Research Data Services Vision(s): An Analysis of North American Research Libraries

Inna Kouper, Indiana University
Kathleen Fear, University of Rochester
Mayu Ishida, University of Manitoba
Christine Kollen, University of Arizona
Sarah Williams, University of Illinois at Urbana Champaign
Background

In response to data and directives deluge (C. Palmer), many academic libraries are developing research data services (RDS)

What are the approaches to implementing RDS in academic libraries?

What is the vision of RDS in academic libraries?
Methodology

1. Review “driver” documents
2. Examine web pages of ARL libraries for research data homepages and strategic documents *(123 libraries examined)*
3. Conduct semi-structured interviews with ARL library administrators *(45 contacted, 25 interviewed)*
Library Web Pages: Focus on RDS Implementation

• 88 libraries (72%) have a main web page dedicated to research data services
• 59 libraries (48%) have other RDS-related pages
RESEARCH DATA MANAGEMENT

Organize my data
How to prepare a data management plan & protect your data

Share my data
Why you would share, data sharing tools, metadata & how to get credit

Access existing data
How to locate data and access data tools, terms & citations

Archive my data
How to find a repository, prepare your data & submit your data

Good data management is informed by funder and institutional policy and encompasses the full data lifecycle including collection, analysis, dissemination and potential reuse.
Library Web Pages: Current State of RDS

- **DMP assistance and mandate support**: 24%
- **Consultations and instruction**: 21%
- **Data deposit and repositories**: 11%
- **Storage**: 8%
- **Sharing and re-use**: 6%
- **Best practices and information dissemination**: 6%
- **Archiving and preservation**: 5%
- **Data processing and analysis**: 4%
- **Metadata**: 3%

[Category Name] [Percentage]
• 113 libraries (92%) have strategic documents online (mission / vision statements, strategic plan, or both)
• 69 libraries (56%) mention data in their strategic documents
• 9 libraries (7%) have data-focused vision documents
Data Emphasis in Strategic Documents

Acquisition of a modern, state-of-the-art research data management system that will capture information pertaining to research funding and research outputs (e.g., publications) in their totality.

Support the university’s research data management initiative, including assisting faculty with the archiving of publications and data from federally funded research and with the preparation of data management plans.
Vision in Data-Focused Strategic Documents

... foster data management best practices by providing guidance, education and training and offering data archiving and sharing services in support of researcher, institution, and agency goals.

... work with units across campus to build the infrastructure and services to fill gaps and provide a base level of service for the stewardship of research data produced on campus.
Interviews: Emerging Vision Themes

Collaboration and engagement
- Work together across campus, with IT, faculty, students, offices of research, but also across organizations

Enabling
- Provide means for doing the full lifecycle of research, including data

Strong expertise
- Train librarians, involve people from various library units, bring data-oriented professionals into the libraries
Theme Examples: Collaboration and engagement

Our aspiration isn’t to be the only place on campus that supports research data. We want to coordinate and partner with other interested groups and stakeholders on campus (e.g., central IT, research office, graduate college). The library builds relationships and bridges. The library is part of the research ecology on campus.

Two things that I say commonly... One is that no institution can go alone. The second one is that we are not as special as we think we are. There are common needs ... and we should not be building these things by ourselves, but we should be working, almost by default, by design, collaboratively and in partnership.
The library’s RDS should **enable** researchers to conduct research at the highest level and disseminate findings to the world.

We really want to support researchers **across the spectrum** of scholarly communications, and we recognize that it is **from planning research to producing, managing data, disseminating it**. And so, we see data as just one of the many research outputs that they may create.
Theme Examples: Strong expertise

Libraries should become co-educators in data management, and ... build a skillset that data management requires into the curriculum. ... So I’d really love to see our library liaisons really be those co-educators.

... We will bring in experts who aren’t necessarily trained as librarians ... . The role of librarians will change; data curation likely won’t be an optional track. LIS educators probably need to rethink what are the foundations of LIS education, and how does curation take a more central role in that. Academic libraries will probably start to embrace more team-based models.
Conclusions (Preliminary)

• Libraries are responding to funding agencies’ data mandates, and developing RDS inclusive of data types, domains, and research needs.
• Vision work related to data is mostly internal.
• There are some strong and overlapping themes that can help to inspire, coordinate, and address tensions.
Vision Suggestions (To Discuss and Critique)

(Statement 1)
Libraries’ research data services are the hub in a campus-wide network, drawing on the strengths of inter-institutional partnership to enable management, sharing and reuse of data throughout its lifecycle.

(Statement 2)
Harness expanding partnerships to provide research data support across disciplines and through the cycle of scholarly communication.