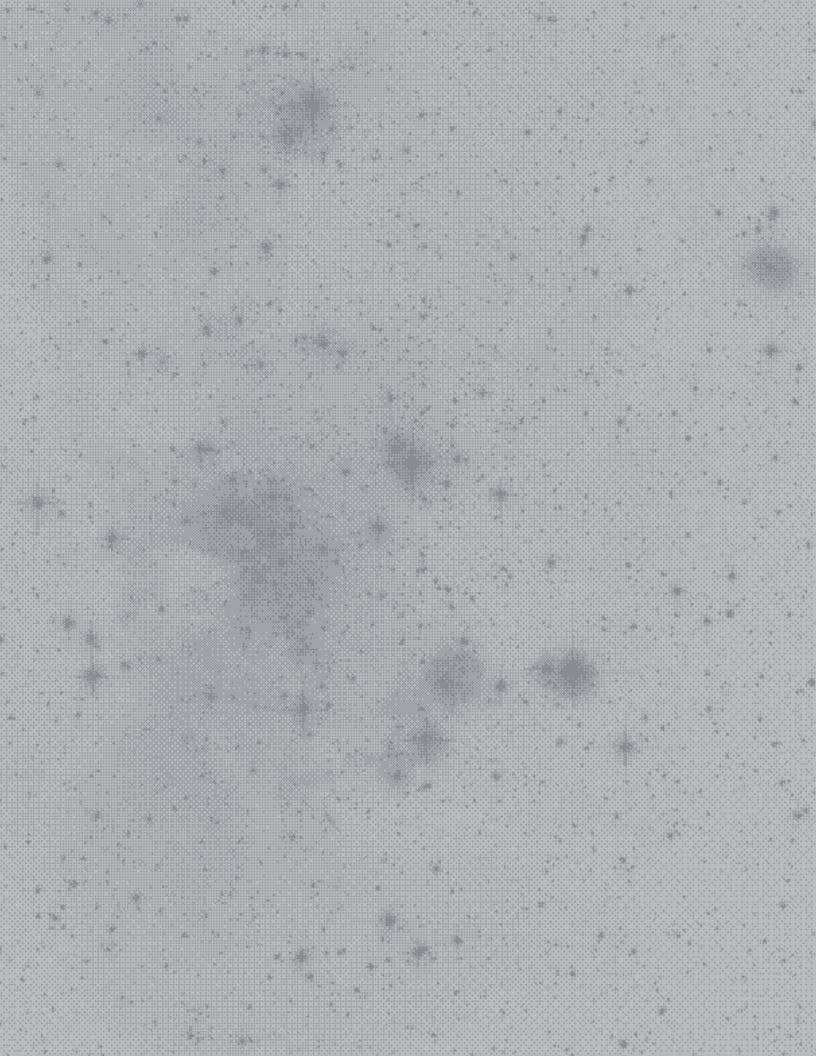


## OCLC Research:

**2015 Activity Report** 





# OCLC Research: 2015 Activity Report



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## Introduction

The OCLC Membership and Research division has a single purpose: to improve library learning, research and innovation. The Research unit is one of the world's leading centers devoted to exploration, innovation and community building on behalf of libraries and archives.

Research strives to create breakthroughs in library practice. Members then benefit from knowledge, evidence and models which make a difference for users and libraries. The work of OCLC Research occurs in five thematic areas:

- Understanding the System-wide Library
- · Research Collections and Support
- User Studies
- Data Science
- · Scaling Learning

This report provides highlights of our progress in 2015 in these five areas.

## Understanding the System-wide Library

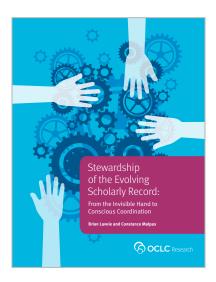
Libraries are embedded in an increasingly complex network of information supply and demand. Our goal is to provide evidence and insight to libraries as they organize collections and services within this changing network environment.

Our research agenda aims to improve our understanding of the factors that guide institutions in their sourcing and scaling choices as they seek maximum impact and efficient provision of library collections and services.

## **Our 2015 Understanding the System-wide Library highlights**

The impact and influence of our shared print work reached beyond the United States. To advance mutual OCLC and Research Libraries UK (RLUK) understanding, we worked with an RLUK Collective Collection Advisory Group and produced an updated statistical profile of the RLUK collective collection in WorldCat. Findings were featured in Chief Strategist and VP, Membership and Research, Lorcan Dempsey's presentation at the November 2015 RLUK meeting and will be summarized in a final project report. The Advisory Group also evaluated an extraction of current holdings and a review of "uniquely held works/expressions."

