Building Support for Research Data Management: Knitting Disparate Narratives of Eight Institutions

Natsuko Nicholls, CLIR/DLF Data Curation Fellow
University of Michigan

Paper co-authors:
Katherine Akers, Fe Sferdean and Jennifer Green

IASSIST40, Toronto, Canada
June 3-6, 2014
RESEARCH DESIGN
Goals

- To respond to the emerging and prominent role of the library in assisting researchers with research data management (RDM)
- To conduct an environmental scan: Where does the U of M stand?
- To identify similarities and dissimilarities among universities in motivation, approach, and method of data service development
- To apply research findings to practice at U-M
Methods

• Sample Selection
  ◦ Both public and private research universities
  ◦ Sample variation: Being at different stages of RDM development and implementation
  ◦ Sample commonality: All employed at least one staff/librarian fully dedicated to RDM

• Data collection
  ◦ Semi-structured phone interviews with representatives of selected institutions
  ◦ Interviews took place between Oct – Dec 2012 (follow-up in Dec 2013)
Eight Institutions

- Cornell University
- Emory University
- Johns Hopkins University
- Pennsylvania State University
- Purdue University
- University of Illinois at Urbana-Champaign
- University of Michigan
- University of Virginia
Interview Questions

• Four categories
  1. Context
e.g. historical origin, current state, assessment
  2. Content
e.g. types of services and repository systems, university policies
  3. Infrastructure
e.g. funding models, campus partnership, IT, supercomputing facilities
  4. Challenges and opportunities
e.g. staffing, outreach strategies, disciplinary-specific or interdisciplinary needs
A list of interview questions are available at:

https://docs.google.com/spreadsheet/ccc?key=0AsWH4EdAxHD4dHVUTnIEZDFkX2NSbUEtR05kQkVUV1E&usp=sharing
FINDINGS

Similarities and Dissimilarities
Where does the U of Michigan stand?
Key Milestones

- Environmental scan
- Data service needs assessment
- Education: from awareness-building to data management training
- Tool and infrastructure development
- Policy formation
- Data service evaluation
Institutional Timelines of Building RDM Support

- Cornell University
- Emory University
- Johns Hopkins University
- Penn State University
- Purdue University
- University of Illinois
- University of Michigan
- University of Virginia

Year:
- 1984
- 1996
- 2002
- 2004
- 2006
- 2008
- 2010
- 2012
- 2014

Symbols:
- ○ Data Services
- □ IR
- △ Assessment
- □ RDM Services
- ■ Data IR

NSF DMP requirement
Motivation

- Federal funding agency requirements
- Comprehensive research support
  - Focusing on data, research and grant lifecycles
  - Focusing on e-Science and e-Research
  - Multi-disciplinary focus
- Cross-institutional collaboration
  - ARL/DLF/DuraSpace E-Science Institute
  - Grant-based library projects
  - CLIR/DLF E-Research Peer Networking and Mentoring Group Program
Outreach

- Campus partnership
  - Buy-in from other campus units
  - Buy-in from librarians
  - Working with faculty data champions

- Outreach methods
  - Resource development: Website, LibGuide
  - Data Management Workshops: Designed for librarians, faculty and graduate students
Outreach at UM

• Data Education for Librarians
  1. Basic Training: Research Data Concepts for Librarians
     ▪ Working with data
     ▪ Sharing and preserving data
  2. Advanced Training: Deep Dive into Data
     ▪ Deep Dive into Ecology Data
     ▪ Deep Dive into Psychology Data
     ▪ Deep Dive into Clinical Data
     ▪ Deep Dive into Arts and Humanities Data
     ▪ Deep Dive into International Data

• Data Management Workshops for Engineering Faculty (as part of a data support pilot)
Staffing, Re-skilling and Changes in Job Responsibilities

- Changes in staffing
- Changes in skill-sets
- Changes in subject specialists’ levels of engagement associated with research data
  - Ability to understand the ‘data landscape’ for a discipline or area-responsibility as a basic data-expectation
  - Ability to advertise library data initiatives and provide data reference services (and appropriate referral)
  - Ability to provide data management consultations
Staffing, Re-skilling and Changes in Job Responsibilities at UM

- **New library leadership**
  - Associate University Librarian for Research
  - Director of Research Data Services
  - Research Data Services Manager

- **New data responsibilities**
  - Changes in subject specialists’ levels of engagement
  - Changes in job descriptions: Currently, the University leadership is drafting the ‘data expectations’ language to go into all subject specialists’ job descriptions
CONCLUSION
Challenges and Opportunities

- Grappling with outreach strategy: How to reach out to and interest researchers in improving their data management, i.e., how to move from ‘nice-to-have’ to ‘must-have’
- Identifying the best target despite the marketing pitch of ‘multi-disciplinary focus’
- Learning from peers: Institutional contexts differ and matter, but peers’ trials and errors will help to avoid unnecessary duplication of effort and maximize efficiency and effectiveness
Thank you!

Questions?