new areas to which we should turn our attention.

Lorcan Dempsey
Vice President, Research, and Chief Strategist
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Introduction

The mission of OCLC Research is to expand knowledge in support of OCLC’s public purpose of advancing libraries and librarianship. OCLC Research is one of the world’s leading centers devoted exclusively to the challenges facing libraries and archives in a rapidly changing environment.

OCLC Research is dedicated to three roles:

1. To act as a community resource for shared Research and Development (R&D).
2. To provide advanced development and technical support to other OCLC divisions.
3. To enhance OCLC’s engagement with members and to mobilize the community around shared concerns.

Within these roles, we collaborate, consult, develop, convene and publish.

This report includes highlights of our efforts and outputs in 2013.
We organize community R&D around several themes where we have recognized expertise and community standing. Our public outputs include applications and prototypes, publications, webinars, videos and meetings ranging from working group sessions to influential symposia. We collaborate with external partners. Most of our outputs are made freely available as a resource for the OCLC membership and the library community more broadly.

Our work is organized around four thematic areas.

1. Research Collections and Support
2. Data Science
3. Understanding the System-wide Library
4. User Studies

1. Research Collections and Support

We have special expertise in mobilizing unique materials. We’re working to change the cost/benefit equation associated with special collections and archives, and investigating how to efficiently describe materials while investing only what is necessary to make them discoverable. Our objective with this work is to help institutions improve stewardship, raise visibility and increase the use of rare books, manuscripts, archives and special collections.

We are working with libraries as they:

- Realign their services to more directly support specific research and teaching goals of their universities, and
- Refocus their physical assets—collections and space—to provide new value to their campus communities.
Selected activities:

- **Role of Libraries in Data Curation** — Published *Starting the Conversation: University-wide Research Data Management Policy*, a call for action that summarizes the benefits of systemic data management planning and identifies the stakeholders and their concerns. This was also published in *EDUCAUSE Review Online*, which extended the reach of this work to a larger range of stakeholders.  
  [www.oclc.org/research/activities/datacuration.html](www.oclc.org/research/activities/datacuration.html)

- **Registering Researchers in Authority Files** — We’re working to summarize the benefits and trade-offs of emerging approaches to the problem of incomplete national authority files. The broader impact of this work will be to make it easier for researchers and institutions to more accurately measure their scholarly output.  
  [www.oclc.org/research/activities/registering-researchers.html](www.oclc.org/research/activities/registering-researchers.html)

- **Sharing Special Collections** — Published *Tiers for Fears: Sensible, Streamlined Sharing of Special Collections*, which provides strategies for providing efficient and affordable interlending of actual physical items from special collections for research purposes, as well as advice on determining if a loan is the most appropriate way to fulfill a particular request.  
  [www.oclc.org/research/activities/sharing.html](www.oclc.org/research/activities/sharing.html)

- **Demystifying Born Digital** — Published *Walk This Way: Detailed Steps for Transferring Born-Digital Content from Media You Can Read In-house*, the third report in a series of reports about managing born-digital materials, that provides the assembled wisdom of experienced practitioners to help those with less experience gain control of born-digital content.  
  [www.oclc.org/research/activities/borndigital.html](www.oclc.org/research/activities/borndigital.html)

I’ve also got to say thank you for all of the great work under “Demystifying Born Digital”—the reports have been extremely useful in helping us here at Suffolk get a handle on where to start, how to prioritize, and have even helped us make the case with institutional stakeholders for building a digital records program.

---

Jessica M. Sedgwick  
Associate Archivist for Reference and Digital Collections Moakley Archive and Institute, Suffolk University

Not only has your work been personally helpful to me in my academic endeavors, but I believe that the issues that you raise have prompted valuable and vital conversations within the archival profession. I look forward to continuing to read your work.

---

Courtney Bailey  
Records Management Analyst, North Carolina State Archive
2. Data Science

How should metadata structures evolve to work effectively in a semantically richer Web? Making our data work harder, releasing greater value in systems and services, will help us make future descriptions of library materials less costly, more responsive to network-level discovery requirements and more consistent with user expectations.

Much of our work in this area is internally focused on the data modeling and “entification” associated with OCLC’s implementation of linked data approaches. We work closely with our product and engineering colleagues on these issues. Some of this work is visible in public collaboration and consultation.

- Bibliographic Framework Transition Initiative at the Library of Congress — In 2013, Senior Research Scientist Jean Godby, Ph.D., published the OCLC report, The Relationship between BIBFRAME and OCLC’s Linked-Data Model of Bibliographic Description: A Working Paper [pdf], and delivered a synopsis at the Bibliographic Framework Initiative Update Forum at the American Library Association Annual meeting. She also represented OCLC Research at the third BIBFRAME Early Experimenters’ meeting at the Library of Congress in November. All of these activities advanced the research goal of identifying synergies between BIBFRAME and the OCLC model of bibliographic description derived from Schema.org.
  
  www.oclc.org/content/dam/research/publications/library/2013/2013-05.pdf

- Each of these activities was launched in 2013:
  
  - Scholars’ Contributions to VIAF — This activity explores the potential benefits of collaborating with scholars to enrich the Virtual International Authority File (VIAF) with new names and additional script forms for names already represented. The experience and knowledge gained from working with diverse files may inform third parties’ development of authority tools used by scholars.
    
    www.oclc.org/research/activities/viaf-scholars.html
  
  - Cookbook Finder — Cookbook Finder is a works-based application that provides access to thousands of cookbooks and other works about food and nutrition described in library records. You can search by person, place, topic (e.g., course, ingredient, method and more) and browse related works by author and topic (supplied by the Kindred Works/Recommender API). Results include links to full-text when available from HathiTrust and Project Gutenberg.
    