The Evolving Scholarly Record framework we provided to create a structured discussion was embraced by the community. This broad acceptance was established via a series of workshops reported on elsewhere in this document. These discussions informed the new OCLC Research Report, Stewardship of the Evolving Scholarly Record: From the Invisible Hand to Conscious Coordination.





**Our evidence challenged the common assumption that interlibrary loan is going away.** The broad interest in the presentation, "Is ILL Dying Off? Some Clues From the Borrow Direct Consortium," at the OCLC Research Update at ALA Midwinter in January 2015 led us to expand our ongoing study of the Borrow Direct consortium's collection-sharing activities. The Committee on Institutional Cooperation (CIC) provided data from its member libraries, which we will use to provide a more complete picture of current trends in resource sharing.

The resource sharing community also continues to support development of the OCLC ILL Cost Calculator. We took a major step toward finalizing this calculator as ILL administrators beta-tested the tool they will use to gather and submit their data, ultimately allowing them to learn their own unit costs for interlibrary borrowing and lending and compare those costs with anonymized peers.

## Research Collections and Support

Libraries are increasingly leveraging the raw materials of scholarship and knowledge formation by emphasizing the creation and curation of institutional research assets and outputs, including digitized special collections, research data and researcher profiles.

Our work informs current thinking about research collections and the emerging services that libraries are offering to support contemporary modes of scholarship. We are encouraging the development of new ways for libraries to build and provide these types of collections and deliver distinctive services.

#### **Our 2015 Research Collections and Support highlights**

We helped the community explore the practical implications of the Evolving Scholarly Record through a series of workshops.

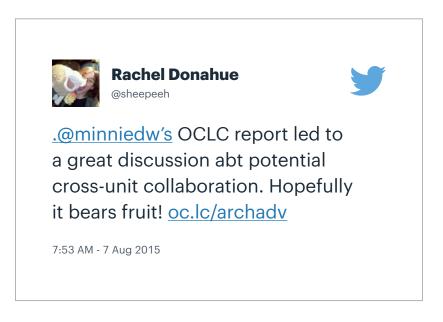
We hosted the third and fourth in a series of one-day "Evolving Scholarly Record" workshops to build on the framework presented in our report of the same name. The workshops also helped libraries address how they will deal with the evolving scholarly record that goes far beyond the traditional journal and monograph outputs. The workshop series is summarized in several blog posts on hangingtogether.org.

We sponsored a meeting on university ranking and researcher reputation to help libraries move closer to the center of research support. The University Ranking and Researcher Reputation: Rep, Rank & Role OCLC Research Library Partnership meeting attracted attendees from a range of countries where university ranking schemes are particularly influential, including Canada, the Netherlands, Australia, New Zealand, Japan and China. The meeting presentations, videos and blog post summaries are available on OCLC.org.

We created interest in the publisher and digital science communities about the implications of the Evolving Scholarly Record. We grew awareness about our work on the evolving scholarly record through a series of webinars including an NFAIS webinar that exposed our work to the publisher community, who are important stakeholders in the scholarly record ecosystem.



The archival community took action on recommendations that we made in two significant special collections/archival **publications.** Making Archival and Special Collections More Accessible represents OCLC Research efforts over the last seven years to support change in the end-to-end process that delivers archival and special collections materials to interested users. The Archival Advantage: Integrating Archival Expertise into Management of Born-digital Library Materials explores the ways in which library management of these materials can be enhanced by archival practices and skills. See The Archival Advantage webinar that elicited this comment:







We collaboratively discovered the community's biggest needs for Web archiving. These shaped a program of work that is now underway. Our survey on Web archiving asked which of five topics is most important to address and which the respondent would be willing to work on. The top two:

- Not enough is known about use of harvested websites. We will study users and potential users of Web archives to find out what they want, what they want to do with them and how they find and navigate what is available.
- Web archives often are hidden in silos, making access difficult. We will work on developing metadata guidelines to bridge the archival and bibliographic traditions so that records for live and/or harvested websites can appear in local catalogs, as well as in WorldCat and other aggregations.

We secured funding to further study the data curation services increasingly being offered by libraries to their faculty constituents. "Beyond Management: Data Curation as Scholarship in Archaeology," a 36-month project started January 1, 2016, received a National Endowment for the Humanities (NEH) Research and Development grant. An OCLC research scientist is a coprincipal investigator on this longitudinal study of practices of creation, management and reuse of archaeological data.

