

DMPTool2 & IMLS Grant Meeting Report

Improving Data Stewardship with the DMPTool: Empowering Libraries to Seize Data Management Education

1. Purpose of the meeting

The primary goal of the IMLS-funded project is to provide librarians with the tools and resources to claim the data management education space. In an effort to ensure the tools and resources developed meet the needs of librarians, we convened a meeting of DMPTool partners, as well as librarians from five University of California campuses. We had three goals for the meeting:

1. Identify the resources most useful for helping librarians use the DMPTool for outreach.
2. Prioritize resources based on user profiles and use cases.
3. Create timelines and brainstorm dissemination tactics for resources to be developed.

2. Agenda

Thursday 21 Feb

12:00 – 1:00	Lunch at Berkeley City Club	
1:00 – 1:15	Welcome; logistics; introductions	Carly
1:15 - 1:30	IMLS grant overview; meeting goals	Carly
1:30 – 1:45	Current DMPTool overview	Carly
1:45 – 2:30	Review of Sloan meeting outcomes & future directions	Andrew
2:30 - 3:15	Your experiences	All
3:15 – 3:30	Break	
3:30 – 4:30	Community needs assessment	Small groups
4:30 – 5:00	Needs assessment report back	All
5:45	Group dinner	

Friday 22 Feb

9:00 - 9:15	Goals for today	Carly
9:15 - 10:15	Brainstorm resources	Small groups
10:15 - 10:30	Break	
10:30 - 11:00	Report back - resources	All
11:00 - 11:45	Group prioritization of resources	All
11:45 - 1:00	Lunch	
1:00 - 2:45	Small working groups	Small groups
2:45 - 3:00	Break	
3:00 - 3:45	Report back from groups	All
3:45 - 4:15	Review outcomes; time frames	Carly
4:15 - 4:30	Final thoughts, discussion, future directions	Carly

3. Participants

Amber Budden, DataONE

Andrew Sallans, University of Virginia

Carly Strasser, California Digital Library

Chris Hoffman, University of California Berkeley

Daniel Phipps, California Digital Library and University of California Los Angeles

Laura Soito, University of California Davis

Lisa Federer, University of California Los Angeles

Megan Laurence, University of California San Francisco

Michael Witt, Purdue University

Perry Willett, California Digital Library

Sarah Shreeves, University of Illinois Urbana-Champaign (Thursday only)

Sherry Lake, University of Virginia

Stephen Eisenhauer, University of North Texas

Sue Perry, University of California Santa Cruz

Susan Borda, University of California Merced

Todd Grappone, University of California Los Angeles (Thursday only)

4. Small groups: Barriers and Solutions

We broke into small groups and asked participants to discuss the barriers to librarians using the DMPTool successfully for promoting data stewardship.

4.1 Barriers

Group 1

1. Researchers don't self identify with DMPTool community
2. Limitations of service provision/branding and institutional resources
3. Researchers don't think about using DMPTool until at grant-writing deadline
4. Lack of institutional understanding- people don't know what tool can do for them
5. Insufficient guidance for how to fill out the plan
6. Researchers are not connected to the library- rely on voluntary contact
7. Not enough DMPTool customization examples
8. Need better training about benefits of data management, as well as sticks
9. Lack of knowledge about resources outside of the library- e.g., IT

Group 2

10. No point person or dedicated staff
11. Researchers' perceptions about role of library in data management
12. Librarians have an inferiority complex
13. There is a lack of support/services at institution level
14. There is an absence of clear success stories
15. Poor communication at campus level- IT, VCR etc. don't talk
16. Not clear how to identify potential tool users
17. Requirement for data management is not taken seriously by funders, researchers etc.
18. No top-down recognition of library's role in data management
19. No existing communication lines among faculty, libraries etc
20. Lack of trust that libraries can help with data management
21. Researchers don't have time to worry about data management
22. Libraries are unsure of role in data management
23. Lack of effective outreach materials
24. Perception that DMPTool is clunky
25. Researchers hesitant to share data and can't separate data management from this