    www.oclc.org/research/activities/cookbook-finder.html
  
  - MARC Usage in WorldCat — This project studies the use of MARC tags and subfields in WorldCat and produces tools and reports to inform decisions about future MARC usage. We do this by providing an evidence base for testing assertions about the value of capturing various attributes, by demonstrating whether the cataloging community has made the effort to populate specific tags, not just to define them in anticipation of use.
    
    www.oclc.org/research/activities/marcusage.html
Selected ongoing activities:

- **Preservation Health Check** — OCLC Research and the Open Planets Foundation, a European-based organization that bundles digital preservation expertise present in major libraries and archives, conducted a Preservation Health Check pilot. The pilot’s purpose is to determine if preservation metadata created and in use by operational repositories could serve as a useful evidence base for assessing digital preservation risks. The Bibliothèque nationale de France became a pilot site in June 2013. OCLC Research in Leiden is using this metadata to validate the practical utility of our evidence-based threat assessment logic.
  
  [www.oclc.org/research/activities/phc.html](http://www.oclc.org/research/activities/phc.html)

- **Similarity clustering in large aggregations** — The work on clustering cultural heritage objects in the Europeana dataset was started in 2012 and successfully concluded in 2013. Research scientist Shenghui Wang, Ph.D., reported the findings at the International Conference on Theory and Practice of Digital Libraries (TPDL) and was the lead author of the corresponding scientific article, “Hierarchical Structuring of Cultural Heritage Objects within Large Aggregations.” The clustering algorithms that were developed as a result of this activity are being reused on other datasets and further refined. The compression-based similarity measure, in particular, is used on the ISNI dataset maintained at the OCLC Leiden office.

- **Matching of FAST and GTT (the Dutch subject headings thesaurus)** — During 2013, OCLC Research continued to investigate the mapping results of the two subject heading systems and the feasibility of automatically assigning FAST headings to Dutch bibliographic records. FAST, which is based on the Library of Congress Subject Headings (LCSH), was developed by Research to enrich WorldCat records with a uniform subject heading system across the whole aggregation, in order to achieve a consistent subject-based search experience in WorldCat. Assigning FAST headings to records that do not carry LCSH is a logical next step toward achieving that goal. The findings with the Dutch records show that the coverage of FAST is good enough for the nonhumanities but that there are significant gaps in the culture/language-related headings. The findings demonstrate the need to globalize FAST if it is to be used across the whole of the WorldCat dataset.

3. Understanding the System-wide Library

Right-scaling has become an important decision point for libraries: at what level should an activity be carried out? We’re exploring the shift from local provision of library collections and services to increased reliance on cooperative infrastructure, collective collections, shared technology platforms and “above-the-institution”management strategies.

At the same time, we’re examining the array of collections and services that are best provided at the level of the local institution. Our purpose is to maintain an outcomes-based orientation that is widely applicable, yet sensitive to institutional differences, and can provide useful context for decision-making without necessarily prescribing a single “best” course of action. Our major initial focus is on library collections.

**OCLC engagement in this very strategic and pressing issue for us is most welcome.**

*I believe there is a high degree of readiness to take the next steps. With the HathiTrust launching its print archiving task force shortly, added momentum will be gained. OCLC has a key role to play in this process both as a venue for noting these commitments but for also its role in the delivery of shared materials.*

**Carol Pitts Diedrichs**

Vice Provost and Director of University Libraries, The Ohio State University
Selected activities:

- Published *Understanding the Collective Collection: Towards a System-wide Perspective on Library Print Collections*, which brings together the important work that OCLC Research has done for the community in providing a quantitative, analytic, system-wide view of library collections. This body of work has established an evidence base that has allowed and encouraged libraries to begin the shift from local provisioning of library collections and services to increased reliance on cooperative infrastructure.
  
  www.oclc.org/research/activities/aboutusl.html

  *Receiving a paper copy of Understanding the Collective Collection: Towards a System-wide Perspective on Library Print Collections was a true godsend. It arrived at a critical time as we were in the throes of launching a massive strategic planning effort, and it was very helpful to us throughout this process.*
  
  **Hjordis Halverson**
  Vice President for Library Services, Newberry Library

- Analyzing Consortial Book Circulation Patterns — Analyzed OhioLINK's consortial book circulation patterns—the largest, most diverse compilation of academic book usage ever collected and published. Published the interpretation of this data in the paper, “Consortial Book Circulation Patterns: The OCLC-OhioLINK Study.”
  
  www.oclc.org/research/activities/ohiolink.html

  *You have some nationally recognized leaders in the print storage space, and more potential than anyone else on the face of the earth to identify patterns of library holdings...at scale.*
  
  **Mark Sandler**
  Director, Center for Library Initiatives Committee on Institutional Cooperation (CIC)

- Identifying a National Presence in the Global Library Resource — Published *Not Scotch But Rum: The Scope and Diffusion of the Scottish Presence in the Published Record*, which uses WorldCat bibliographic and holdings data to identify, characterize and track the diffusion of the Scottish presence in the published record. Scotland is employed as a case study to illustrate a repurposeable, machine-processing-based methodology for identifying a country’s national presence, including materials published in the country, published by the country’s nationals or published about the country.
  
  www.oclc.org/research/publications/library/2013/2013-07r.html
4. User Studies
We’re helping libraries calibrate their services around a completely new set of user expectations that have been shaped by consumer technologies. We provide the library community with behavioral evidence on their users’ perceptions, habits and requirements to inform the design of future library services.