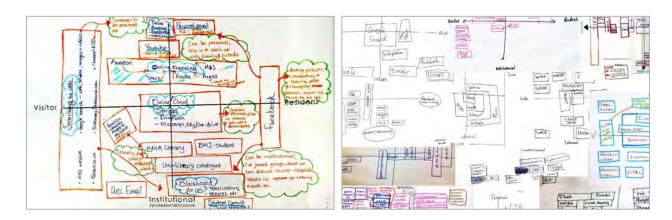
## **User Studies**

Libraries are impacted by the ways in which individuals engage with technology; how they seek, access, contribute and use information; and how and why they demonstrate these behaviors and do what they do.

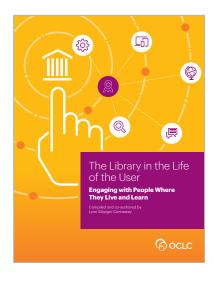
We're collaborating with librarians to shape their services around a set of expectations that have been influenced by consumer technologies and modern research and learning environments. By providing the library community with behavioral evidence about individuals' perceptions, habits and requirements, we can ensure that the conception and design of future library services is all about the user.

### **Our 2015 User Studies highlights**

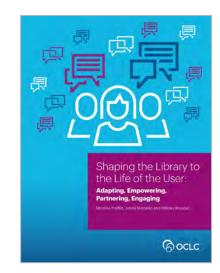
We expanded our <u>Digital Visitors and Residents</u> work to Europe in support of a broader evidence base. Enabling others to replicate this study in Europe will allow us to compare results from multiple countries to identify how individuals engage with technology and their expectations, which can influence the development of library services and systems. We taught librarians in Europe to use our data collection and analysis methods to assess their services and determine if the resources for these services should be reallocated to new services.



We consolidated all of our user behavior research findings, which articulate the need for the design of future library services to be all about the user. The compilation, The Library in the Life of the User: Engaging with People Where They Live and Learn, will be useful to library and information professionals as they think about new ways to provide user-centered library services and to conduct research that will inform practice in ways to engage and build relationships with users and potential users.



In further support of this approach to library services, we held the event, The Library in the Life of the User, which presented information about how ethnography and design thinking can help shed light on the life of the user outside the library and will help libraries to provide more meaningful support based on what students and others really do. You can view the video and slides, and read the report that recaps this event, Shaping the Library to the Life of the User: Adapting, Empowering, Partnering, Engaging.



"Loved the variety of presentations, was inspired by what colleagues are doing and challenged to think differently."

#### **Mary Marissen**

Librarian for Assessment, User Experience, and Assistant Head of Collections Swarthmore College

We studied the reuse of research data as well as the differences in domain and disciplinary communities to inform the services libraries create to manage this research data. These publications capture what we've learned to date: Social Scientists' Satisfaction with Data Reuse and Destruction/Reconstruction: Preservation of Archaeological and Zoological Research Data, while these webinars summarize the ongoing investigations: Managing and Curating Data With Reuse in Mind and Data Management, Sharing and Reuse: A User's Perspective.

**We will study how K-12 and undergraduate students determine credibility.** Two OCLC research scientists will be co-principal investigators on a 36-month Institute of Museum and Library Services grant awarded for "Research Students' Information Choices: Determining Identity and Judging Credibility in Digital Spaces."

## Data Science

The Web is the native environment of information seekers. OCLC Research recognizes that to be integrated into the Web, traditional library data must be transformed in various ways. We are analyzing the data in WorldCat and other sources to derive new meaning, insights and services for use by libraries and others on the Web.

### **Our 2015 Data Science highlights**

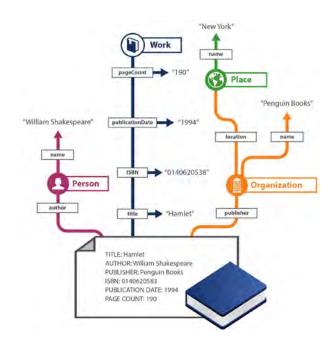
We scoped the status of global linked data work and advanced our education and leadership in the area via seminal publications. Our second annual International Linked Data Survey for Implementers drew responses from 77 institutions that included 15 national libraries, and described 112 linked data projects or services (compared to 76 described projects in the 2014 survey.) Prior years' results are available, while the most recent data are being analyzed for publication early in 2016.

• The article <u>"Is your library a 'Thing'?"</u> explained to the community how linked data and the Semantic Web play an important role in making libraries more visible on the Web.



OCLC research scientists published <u>Library Linked Data in the Cloud: OCLC's Experiments</u>
 with New Models of Resource Description, a book that explained the conceptual and technical
 challenges involved in publishing linked data derived from traditional library metadata.

