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#### Commons-based digital libraries

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Anita Coleman. "Commons-based digital libraries" *School of Library and Information Science, Indiana University* (2006).

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# Commons-based digital libraries

#### Anita Coleman University of Arizona

#### Brown Bag, SLIS, Indiana University 31, March 2006 Bloomington, IN

#### Overview

Commons-based digital libraries are an emerging phenomenon. They are based on a new vision of digital information organization and use. A definition of commons-based digital libraries, some examples, fundamental characteristics, emerging information behaviors, and preliminary results from a scholarly communication survey of LIS faculty will be presented.

#### Not just a matter of time...

- "Digital disciplinary corpora"
- "Open flow fields" and "closed flow fields" (chastity belts – peer review)
- "Communicative plurality and communicative heterogeneity are durable features in the scholarly communication landscape"
  - Kling & McKim (2000)
- "Action agenda"
  - Robbin (2005)
- "Distributed cognition"
  - Cronin (2004) & Cronin, Shaw & La Barre (2003)

### The phenomenon is:

- a global, trusted, open, commons-based digital library
- *for the solution of large-scale problems;*
- collections and communities are multi-disciplinary; resources include peer-reviewed research articles and diverse, digital objects of scholarship (datasets, learning objects);
- cyber-infrastructure and emerging behaviors such as scholarly self-archiving and end-user classifying facilitate peer organization, use, and peer production of knowledge.

#### **Characteristics**

- Global users can be anywhere in the world
- Trusted document and author certification
- Open no economic or legal restrictions
- Standards Metadata, Document formats

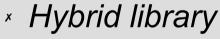
# **Characteristics (contd.)**

- Solving a problem global and large-scale
- Peer production of knowledge
- Peer organization of knowledge
- Multiple uses/reuses of information
  - Sustainable information behaviors
    - Principle of least effort citation bias
    - Authentication
    - Certification/Quality control (refeereable quality)

#### **Examples and Non-examples**

 Conservations
 Commons
 Public Library of Science

- *Gutenberg Texts Ascii texts*
- Greenstone
  - Software
- California Digital Library







Digital Library of Information Science & Technology

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#### About ConserveOnline

**ConserveOnline** is a "one-stop" online, public library, created and maintained by The Nature Conservancy in partnership with other conservation organizations. The library makes conservation tools, techniques, and experience available to a broad community of conservation practitioners. This site is intended to foster learning and collaboration, and provide information and support to anyone making conservation-related decisions, from the staff of conservation organizations to land managers at government agencies to local land trusts to private landowners. Through discussion groups and information sharing, ConserveOnline is an open forum for sharing successes and failures, and for connecting scientific research with field-based conservation practice. We welcome anyone with documents, data, maps, or images relevant to the science and practice of conservation to make these resources publicly available through ConserveOnline, and to share their expertise through the discussion groups.

This new version of ConserveOnline features a major overhaul of the user interface and the underlying technology. More features will be added gradually and there will be plenty of opportunity for feedback. Please note: we perform regular maintenance on ConserveOnline every Wednesday morning, between 7-8AM, Eastern time. ConserveOnline may be briefly unavailable during that time.

More information about:

- State Conservancy State Conservancy
- Collection of Conservation Websites
- GIS collection
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The Public Library of Science (PLoS) is a non-profit organization of scientists and physicians committed to making the world's scientific and medical literature a freely available public resource.

The Public Library of Science (PLoS) seeks to catalyze a change from traditional subscription-based scientific and medical journal publishing to open access publishing. We work toward our goal by publishing our own open access journals and through advocacy for open access among producers and consumers of the scientific and medical literature. *Find out more about our journals and what you can do with our content*.

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PLoS has a number of different projects and products. Like the rest of the world, we are constantly evolving. All our activities are guided by our core principles. *More about PLoS' core principles.* 

# dLIST

- An open access archive
- Information Sciences
  - Archival Science, Information Systems, Library & Information Science, Museum Informatics
- In production (service)
- Testbed Information Technology & Society Research Lab

#### **DL-Harvest**

- Open Access Aggregator & Metadata Search
  - 13 archives
    - @rchiveSIC
    - ArXiv.org
    - E-LIS
    - OCLC Research Repository
- Subject-based discipline service
- Commons-based digital library

## **Objectives**

- Connecting research, education and practice communities globally in the related but disparate Information Studies
- Research on issues critical for supporting sustainable information behaviors
  - Barriers to open behaviors
- Resolution of organization and technological issues underlying the digital libraries-digital repositories-digital commons phenomenon
  - Adaptability, extensibility, and sustainability of open technologies

# LIS Scholars – Schol Comm Study

- Survey conducted in Oct/Nov. 2005
- Online survey
- Overarching Research Question: How does the LIS field practice open access?
- Instrument adapted from Swan & Sheridan (2005). Available in dLIST.