Selected activities:

- **Digital Visitors and Residents**: What Motivates Engagement with the Digital Information Environment? — Published a paper of the same name that reports on the three-year Digital Visitors and Residents project funded by JISC, OCLC, Oxford University and the University of North Carolina at Charlotte. This project investigates the theory of digital residents and visitors among learners in four educational stages, from late-stage secondary (high school) into post-degree professional practice. [www.oclc.org/research/activities/vandr.html](http://www.oclc.org/research/activities/vandr.html)

- **Cyber Synergy**: Seeking Sustainability through Collaboration between Virtual Reference and Social Q&A Sites — This project proposes a new model that enables Virtual Reference Services (VRS) to remain viable despite today’s environment of reduced resources, addressing collaboration between knowledge institutions such as libraries and the social Q&A community. [www.oclc.org/research/activities/synergy.html](http://www.oclc.org/research/activities/synergy.html)

"This report is absolutely fascinating both for methodology and results. The different concepts of national presence and about/by/for ‘Scots’ are really challenging and the detailed results show some of the pitfalls but, taking those difficulties into account, there is so much this can tell us."

**Caroline Brazier**
Director of Scholarship and Collections, The British Library

"There is no greater area deserving of our attention in libraries than the study of information use and the behavior of information seekers in our increasingly complex and diverse world. OCLC reports are shaping the way we are thinking about and designing our services across a range of information environments."

**Janice Wellburn**
Dean of University Libraries, Marquette University 2011 ACRL Academic/Research Librarian of the Year
This project has the potential to revolutionize the creation and evaluation of academic library services, by providing us with ideas to gather evaluative data that is specific to our institutions and to our primary user groups. It relates to work that many of us are doing on helping students transition to college and university information resources and services. It also asks and answers many of the nagging questions that we have had about providing services that meet the varying needs of our users. The Infokit on Digital Visitors and Residents connects researchers and practitioners, helping librarians to adapt and apply significant research findings in our own environments.

Kristine Brancolini
Dean of the Library, Loyola Marymount University
Advanced development and consultation within the OCLC enterprise

OCLC Research is an important source of expertise, development and consultation within the enterprise. The Innovation Lab is an incubator for rapidly advancing new technologies into publicly available services. It uses planning and deployment models common in technology start-ups to advance intra-company and inter-company opportunities. It also creates a bridge between OCLC Research and product groups, providing advice or rapid consulting, and jump-starting shared initiatives. It plays a leading role in analytics, linked data, open access policy and text mining covered throughout this report.

Recent areas of focus

Analytics:
Provided strategic leadership in bringing together many analytics projects into a coordinated plan.

Linked Data:
As our linked data program becomes more mainstream and integrated into production data management, the lab has focused on applying entity-based data management across people, places, events, organizations and works. This led to the development of massively scalable triple store technology that currently manages 31 billion triples derived from WorldCat, VIAF, Dewey and ArchiveGrid.

Experimental applications
We build experimental applications to test new approaches and demonstrate possibilities. We make many of these applications freely available to the community for the benefit of libraries and archives. Some applications transition to or influence OCLC services. Publicly available experimental applications are available online, including prototypes and experimental services produced by OCLC Research (including the Innovation Lab).

www.oclc.org/research/activities/researchworks.html
http://experimental.worldcat.org

Just discovered ArchiveGrid, and my life will never be the same. Thank you to @WoodpeckerOwl for showing me the light.

Andrea Milne
via Twitter @MyPenHistorical
Hearty congratulations on the success of ArchiveGrid!!! It is a wonderful resource. I continue to promote it in all of my graduate courses and I love seeing the look on the faces of students and faculty when they unearth the most obscure collections and resources.

Heidi N. Abbey, M.A., M.L.S.
Archivist and Humanities Reference Librarian, Coordinator of Archives and Special Collections

ArchiveGrid
ArchiveGrid is a collection of nearly 2 million archival material descriptions, including MARC records from WorldCat and finding aids harvested from the Web. OCLC Research supports it as the basis for experimentation and testing in text mining, data analysis, and discovery system applications and interfaces. It also provides a foundation for our collaboration and interactions with the archival community.
Classify

Classify supports the assignment of classification numbers and subject headings for books, DVDs, CDs and other types of materials.

- Works: 49.8 million
- Bibliographic records: 129.6 million
- Classification numbers: 109 million
- http://classify.oclc.org/

Classify

An experimental classification Web service

109 million classification numbers

+3 million numbers added in 2013

49.8 million works

129.6 million bibliographic records

+ 11.6 million numbers added in 2013

CLASSIFY.OLCLC.ORG

User Interface
403 million

Web Service
37.8 million accesses
4.8 million accesses via MARCEdit

FAST Access
5 million

Top Visitor Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Accesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>23.50%</td>
</tr>
<tr>
<td>India</td>
<td>11.30%</td>
</tr>
<tr>
<td>UK</td>
<td>4.95%</td>
</tr>
<tr>
<td>Canada</td>
<td>3.75%</td>
</tr>
<tr>
<td>Germany</td>
<td>2.95%</td>
</tr>
<tr>
<td>Italy</td>
<td>2.90%</td>
</tr>
<tr>
<td>France</td>
<td>2.40%</td>
</tr>
<tr>
<td>Australia</td>
<td>2.13%</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.96%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1.92%</td>
</tr>
</tbody>
</table>

I love this website! Thank you so much for this service!