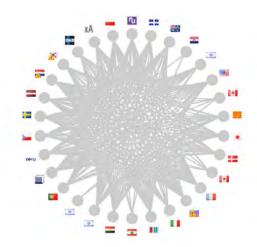
We were part of the national response to the changes in the descriptive metadata that came from the Library of Congress' BIBFRAME work. OCLC Research gained significant visibility as nationally recognized experts in the transition from MARC to linked data based on collaboration with BIBFRAME development, participation on a Program for Cooperative Cataloging committee and outreach efforts like the webinar, How You Can Make the Transition from MARC to Linked Data Easier. We published the white paper, Common Ground: Exploring Compatibilities between the Linked Data Models of the Library of Congress and OCLC, jointly with the Library of Congress.



We enhanced data through ISNI, Schema.org and a range of data mining projects. Our Organizations in ISNI Task Group developed use cases to help model organizations. We will apply these use cases to OCLC's entification work to improve clustering of WorldCat records for discovery and to expedite authority work. Acknowledging OCLC's thought leadership in the library standards community, ontology experts at Schema.org republished much of the experimental extension vocabulary BiblioGraph.net as a hosted extension, bib.schema.org. They have promoted it as a model for other specialized communities of practice that aim to align key concepts in their domain models with the language understood by the world's major search engines.

We grew and expanded the Virtual International Authority File (VIAF) by adding data from the National Library of Ireland, National Central Library of Taiwan, National Library and Archives of Québec (Canada) and the National Library of Russia.

Wikipedia has codified much of the VIAF data into Wikidata, which includes information across all of the different language versions of Wikipedia. VIAF's links to Wikidata enrich the information about personal, corporate and geographic names beyond that recorded in national and regional authority files.



"I want to thank you for the tireless work you do for the library community..."

#### **Stephen Lacey**

Project Manager National Library of Australia

## Scaling Learning

Skilled, confident library practitioners are the foundation of innovative library service. Our WebJunction program designs and delivers learning at scale, through online training programs, self-directed study, peer-to-peer knowledge sharing and facilitated communities of practice. We focus on topics that build the capacity of libraries to continually evolve in response to user needs.

## **Our 2015 Scaling Learning highlights**

Our training and webinar audience continued to grow, as did external funding support for these important community resources. Twenty-three state libraries provided cooperative support for WebJunction. Four of these, Hawaii, Idaho, Kansas and Nevada, are new this year. This support enabled us to offer 25 live webinars, and add 15 new self-paced courses and 46 webinar archives to the freely available WebJunction course catalog, bringing the total learning resources in the catalog to 224. These resources represent a wide variety of topics of interest to library staff, including library management, marketing and communications, and technical services.

Our grant-funded programs connect library staff to resources and ideas that help to empower relevant and vibrant libraries. With funding from the Institute of Museum and Library Services (IMLS), the <u>Supercharged Storytimes</u> program has empowered libraries in six states to incorporate research-validated early literacy techniques into storytime for young children. More than 550 library staff participated in the online orientation and community of practice in 2015. WebJunction is now seeking funding to bring this project to more public libraries across the U.S.

"Supercharged Storytimes engages children! I see other programs that don't have that extra thing that pulls the kids in and gets their brains moving."

#### **Public Librarian**

Washington State

Our <u>Health Happens in Libraries</u> program released resource guides for public library staff to explore how they can support local community health needs and build their skills and confidence in connecting patrons to health information. This program, also funded by IMLS, <u>developed an infographic</u> that looks at the essential role public libraries play in addressing equitable access to health information and resources.





The <u>Geek the Library</u> advocacy project, funded by the Bill & Melinda Gates Foundation, formally ended in June at a showcase during the American Library Association Annual Conference in coordination with the Public Library Association's <u>Turning the Page</u> program. The legacy resources created by the Geek the Library project have been curated and published as <u>Advocacy in Action</u>, which can help library staff plan and execute a successful library awareness campaign in their local community.

**OCLC** is the backbone organization and administrator for the Coalition to Advance Learning in Archives, Libraries and Museums, which was formed in 2013 with support from IMLS and the Bill & Melinda Gates Foundation. The Coalition has 22 organizations as formal participants, who have formulated a joint strategy and national agenda for strengthening and sustaining professional development and continuing education for the field. In support of these efforts, we hosted a two-part Project Management 101 webinar series produced by the Coalition to Advance Learning in Archives, Libraries and Museums and attended by more than 1,000 library, museum and archives practitioners.



For information about the work currently underway in OCLC Research, visit our website at www.oclc.org/research.



For more information about OCLC Research, please visit: www.oclc.org/research.html



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