Group 3

26. Campus contact(s) for data management are not transparent
27. Campus users are not transparent to DMPTool support providers
28. "How to get started" package for librarians doesn't exist
29. Lack of content/outreach startup materials
30. No good localization examples
31. No print materials
32. Need for materials to guide coordination activities surrounding tool on campus
33. Lack of domain knowledge about research/grants
34. Lack of ability to collaborate
35. Lack of notification on usage

4.2 Solutions

Group 1

1. More example plans on the website
2. Better self recognition on front page. see picture and not sure it's appropriate for them.
3. "Contact your institution" links and live chat with instituion resources
4. Better branding possibilities
5. Build case studies of DMPTool in institutional landscape. provide example of how it fits
6. Provide additional life cycle support- more functionality across multiple parts of research life cycle
7. Help librarians do an environmental scan- figure out how to build the case study for their institution
8. Provide training to librarians/administrators on how to use the tool
9. Start a users group
10. Create e-sources/materials for teaching- tools for the librarians themselves to run workshops
11. Create good documentation on institution-specific customization with examples
12. Provide sales pitch for data management (carrot/stick), especially via metrics from tool
13. Add information on non-template funders to tool, even if we don't have resources for them

Group 2

14. Create taking points for researchers
15. Establish a set of core competencies for librarians
16. Communicate that data management is extension of info literacy
17. Tie existing skill sets of librarians to data management
18. Emphasize that data management can be applied outside funder requirements (e.g., for thesis)
19. Present tool to researchers- grant writing workshops, grad students etc.
20. Presentations at MLA/SLA/ALA
21. Customized press releases for DM stuff
22. Create customizable materials in general
23. Direct outreach to special programs and grants offices
24. Brown bag kit for librarians
25. Help set up campus-level communication channels
26. More features of success stories on blog posts
27. Invite librarians to contribute to blog
28. Partner with institutional groups for presentations
29. Good reporting/metrics for proof DMPTool works
30. Get ULs and deans to endorse the librarians' roles in data management
31. Certification for librarians as DMP consultant

Group 3

32. Create use cases and models covering various support tiers (i.e., small support group, medium sized, big group in library)
33. Create customizable promo materials online
34. Customizable training materials
35. Develop a train-the-trainer webinar series for varying support tiers
36. Forum/email group for sharing experiences
37. Case studies for campus groups
38. Draw from forum and promote via blogs, etc.

39. Publish campus contact openly for peer influence
40. Primer with DMPTool at the core. grants, research, etc.
41. Calendar service of all funders supported

5. Consolidated list of outcomes/tasks for IMLS Project

We broke into small groups and brainstormed potential outcomes and tasks for the IMLS Project to help librarians use the DMPTool effectively on their campuses.

1. Checklist/talking points documents & brown bag kit for librarians to talk to...Researchers (including domain-specific help) | VCRs | Special Projects/Grants offices | IT | other librarians
2. Slide deck for presenting to researchers (long and short versions)
3. Promotional materials (posters, pamphlets, bookmarks, postcards, flyers)
4. Kit for undergoing an environmental scan
5. Video scripts for creating customized institutional data management video
6. DMPTool Webinar Series for librarians
7. DMPTool Screencasts for users, librarians
8. Short video on DMPTool
9. Collect customization materials/examples
10. Collect case studies of institutions using the DMPTool successfully
11. Collect data management success and horror stories
12. Create a calendar of funder deadlines
13. Identify important conferences to attend/present (strategic plan rather than ad hoc) (see list above)
14. Set up a data management certification process
15. DMPTool Libguide – resource for librarians to customize and provide to researchers (Include domain-specific resources?)
16. Set up online commons (blog? Google group?) that allows for
 - sharing customization of tool
 - forum for user conversation streams
 - providing access to materials developed here
 - collecting use cases; success and horror stories
17. Add content to front page of DMPTool – make it more navigable for first-timers
18. Use workshops at conferences to collect experiences and get feedback on tool (not just present it)