Brian Newell
Indiana Family and Social Services Administration

I am in love with the Classify tool from @OCLC http://classify.oclc.org/classify2/

Elliot D. Williams
(via Twitter@elliott_dw) New metadata/cataloging librarian, Miami, Florida
WorldCat Genres
Genre profiles allow users to browse genre terms for hundreds of titles, authors, subjects, characters, places and more, ranked by popularity in WorldCat.
[www.worldcat.org/genres/](http://www.worldcat.org/genres/)

Kindred Works
This experimental service provides a list of items similar to an item of interest by employing content-based recommendation using various characteristics of a sample work, such as classification numbers, subject headings and genre terms, to retrieve related resources from WorldCat.
[www.oclc.org/research/activities/kindredworks.html](http://www.oclc.org/research/activities/kindredworks.html)

VIAF (Virtual International Authority File)
A collaborative effort between national libraries and organizations that contribute name authority files, VIAF is now an OCLC production service that includes authority data from 24 agencies in 19 countries, representing a variety of formats.

- Added the following contributors to VIAF in 2013:
  - IZUM (Institute of Information Science)
  - Lebanese National Library
  - National Library of Catalonia
  - National Library of Latvia
  - National Library of Luxembourg
  - National Library of Poland
  - National and University Library in Zagreb
- Also added ISNI, the International Standard name identifier for the identification of public entities of parties, to VIAF in 2013.
**FAST (Faceted Application of Subject Terminology)**

FAST is an enumerative faceted subject heading schema derived from the Library of Congress Subject Headings (LCSH). Easier to apply and capable of successful application by nonprofessionals, FAST provides a rich LCSH vocabulary that is available as a post-coordinate system in a Web environment. FAST is being added to WorldCat and several libraries are experimenting with its use. The following applications are available:

- assignFAST
- FASTConverter
- FAST Linked Data
- mapFAST
- searchFAST
- http://fast.oclc.org/
- mapFAST Mobile
  - Previously available on the Web, we launched mapFAST Mobile as an Android app in the Google Play store. Users can now search WorldCat.org from smartphones for materials related to any location and find them in the nearest library.
  - http://experimentalworldcat.org/mapfast/mobile/

---

Currently we are using VIAF as a source for author nationality and death data used as part of our high-production copyright review of European works at HathiTrust. We chose VIAF mostly due to the ease of use of its API and the breadth of its content. We hope to eventually use VIAF as a repository for additional information as our investigations document currently missing death dates and nationalities by creating and updating this information in the USNAF.

Judith R. Ahronheim  
Head, Electronic Resource Access Services, University of Michigan
OCLC URL Shortener

- Released in February 2013, the Innovation Lab created a URL shortener for OCLC staff use. Publications from OCLC now contain oc.lc-shortened URLs, which are more manageable and memorable for members. The service protects the privacy of our members by keeping URL resolution and tracking within the cooperative.

WorldCat Live!

- The WorldCat Live! API provides an easy-to-consume, real-time feed of newly added items to the WorldCat global catalog of library collections and published materials. http://experimental.worldcat.org/xwwg/

The platform is indeed a thing of beauty—intuitive, HTML-based, easy-to-modify and able to import records from OCLC without additional cost. No server space is needed as OCLC provides the cloud storage.

Catherine Lemmer, Law Librarian
Indiana University Robert H. McKinney School of Law

WorldCat Live!

The WorldCat Live! Visualization Interface provides three interactive visualizations of the WorldCat Live! API data.

The WorldCat Live! API provides an easy-to-consume, real-time feed of newly added items to the WorldCat global catalog of library collections and published materials.

Visualization:

- Geography
- Language
- Format*
- Feed Only

Geography: Displays where OCLC members are adding items to WorldCat in real-time around the globe
Language: Tracks language of item added
Format*: Tracks the format of items as they are added to WorldCat
*not shown

API: experimental.worldcat.org/xwwg/
Website for Small Libraries (WSSL)

Fifty-nine libraries began trial use of the Innovation Lab’s cloud-based library system, Website for Small Libraries (WSSL), in 2013. The Penn-Kidder Library Center in Pennsylvania used Website for Small Libraries to get up and running for its grand opening in June 2013. Penn-Kidder is a nonprofit, volunteer-created library for the 11,500 residents of Penn Forest and Kidder Townships in Albrightsville, Pennsylvania.

- WorldCat.org/Schema.org—the entire WorldCat catalog, about 270 million pages, is publicly available using Schema.org mark-up with library extensions for use by developers and search partners. This is based on the special ‘enhanced WorldCat’ maintained in Research.

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We love your program! Have trained over 20 volunteers on different aspects, and they all catch on very quickly. The program has been a dream for entering items into our catalog.

Barbara Franzosa, Library Director
Penn-Kidder Library Center

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Innovation Lab

T3 Triples

T3 is the OCLC triplestore database intended for the storage and retrieval of the trillions of triples in the OCLC knowledge graph resulting from the entification of WorldCat.

37.6 billion triples

- DDC Editorial System: 20,310,867
- ArchiveGrid: 248,760,699
- VIAF: 5,452,830,113
- WorldCat: 31,694,512,958

---

OC.LC

URL Shortener

Users: 100
URL: 2,114
Clicks: 1,116,872

---

WorldCat Live! API

Real-time feed of newly added items to WorldCat

Unique users: 5,827
Accesses: 1,751,045

---

WSSL

OCLC Website for Small Libraries

WSSL statistics

Patrons: 35,226
Items: 115,390
Accesses: 15,518,194

59 libraries

21 new libraries
Engagement

We are deeply interconnected with library and archival institutions and organizations, engaging directors and operational staff and representing OCLC interests and positions in our relations with them. We also represent library and archive interests in internal OCLC discussions, and regularly provide context or introductions for colleagues.

