The Research Library
Scholarly Record, Stewardship and Services

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slides courtesy of
Brian Lavoie Constance Malpas
Topics from the NMC Horizon Report > 2015 Library Edition

**CHALLENGES**

**SOLVABLE**
- Embedding Academic and Research Libraries in the Curriculum
- Improving Digital Literacy

**DIFFICULT**
- Competition from Alternative Avenues of Discovery
- Rethinking the Roles and Skills of Librarians

**WICKED**
- Embracing the Need for Radical Change
- Managing Knowledge Obsolescence

**TRENDS**

**SHORT-TERM IMPACT**
- Increasing Value of the User Experience
- Prioritization of Mobile Content and Delivery

**MID-TERM IMPACT**
- Evolving Nature of the Scholarly Record
- Increasing Focus on Research Data Management

**LONG-TERM IMPACT**
- Increasing Accessibility of Research Content
- Rethinking Library Spaces

**DEVELOPMENTS IN TECHNOLOGY**

**NEAR-TERM** (1 year or less)
- Makerspaces
- Online Learning

**MID-TERM** (2-3 years)
- Information Visualization
- Semantic Web and Linked Data

**FAR-TERM** (4-5 years)
- Location Intelligence
- Machine Learning
Roadmap

• The evolving scholarly record: A challenge for academic libraries
  – Background & trends

• OCLC Research reports
  – The Evolving Scholarly Record
  – Stewardship of the Evolving Scholarly Record: From the Invisible Hand to Conscious Coordination

• Key issues for academic libraries

• Questions & discussion
THE EVOLVING SCHOLARLY RECORD
Welcome to create.ou.edu

Empowering Digital Scholarship, Expanding Digital Literacy & Creating Digital Citizens.

Get Started

“... Create aims to empower all members of the OU community to craft and control their digital narrative through the use of blogs, portfolios, wikis, and more.”

https://create.ou.edu/

What is OU Create?

A: OU Create is a project at the University of Oklahoma managed by the Center for Teaching Excellence.

OU Create offers students, faculty, and staff the opportunity to register a domain (.com, .org, .net) and create a digital presence through various mediums such as blogs, portfolios, and wikis. Students can easily install popular open source applications such as WordPress, MediaWiki, Drupal.
Evolutionary trends ...

• Formats shifting:
  – Print-centric to digital, networked

• Boundaries blurring:
  – Articles/monographs, but also data, computer models, lab notebooks, blogs, e-mail discussion, e-prints, interactives/executables, visualizations, etc

• Characteristics changing:
  – Traditionally: static, formal, outcome-focused
  – Today: dynamic, blend of formal & informal, more focus on process, replicability, “leveragability”

• Stakeholder roles reconfiguring:
  – New paths for the scholarly communication “supply chain”
Scholarly communications, 1981

Subramanyam’s Model

The evolution of scientific information. (from Encyclopedia of Library and Information

S. Curl “Subramanyam Revisited: Creating a New Model for Information Literacy Instruction”
http://crl.acrl.org/content/62/5/455.full.pdf
Library-based stewardship covered ~ 80%?

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Scholarly communications, 1981
Scholarly communications, 2015

J. Bosman, B. Kramer “101 Innovations in Scholarly Communication”
University of Utrecht Library
http://innoscholcomm.silk.co/
Library-based stewardship covers ???

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The Evolving Scholarly Record

Develop framework to:

– Organize/support/drive discussions about ESR
– “Big picture” view of ESR
– Define key categories of material and stakeholder roles
– Common reference point for ESR within/across domains
– Support strategic planning by libraries, funders, publishers, scholarly societies, etc.

http://oc.lc/esr
Framing the Scholarly Record …
In practice …
The Research Ideas and Outcomes (RIO) journal publishes all outputs of the research cycle, including: project proposals, data, methods, workflows, software, project reports and research articles together on a single collaborative platform, with the most transparent, open and public peer-review process. Our scope encompasses all areas of academic research, including science, technology, humanities and the social sciences.

Read more about the journal on the RIO blog
EVOLVING STEWARDSHIP MODELS
The scholarly record is evolving ...