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<u>2006 Mar</u>	113	25
<u>2006 Feb</u>	59	15
<u>2006 Jan</u>	104	15
2005 Dec	106	39
<u>2005 Nov</u>	68	21



dLIST, an open access archive for the Information Sciences, is a service of the School of Information Resources and Library Science and Learning Technologies Center, University of Arizona. dLIST has a global Advisory Board and is a part of the Information Technology & Society Research Lab.



# **Survey Questions**

#### Demographic Questions

- Gender, Age group, professional title, geographic location, dLIST registration status, specialization, LIS school faculty
- Knowledge of self-archiving
  - Definition of self-archiving; major difference between a subject & institutional repository, examples
- Use of Research Information and Publishing Activities
  - E.g. How many articles published each year?

# **Questions (contd.)**

- Experience with Self-archiving (SA)
  - General self-archiver, dLIST self-archiver, Non self-archivers
    - General self-archiving behaviors
      - Motivations
      - Where, what version of work, what types of works
      - Mechanics (who, length of time SA practice)
      - Barriers
      - Expectations
  - Self-archiving behaviors in dLIST
  - Non-self-archiving attitudes and intentions
- Value of dLIST
  - Ranking services, content quality, effect, concerns, disadvantages of SA

#### Results

- How do LIS scholars practice open access?
- 244 usable responses
   99 LIS faculty
- 126 completed the full set of responses
- Knowledge of self-archiving
  - Only 3 responses fit our rigorous definition of self-archiving: depositing a copy in an OAIcompliant archive; to others self-archiving ranged from publishing in a journal, saving hard drive files, uploading a copy to a personal webpage

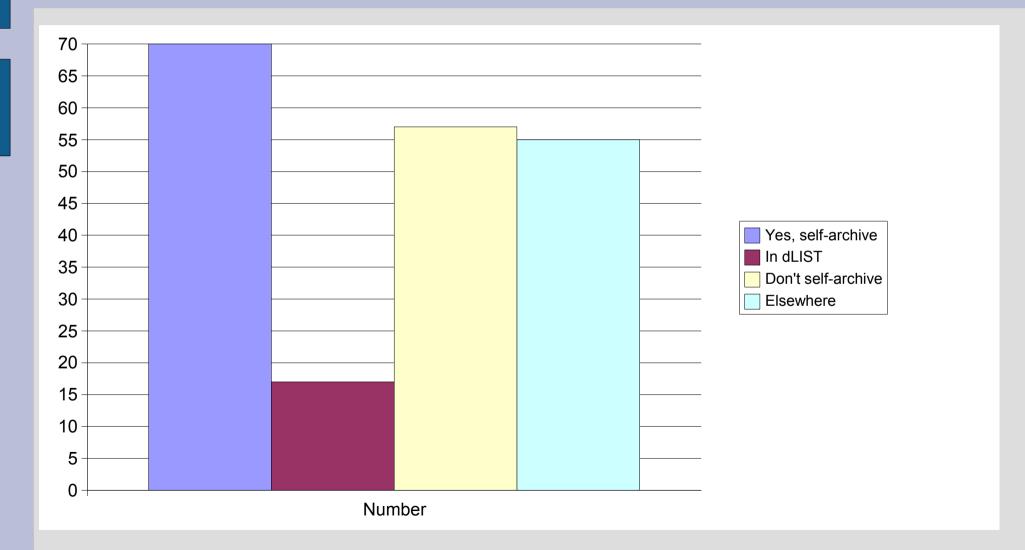
### **Demographic results**

- Participants were from Africa, Asia, Australia, Europe, North America; none from South America
- Specialization
  - Weird results