The OCLC Research team that operates out of OCLC’s Leiden office has expanded our presence in Europe by leading relations and joint projects with European research institutions and library support agencies.

OCLC Research staff regularly give keynote presentations and publish in a wide range of venues, contributing to discussion and the literature in our field. We are pleased to collaborate with ALISE (the Association of Library and Information Science Education) on a grant program to faculty in iSchools/library schools each year.

We’re bringing library interests to bear on mainstream standards work and helping to ensure that important library and archive standards activity is supported and noticed. We participate in architecture and standards work, supporting adoption and sometimes providing infrastructure support. We also build and promote prototypes that help to improve library catalogs, engage users and create mobile experiences.

Collaboration and consultation

OCLC Research works with a variety of organizations, often as a partner in grant-funded work. These engagements amplify our capabilities, share expertise and broaden the community investment of the OCLC cooperative. We stay alert for opportunities for productive collaboration and strive to maintain good personal relationships across a wide spectrum of partners. An overview of selected collaborations is listed below.

With IMLS support:

- Lynn Silipigni Connaway, with Marie L. Radford and Chirag Shah (Rutgers University)—Cyber Synergy: Seeking Sustainability through Collaboration between Virtual Reference and Social Q&A Sites [www.oclc.org/research/activities/synergy.html](http://www.oclc.org/research/activities/synergy.html)
- Ixchel Faniel and Elizabeth Yakel (University of Michigan)—Dissemination Information Packages for Information Reuse (DIPIR) [http://dipir.org](http://dipir.org)

With Jisc support:

Other selected collaborations:

- Collaborated with staff from other OCLC departments on the Bibliographic Framework (BIBFRAME) Transition Initiative at the Library of Congress and continue to support the OCLC position in ongoing BIBFRAME analysis and discussion.
- Worked with a group of Syriac scholars to load their data into VIAF.
- Collaborated with colleagues at the University of Michigan on the DIPIR project and co-authored papers, presentations, posters.
- Co-authored papers, presentations and posters with colleagues from the University of Berkeley, School of Information, the Alexandria Archive Institute and Open Context.
- Collaborated with RLUK to administer, review and report the findings of the Survey of Special Collections and Archives in the UK and Ireland.
- Collaborated with staff of The Ohio State University Libraries on print book analysis.
- Collaborated with the CIC (Committee on Institutional Cooperation) to analyze print books in CIC libraries.

Collaborating with colleagues in Europe

One of the goals in our User Behaviors strand of work has been to amplify our work through collaboration. This year has been busy one as we build on existing partnerships and build new relationships in Europe to carry this work forward. Senior Research Scientist Lynn Silipigni Connaway has been working with:

- Jisc and University of Oxford on the Visitors and Residents project
- University of Sheffield to investigate the applicability of the recommended concept to the domain of the library catalog
- Faculty and students at the Universidad Carlos III de Madrid (UC3M) in Chair of Excellence program
- Faculty and students at the Royal School of Library and Information Science of Denmark at the Copenhagen and Aalborg campuses.

Staff at the University of Glasgow library are eagerly anticipating the outcomes of this User Behaviour research which will inform how we tailor our services to students. This is a very important area as we need to maximise the impact of the information resources held by us to enhance learning.

Helen Durndell
University Librarian, University of Glasgow
The studies led by Lynn Connaway and David White on user behaviour must be regarded as a major asset for those who deliver online learning. Not only is there insight offered by the Visitor/Resident and Personal/Institutional framework in the ever-changing arena of the Internet, this has recognised credibility based on critical analysis through use of well-respected methods. This international collaboration has delivered a real contribution that improves understanding in a genuinely accessible manner.

Peter Burnhill
Director of EDINA and Head of Edinburgh University Data Library

OCLC Research Senior Research Scientist Lynn Silipigni Connaway delivers work of the highest quality. I think it is fair to say that much of the research Lynn has worked on, both directly with Jisc and more generally, has been significant and helped to inform our work with UK academic libraries and information services. This by itself would be recommendation enough, yet Lynn also manages to combine research excellence with friendliness and professionalism; she is a pleasure to work with.

Ben Showers
Programme Manager, Digital Infrastructure, Jisc

Select consultations
In addition to collaborating with others, OCLC Research staff are often asked to provide consultation on a variety of issues. Examples of some of the consultation we provided in 2013 include:

• Helped to supervise the University of Sheffield 2010–2013 Arts and Humanities Research Council project, “User-Centered Design of a Recommender System for a ‘Universal’ Library Catalogue.”

• Prepared areas studies analysis for Duke University at the recommendation of Don Waters from The Andrew W. Mellon Foundation.

• Supported early work of HathiTrust Task Force on Shared Monographic Collections.

• Provided the National Library of Scotland with an overview of collections-related work in OCLC Research, including key data points.

• Served as an expert advisor on the IMLS-funded XCU Project of the Northwest Digital Archives, a program of the Orbis-Cascade Alliance.
• Met with staff at The Ohio State University Libraries and Pennsylvania State University Libraries to evaluate existing strengths and synthesize opportunities for organizational change.

• Provided data analysis to the Research Collections and Preservation Consortium (ReCAP)—owned by Columbia University, the New York Public Library and Princeton University—to support Mellon grant exploring collection sharing of ReCAP holdings.

• Reviewed library strategy with University of Edinburgh.

• Provided keynote and workshop at University of Wisconsin Libraries to kick-off a library-wide strategy planning process initiated by the new library director.

• Facilitated the retreat of the Council on East Asian Libraries Executive Committee on CEAL’s future directions.