... and stewardship of the scholarly record is changing too

**Conscious coordination** is key to securing scholarly record’s future:

- System-wide awareness
- Explicit commitments
- Division of labor
- Reciprocal access

[Stewardship of the Evolving Scholarly Record: From the Invisible Hand to Conscious Coordination](http://oc.lc/esr-stewardship)
Stewardship … historically

- Stewardship of scholarly record was byproduct of uncoordinated, highly distributed, and duplicative process of managing local print collections.
- Sum of local stewardship efforts resulted in aggregate library resource that was relatively complete record of published (print) scholarly outputs.
- “Invisible hand” metaphor: uncoordinated local efforts lead to socially desirable outcome.
Stewardship ... now

• Scholarly record *imperfectly approximated* in aggregate library resource
  – Libraries not collecting full range of ESR
  – Portion of scholarly record that libraries can *collectively* capture and make available is diminishing

• New stewardship models require *conscious coordination*.

The ‘owned’ collection  
- ‘borrowed’  
- ‘licensed’

The ‘facilitated’ collection  
- ‘demand-driven’  
- ‘shared print’
Stewardship ... now

The ‘owned’ collection

- ‘borrowed’

The ‘facilitated’ collection

- ‘ESR’
- ‘shared print’

Invisible Hand

Conscious Coordination

Scholarly record no longer approximated in academic library collections
Four elements of conscious coordination

1. **System-wide awareness**
   - “Align local action with collective effort”

2. **Explicit commitments**
   - “Move commitments above the institution”

3. **Division of labor**
   - “Collect more of less”

4. **Reciprocal access**
   - “Curate locally, share globally”
Examples

- System-wide awareness
- Explicit commitments
- Division of labor
- Reciprocal access
IMPLICATIONS FOR ACADEMIC LIBRARIES
Academic libraries: key issues

• Much of scholarly record not represented in academic library collections

• Stakeholder roles are reconfigured

• Providing access to scholarly record involves shift from “owned collection” to “facilitated collection”

• Stewardship relies on consciously-coordinated networks of collective responsibility

• Local collections/services increasingly embedded in cooperative access/stewardship arrangements
Key issues in focus

• Much of scholarly record not represented in academic library collections

• Stakeholder roles are reconfigured

• Providing access to scholarly record involves shift from “owned collection” to “facilitated collection”

• Stewardship relies on consciously-coordinated networks of collective responsibility

• Local collections/services increasingly embedded in cooperative access/stewardship arrangements
Library coverage: increasingly partial

- Growing number and diversity of outputs published in venues outside traditional library supply chain: GitHub, Figshare, ResearchGate, Zenodo etc.

Questions to consider:
- Is your institution systematically collecting artifacts of research process and aftermath, as well as traditional outcomes?
- How can library expertise in appraisal and selection be applied to curation of materials managed outside the library?
Example: New publication platforms

New forms of **scholarly work** not fully documented in institutional archives or library collections.
Curating ‘facilitated collections’

• Demand-driven acquisition profiles; shared print partnerships
• Open access resources included in local discovery environment, but not local collection
• Institutional repository (content) vs. institutional bibliography (metadata)

Questions to consider:
• Does the library track student/faculty use of ‘extra-institutional’ repositories?
• Does the library coordinate with other campus units collecting or monitoring research/learning outputs?
Example: Open access content

Many (non-partner) libraries include HathiTrust content in local discovery environments

OCLC catalog records are available for 97 percent of the journals in our sample, representing 91 percent of the articles. The median number of holding libraries is 230, a number that does not vary systematically by subject. These findings suggest that...


Many libraries point to OA journals without participating in preservation schemes

Discoverability and stewardship are decoupled
New scholarly publication venues maximize visibility and impact
Networks of collective responsibility

• Growing attention to governance of ‘above institution’ stewardship -- HathiTrust, UKRR, WEST etc.
• Participation rates (and incentives) vary across higher education community – archive holders vs. builders, content contributors vs. capital contributor

Questions to consider:
• What is the primary motivation for your library to participate in cooperative stewardship arrangements?
• How do you evaluate the robustness of current partnerships? Are you confident they will last?
Examples: stewardship at scale
What is the scholarly record?

A selection of scholarly content …

supported by stable configurations of stakeholder roles …

sustained through conscious coordination
QUESTIONS & DISCUSSION
Thank You!

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