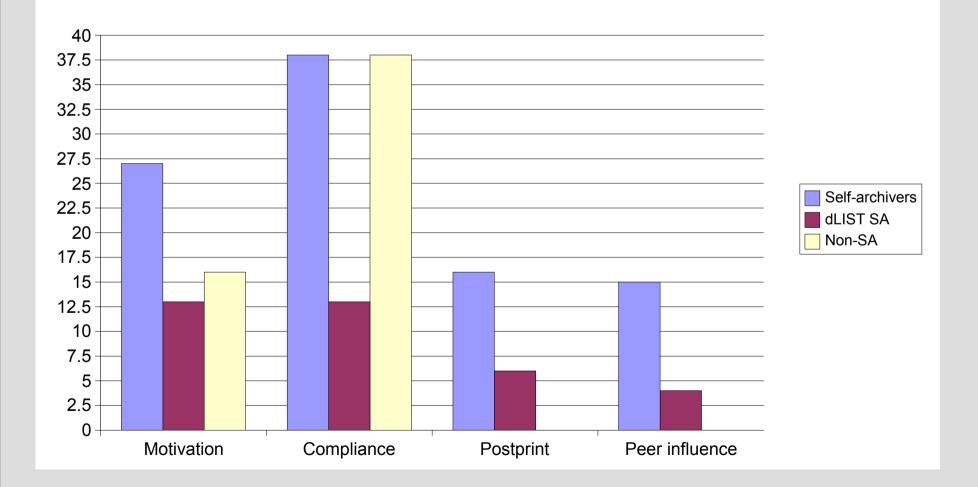
### **Self-archiving behavior**

- 54% (n=69) have self-archived at least once
- 13% (n=17) self-archive in dLIST
- 18% (n=23) self-archivers are LIS faculty in US & Canada
- 4.7% (n=6) LIS faculty self-archive in dLIST

#### **Self-archiving venue**



#### **Attitudes of LIS scholars**



#### **Barriers and Practices**

#### Barriers to Self-archiving

- Neither copyright nor technology are barriers
- Time is a barrier even though majority say it takes only a few minutes to self-archive
- Self-archiving length of time
  - Relatively new practice majority have engaged in self-archiving within the last one year
- Scholarly searching in closed archives
  - Majority used subject-specific full-text services
- Scholarly searching in open archives
  - Majority used Google Scholar (11 used DL-Harvest)

### Conclusion

- How does the field practice open access?
- Why is open access important?
  - Or better yet: what is the potential on an LIS Commons?
- Future research
  - Determine the potential size of the field
  - Impact + measures of value + usage statistics
    - LIS has a high rate of uncitedness; high rates of uncitedness are not uncommon but uncitedness provides one sort of an imperative to research/develop other measures

### dLIST Users

- When compared with general self-archivers and non self-archivers, dLIST SA show:
  - Greater awareness of the value of subject-based open access repositories (CBDL)
  - Ranked the importance of open access archiving, self-archiving, much higher
  - Similarly for services: aggregation, searching, alerts
  - Ranked copyright research and deposit services lower
  - Ranked quality higher
  - Less concerned about plagiarism, etc.

#### No difference

- There was no difference among the three categories about the effect of self-archiving on the impact of one's research; that is, in roughly the same percentages and in the order as given below they agreed that
  - OA improves visibility, citation, official recognition of work, influences further work of others, immediacy of work, and lastly, replication / application of work.

#### The dark side of open access

- Strong concerns about plagiarism and lack of credit
- Rare concern about not getting published in a journal because work is self-archived
- Lack of awareness about OAA as personal digital libraries – Google is it!
- Other issues (somewhat rare):
  - Proliferation of versions
  - Concerns about sharing peer production of knowledge, improving quality, productivity of research is not necessarily a goal for everybody

#### Conclusion

How can I do it? What is it? Where can I get it done? Will I have versioning control? Do I lose <u>control</u> of the article after I post it? How do I <u>update</u> as information changes? How do people who are using the archive know that something has been updated on an article they have read in the past? How can I <u>create connections</u> between my articles, or between my articles and other people's articles? What kind of visualizations and <u>search interfaces</u> are used to get people to my articles? How are they abstracted? Can I write my own dLIST specific abstract for display/browsing purposes? Who uses dLIST? Why would anyone bother? Am I wasting my time by putting my article there? How integrated with other services is dLIST? Is it indexed by Google and other search engines? If not, why not? Are there other ways I can access articles in dLIST without disrupting my workflow by going to dLIST's webpage or whatever interface exists? How does it work? How is an <u>article's relevancy</u> to a particular search evaluated? How are search results returned?"

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### Thank you!

Questions?