Support of scholarly research

OCLC Research also supports external scholars by providing data for their research. In 2013 this included:

GLAMMap project
Professor Arianna Betti (Free University of Amsterdam, Netherlands). Supplied a data dump from WorldCat about all philosophy books and a GLIMIRised set of 7,000+ titles.

Acquiring Small Press Monographs: Trends and Analyses
Eugene Hayworth (University of Colorado Boulder). Provided selected WorldCat bibliographic data and statistical data.

Centrality and Prestige in the Interlibrary Lending Network
Felichism W. Kabo (University of Michigan). Supplied ILL transaction-related data.

Citation Monitoring of University Press Prestige
Alesia A. Zuccala (University of Amsterdam). Provided additional data points from WorldCat records to supplement a previously provided dataset.

Developing a Taxonomy of Search Sessions
Paul Clough (University of Sheffield). Provided a sample of WorldCat search logs for this Google Faculty grant-funded project.

Portal to the Black Experience

Qua’si-history and Public Knowledge
A social history of 17th century Chinese Historical Narratives [dissertation research]—Paul Vierthaler (Yale University, Department of East Asian Languages and Literatures). Provision of WorldCat API.

Shifts in Scholarly Attention among World Regions
Charles Kurzman (UNC Chapel Hill). Provided selected WorldCat bibliographic data related with statistical data for this National Science Foundation grant-funded project.
The Nature of RDA Book Cataloging Practices in OCLC at the Beginning of RDA Implementation

Andrea M. Morrison & Taemin Park (Indiana University Libraries). Provided a set of RDA (Resource Description and Access)-compliant WorldCat bibliographic records for analysis.

User-Centered Design of a Recommender System for a ‘Universal’ Library Catalogue

Paul Clough, Simon Wakeling (University of Sheffield) in collaboration with OCLC Research. Provided updated WorldCat search transaction and bibliographic data.

OCLC/ALISE Library and Information Science Research Grants: supporting library/archival research and education

Each year OCLC Research and ALISE, the Association for Library and Information Science Education, collaborate to offer research grants to full-time faculty in schools of library and information science or related fields. The overall goal is to promote independent research, particularly work that helps to integrate new technologies that offer innovative approaches and research that contributes to a better understanding of the information environment and user expectations and behaviors. International proposals and collaborative projects are encouraged.

Awards made in 2013—work to be done in 2014

- Denise Agosto (Drexel University) and June Abbas (University of Oklahoma): “A New Role for Libraries: Promoting Teens’ Safety and Security in the Digital Age”
- Leanne Bowler, Daqing He and Jung Sun Oh (University of Pittsburgh): “Teen Health Information Behavior and Social Q&A: A Study to Investigate Teens’ Assessments of the Accuracy, Credibility, and Reliability of Health Information about Eating Disorders in Yahoo! Answers”

Projects funded in 2012 — work conducted in 2013

- Lynne Bowker (University of Ottawa): “Can machine translation facilitate outreach to newcomers? A pilot study investigating the needs of Spanish-speaking users of the Ottawa Public Library”
- Kyung-Sun Kim (University of Wisconsin—Madison) and Sei-Ching Joanna Sin (Nanyang Technological University): “Social Media as Information Sources: Use and Evaluation of Information from Social Media”
- Sanghee Oh (Florida State University): “Understanding Health Information Behaviors in Social Q&A: Text Mining of Health Questions and Answers in Yahoo! Answers”

I have enjoyed working with this illustrious group, and it has broadened my horizons considerably. Thank you for the opportunity!

Andrea L. Stamm
Head, Bibliographic Services Dept. (since retired), Northwestern University Library
The OCLC Research Library Partnership — engaging research libraries around shared issues

The OCLC Research Library Partnership is a leading venue for research institutions to work cooperatively on designing library futures. Partners connect with OCLC Research to mobilize the community around shared concerns. Together, we collectively identify, analyze, prioritize and design scalable solutions around our shared issues, make operational processes more efficient and shape new scholarly services.

The following institutions joined the OCLC Research Library Partnership in 2013:

- Fordham University
- Occidental College
- University of California, Riverside
- University of Wisconsin–Madison
- Washington University in Saint Louis

Each year, OCLC Research hosts a range of meetings where we exchange information, develop projects and learn from each other and from outside experts. We engage staff from libraries, archives and museums and advance the work of the OCLC Research Library Partnership in regular meetings, hold webinars to encourage and facilitate remote participation, and feature notable speakers in our Distinguished Seminar Series. Our staff also attend various meetings and conferences where they serve as speakers or panelists and engage with colleagues from around the world. Complete information about all of our events—upcoming and past—is available from www.oclc.org/research/events.html.

161 Partner Institutions

Partnership by country

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<th>Country</th>
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<tr>
<td>USA</td>
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<td>Japan</td>
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</tbody>
</table>

Organizations represented

- 56% of RLUK
- 68% of IRLA
- 51% of ARL

Times Higher Ed World University Rankings 2013

- 64% of Top 50
- 57% of Top 100

10 Working and Advisory Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>People</th>
<th>Institutions</th>
<th>Countries</th>
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<td>Art Museum Library Advisory Group</td>
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<tr>
<td>Born Digital Advisors</td>
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<tr>
<td>Data Curation Policy Working Group</td>
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<td>ILL Cost Calculator Working Group</td>
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<td>Metadata Managers Focus Group</td>
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<td>Registering Researchers in Authority Files</td>
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<td>SHARES – a resource sharing consortium</td>
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<td>SWAT Pilot Working Group</td>
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<td>Wikipedia Libraries Advisory Group</td>
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</table>
I really appreciate OCLC doing this. Several of our staff were able to “sample” the meeting and gain wider exposure to trends and ideas. It was great to be able to watch live together and also to be able to see the presentations later.

