Data Management Plans & The DMPTool

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Don’t let this be you!

Source: Data Sharing and Management Snafu in 3 Short Acts
https://www.youtube.com/watch?v=N2zK3sAtr-4
Data Life Cycle

- Creating data
  - design research
  - plan data management (formats, storage etc)
  - plan consent for sharing
  - locate existing data
  - collect data (experiment, observe, measure, simulate)
  - capture and create metadata

Source: Boston University Libraries, Research Data Management
http://www.bu.edu/datamanagement/background/data-life-cycle/
Data Management & Sharing Mandates

- Journals – PLOS, Nature, JDAP partners
- Funders – NSF, NIH
- Office of Science & Technology Policy mandate, February 2013

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
Benefits of Managing Data

- Ensuring research integrity and reproducibility
- Ensuring research data and records are accurate, complete, authentic and reliable
- Saving time and resources
- Enhancing data security and minimizing the risk of data loss
- Preventing duplication of effort by enabling others to use your data
- Complying with practices conducted in industry and commerce
- Facilitating the analysis of change, by providing data with which data at other points in time can be compared.

Source: http://datalib.edina.ac.uk/xerte/play.php?template_id=2
What is a Data Management Plan?

A document that describes what you will do with your data during your research and after you complete your project.

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
DMP is a Living Document

• Start with what you know NOW
• Share your plan with co-authors
• Will not be perfect the first time through
• Keep your plan current & incorporate changes
• Use as a guide for daily activities

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
Components of a Basic DMP

1. Types of Data
2. Data & Metadata Standards
3. Policies
4. Plans for Preservation
5. Budget

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
1. Types of data

- Existing data available for reuse
- Types of data produced
- Format and volume of data produced
- Relationship to existing data
- How/when/where will the data be captured or created?
- How will the data be processed?
- Quality assurance, quality control measures, version control
- Security; backing up
- Who will be responsible for data management during/after project?

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
2. Data & metadata standards

- What metadata are needed to make the data meaningful?
- How will you create or capture these metadata?
- Why have you chosen particular standards and approaches for metadata?

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
3. Policies for access, sharing, re-use

- Does your institution have a data management policy?
- Are you under any obligation to share data?
- How, when, & where will you make the data available?
- What is the process for gaining access to the data?
- Who owns the copyright and/or intellectual property?
- Will the software/programs enable sharing and long-term access?
- Will you retain rights before opening data to wider use? How long?
- Are permission restrictions necessary?
- Privacy issues, i.e. embargo periods for political/commercial/patent reasons?
- How should your data be cited?

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
4. Plans for archiving & preservation

• What data will be preserved for the long term? For how long?
• Where will data be preserved?
• What data transformations need to occur before preservation?
• What metadata will be submitted alongside the datasets?
• Who will be responsible for preparing data for preservation?
• Who will be the main contact person for the archived data?

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
5. Budget

• Costs of data preparation & documentation?
  Hardware, software
  Personnel?
  Archive fees?

• How costs will be paid?
  Request funding!

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
6. Process

- Name a person responsible for implementing the plan
- Assign a person to each DMP activity
- Schedule training for software or other expertise required
- Update as changes are made
Build your Data Management Plan

Email: uc3@ucop.edu
Twitter: @TheDMPTool
Facebook: dmptool
Blog: blog.dmptool.org

Source: Getting Started with Data Management & DMPTool, https://dmptool.org/promote
• DMPTool version 1 released in October 2011
• Self-Funded by Partners
• Built for researchers; limited functionality for editors or administrators
• DMPTool version 2 released May 2014
• What was in DMPTool1 converted to DMPTool2
• External funding
  – Alfred P. Sloan Fundation
  – Institute for Museum and Library Services
• More functionality for researchers and institutional administrators
DMPTool2 New & Improved

• New user interface with embedded tips and help throughout
• Library of publicly available data management plans
• Can copy an existing DMP
• Assigning plan co-owners for better collaboration

DMPTool2 New & Improved

• New help on data management in general
• Frequently Asked Questions, where users can submit questions and get answers
• Quick-start guide for creating a DMP
• Up-to-date data management funder requirements

DMPTool2 Customization for Administrators

- Template includes questions that the funder wants answered
- Templates can be created by institutions
- Resource questions
  - Added by institution
  - DMPTool – wide resources
  - Requirements specified by funders
DMPTool2 Customization for Administrators

- Administrator Wiki including glossary of terms
- Review Functionality
- Visibility of Plans – 3 levels
  - Public = everyone
  - Institution
  - Private
States of the Plan

- New
- Complete
- Submitted
- Reviewed
- Approved
- Rejected
- Revised

All Plans

Used during the review phase
References & Additional Resources


• DMPTool: What Administrators Need to Know Slides, May 14th, 2014 http://www.slideshare.net/UC3/dmptool2-webinar-1-for-administrators
References & Additional Resources

- E-Science Portal for New England Librarians: A Librarians Link to e-Science Resources
  http://esciencelibrary.umassmed.edu/

- Mantra: Research Data Management Training
  http://datalib.edina.ac.uk/mantra/

- Research Data Curation Bibliography, version 4 June 23rd, 2014
  http://digital-scholarship.org/rdcb/rdcb.htm

- Strasser, Carly. (29 May 2014). New DMPTool Released Today blog post.
  http://blog.dmptool.org/2014/05/29/new-dmptool-released-today/

- University of Virginia, Data Management Consulting Group, Data Management Competencies
  http://dmconsult.library.virginia.edu/plan/