Wow! Wow! Wow! That was an incredible conference. I am blown away with how good it was. Many, many people spoke to me about how impressed they were with the program and the experience as a whole. It was brilliant, inspiring and fun.

Events

“Past Forward! Meeting Stakeholder Needs in 21st Century Special Collections”

This OCLC Research Library Partnership meeting took place 3–5 June 2013 at Yale University in New Haven, Connecticut. Co-sponsored by Yale University’s Beinecke Rare Book and Manuscript Library, the event covered topics related to managing special collections in the 21st century. Presentations offered guidance on integrating special collections into the broader library to support the missions and priorities of their parent institutions; new ways to address challenges with collaboration, workplace issues and skills; and finding users and cultivating relationships.

This was the highest-rated Partner meeting we’ve ever held (based on Partner survey responses). More than 300 OCLC Research Library Partners attended this event: 155 in person and more than 170 remotely online.

You guys are awesome. You do a lot for the community and the great level of dedication and work you put into it show. Thank you.

Great thanks for a stimulating and meaningful conference. Excellently organised. But most especially, format worked really well. Great presentations and active discussion.

I learned so much at this conference. Thank you for all your work in putting this program together.

www.oclc.org/research/events/2013/06-03.html
“MOOCs and Libraries: Massive Opportunity or Overwhelming Challenge?”

Hosted by OCLC Research and the University of Pennsylvania Libraries, this event featured thoughtful and provocative presentations about the ways libraries are getting involved with massive open online courses (MOOCs), including the challenges and strategic opportunities they are facing. More than 500 people participated in this event, in person and online. These attendees learned from the pioneers how library content and services can be represented in these new learning environments, and about new opportunities for supporting teaching on campus. This influential meeting inspired the first MOOCs meeting in Europe in July 2013, as well as the planning for a MOOCs meeting in Australia in 2014.

www.oclc.org/research/events/2013/03-18.html

Thank you so much for this meeting. These are exciting times in education! Libraries need to be getting ahead of changes in order to stay an essential educational partner.

I would just like to compliment the entire planning team on a job very well done. This was by far one of the nicest conferences that I have attended. The attention to detail was evident, and it made the day sail by effortlessly.
Webinars

OCLC Research webinars encourage and facilitate remote participation and time-shifted review of meetings and presentations. We hosted the following webinars in 2013, recordings of which are available on our website at www.oclc.org/research/events/webinars.html and on the OCLC Research YouTube Channel at www.youtube.com/OCLCResearch:

- Achieving Thresholds for Discovery
- ArchiveGrid
- Are We Reconfigured Yet? US Research Libraries — Priorities, Trends, Directions
- How to Read Millions of Books, by Jean-Baptiste Michel
- Managing Research Data
- Print Management at Mega-scale
- Research Roundup
- SHARES 101
- Shifts in Scholarly Attention by Charles Kurzman
- Transformation of the Academic Library, by Kurt De Belder
- Why Google?

OCLC Research Website
ocl.org/research

Top visited pages

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<tr>
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Top visitor countries

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<tr>
<td>Italy</td>
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Total unique visitors

213,555

Total pageviews

448,113

Top downloads

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<td>Survey of Special Collections and Archives in the United Kingdom and Ireland</td>
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<td>Walk This Way, Detailed Steps for Transferring Born-Digital Content from Media You Can Read In-house</td>
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<td>You’ve Got to Walk Before You Can Run: First Steps for Managing Born-Digital Content Received on Physical Media</td>
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<tr>
<td>Social Media and Archives: A Survey of Archive Users</td>
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Videos

Since its launch in 2010, the OCLC Research YouTube Channel has presented different views of our current work and recent findings. The following videos were posted in 2013 and generated nearly 10,000 views:

- Addressing Issues with EAD to Increase Discovery and Access
- Aggregations as Information Supermarkets
- Beyond EAD
- Cataloging Unchained
- Linking Library Data to Wikipedia, Part III
- Past Forward! Meeting Stakeholder Needs in 21st Century Special Collections Event Playlist (contains 16 videos)
- The Scope and Diffusion of the Scottish Presence in the Published Record
- Survey of Special Collections and Archives in the United Kingdom and Ireland
- Tiers for Fears: Sensible, Streamlined Sharing of Special Collections
- Walk This Way: Detailed Steps for Transferring Born-Digital Content from Media You Can Read In-House
- Wikidata and Authority Control

Top-viewed Videos

1. OCLC Research Distinguished Seminar Series Presentation by Kurt De Belder, “Transformation of the Academic Library”
2. Production & Pedagogy
3. Copyright, Licensing, Open Access
4. New Opportunities for Librarians: What Happens When You Go Behind the Lines in a MOOC?
5. MOOCs and Libraries, An Overview of the Landscape

www.youtube.com/OCLCResearch
Publications: contributing to the literature


For a full list of OCLC reports, visit www.oclc.org/research/publications/reports.html.

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**The profession [has] needed publications like this for decades, whereas all we got were pretentious, overblown, self-indulgent, and deliberately opaque projects and monographs that few of us working in the trenches could make heads or tails of. Bless you.**
A very clear, readable, well-organized report just came out on how to manage incoming born-digital content in special collections and archives.

Jody L. DeRidder
(via SAA Metadata & Digital Object Roundtable Discussion List digest 26 June 2013) Head, Digital Services, University of Alabama Libraries

Skimming the most recent OCLC report on detailed steps for handling digital materials YES this is the guide I’ve needed for ages, thanks!!

Eira Tansey
(via Twitter@eiratansey) Digital Archivist/Records Manager, University of Cincinnati

OCLC Research Publications
OCLC.ORG/RESEARCH/PUBLICATIONS

39 articles and publications

- 28 articles
- 11 OCLC Research Reports

Understanding the Collective Collection: Towards a System-wide Perspective on Library Print Collections
by Lorcan Dempsey, Brian Lavoie, Constance Malpas, Lynn Silipigni Connaway, Roger C. Schonfeld, JD Shipengrover and Günter Waibel

OCLC Research Publications
OCLC.ORG/RESEARCH/PUBLICATIONS

Best Conference Paper
International Digital Curation Conference 2013
Trust in Digital Repositories
by Ixciel Faniel

2013 ALISE/Bohdan S. Wynar Research Paper Competition Award
Not Dead Yet! A Longitudinal Study of Query Type and Ready Reference Accuracy in Live Chat and IM Reference
by Lynn Silipigni Connaway and Marie Radford
...I’m such a fan of the OCLC reports—they lay out very clearly what can be done so archivists like me don’t succumb to complete analysis paralysis.

Eira Tansey  
Digital Archivist/Records Manager, University of Cincinnati

Other Publications


For a complete list of other publications in which our work appears, visit www.oclc.org/research/publications.html.

Amount of time spent on OCLC’s hangingtogether.org is gonna surpass my time spent on Twitter

Emma Molls
(via Twitter @emma_molls) Social Sciences and Scholarly Communications Librarian Social Sciences & Humanities Iowa State University

hangingtogether.org
the hangout spot for libraries, archives and museums

2,110 subscribers
36,619 item views
19,780 click-throughs

Top-viewed posts

- Sex Ratios in Wikidata, Wikipedias, and VIAF 3,119
- Library Authorities Alternatives 1,809
- Metadata for Digital Objects 1,809
- Visualizations of MARC Usage 1,626
- The Ropebridges: Authority Control in Wikidata 1,620
- Visualizing Network Flows: Library Inter-lending 1,490
- MOOCs and Libraries: A Look at the Landscape 1,489
- Marking Progress: Print Archives Disclosure 1,484
- OCLC Control Numbers – Lots of Them; All Public Domain 1,408
- User Studies and Risks for Research Libraries? 1,344
I look forward each week to the Above the Fold newsletter. There is always something interesting and unusual in your selections.

Don Waters
Program Officer for Scholarly Communication and Information Technology,
The Andrew W. Mellon Foundation

Newsletters

Above the Fold

Above the Fold is an electronic newsletter that seeks to bring attention to items of interest from beyond our normal reading sphere.

oclc.org/research/publications/newsletters/abovethefold.html

OCLC Research Library Partnership Weekly Updates

Used to communicate weekly updates with staff at OCLC Research Library Partnership institutions about Partnership work, events, publications and participation opportunities

www.oclc.org/research/partnership/lists.html
OCLCRLP- Announce-L

OCLC Research Quarterly Highlights

This periodic roundup of news, events, publications, prototypes and other activities serves a broad online readership.

www.oclc.org/research/publications/newsletters/quarterlyhighlights.html
OCLC Research staff

Many OCLC Research staff use social media to engage with others and exchange information and ideas about things relevant to libraries and archives. We invite you to join the conversation with us on Twitter, Facebook and our HangingTogether blog.

Recognitions

• Senior Research Scientist Lynn Silipigni Connaway, Web Project Manager Patrick Confer, and Marie Radford, with other Rutgers University colleagues, won the 2013 ALISE/Bohdan S. Wynar Research Paper Competition Award for their paper, "Not Dead Yet! A Longitudinal Study of Query Type and Ready Reference Accuracy in Live Chat and IM Reference" (January 2013).

• Post-Doctoral Research Scientist Ixchel Faniel, Ph.D., and her colleagues won Best Conference Paper at the International Digital Curation Conference (IDCC13) in Amsterdam, Netherlands, for "Trust in Digital Repositories" (January 2013).

• Senior Research Scientist Lynn Silipigni Connaway was named Vice-Chair and a committee member of the ACRL Value of Academic Libraries Initiative elected to the Executive Board of Directors of Beta-Phi-Mu, which is the International Library & Information Studies Honor Society; named chair of the ALA Library Research Round Table Committee; served as a member of the ASIST (Association for Information Science & Technology) board and a member of the IFLA Library Theory and Research Section.

• Program Officer Jackie Dooley completed her year-long tenure as President of the Society of American Archivists (August 2013).

• Research Scientist Brian Lavoie was re-elected as Dryad Board Treasurer and continues to serve as the Dryad Finance Committee Chair.

• Consulting Project Manager Eric Childress was elected as Chair-Elect to the Dublin Core Metadata Initiative (DCMI) Governing Board.

• Research Support Specialist Jeff Mixter assumed the position of Chair of the Central Ohio Chapter of Association for Information Science and Technology (ASIST).

• Program Officer Jennifer Schaffner served on an IMLS grant review panel.

Looking ahead

Senior Research Scientist Lynn Silipigni Connaway was appointed to the Chair of Excellence program at the Universidad Carlos III de Madrid and a visiting scholar at the Royal School of Library and Information Science in Copenhagen in early 2014.

Research Support Specialist Jeff Mixter received Kent State University's School of Library and Information Science (SLIS) 2014 Beta Phi Mu Student Achievement Award.

Lorcan Dempsey will be conferred with an honorary doctorate from Open University in the summer of 2014.
For more information about OCLC Research, including staff contacts, see www.oclc.org/research.