6. Small Working Groups

Participants broke into small groups to work on one of five sub-projects: the development of a DMPTool Libguide; a set of talking points that could be used to discuss the DMPTool with campus partners and stakeholders; a set of guidelines to undergo an environmental scan of their campus to assess resources, services and campus partners; an outline of use cases and examples of libraries using the DMPTool; and outlines for webinars for librarians related to using the DMPTool as a data stewardship tool.

6.1 Libguide

This group produced a document assessing current DMPTool-related libguides, and the general themes that emerged from examining this content:

https://docs.google.com/document/d/16gKAbd8b6EvIPLFHLnZcop6kbdwoC8aPn_g70Q3Sppw/edit#

This group included Susan Borda, who has begun working on a DMPTool Libguide for UC Merced (not yet public): <http://libguides.ucmercedlibrary.info/dmptool>

6.2 Talking points

6.2.1 Overall thoughts

Two major themes emerged that should be in all talking points: (1) why data management is important and (2) why librarians should be involved. We identified a list of groups for which these points should be developed (i.e., stakeholders): VCR, UL, Pls/researchers, IT, researchers, students, instructors, other librarians, research administrators. The major deliverables were an elevator pitch, a core competencies list, talking points for different stakeholders, and list of resources to help librarians prepare for sources.

6.2.2 Specific talking points

For all groups

- Data management is important (and why)
- Librarians are key partners in writing a DMP and implementing the activities proposed therein

Researchers

- Increasingly private and public agencies are requiring data management plans in order to receive funding
- DMPTool makes creating a data management plan an easier process by breaking the instructions and resources into a steps
- Improve research efficiency (it takes time to make and implement a plan, but it also takes times and resources to search for and re-create data).
- Improve continuity between staff and students in a ever changing research group/make it easier for people to pick up where others have left off.
- Improve collaboration
- Data is a resource--takes money and time to create, may have value outside of your domain
- Having data that is well organized and sharable allows for re-use (more citations and publications)

- Increased transparency improves the research process and trust in the institution of science
- Data is a cite-able resource that you can include on your CV and bio-sketch (metrics)

Instructors (i.e., students)

- Help students gain important research skills early in their career
- Talking points and tools to help prevent misunderstandings about data ownership and create expectations for data handling
- Provides easy model for learning how to do data management
- Makes less work for instructors to teach how to do data management

VCR or similar

- Data management is required by many funders, including NIH, NSF, NEH etc. recent developments in congress/OSTP LFASTR, other OSTP directive indicate that this is an issue that will only become more important
- Managing data ensures that the work researchers do will remain accessible, to them and to others
- Making a statement about supporting data management is an outward sign that your institution is committed to participating to the fullest extent in the research community and also being good stewards of their data, and more importantly, using their grant funding responsibly
- Librarians are good partners for data management. with training in information organization, metadata, etc. librarians have expertise that can be very useful to researchers. the library is also uniquely situated within the institution and can provide a united approach to data management, rather than relying on departments (library = Switzerland) to come up with solutions – data services become siloed; repetition of effort, inefficiency. the library serves the entire campus and can consolidate these services.
- The DMPTool provides a useful framework for researchers doing a data management plan and is easy for a campus to adopt; plus it's free

Library administrators (ULs etc)

- Assistance with management of research data is an extension of activities, skills, and expertise that are already part of the librarians' work
- This is an opportunity for the library to be the hero- researchers need help, and we can offer it. plus, this is a good chance for us to let researchers know that librarians can (and do) do a lot more than just fixing the problem when e-journal access goes down, for instance.
- Part of the library's mission is to support the research mission of the institution. this is an important way we could do that
- In the current challenging fiscal climate, collaboration with research teams could represent a significant funding source. if a librarians is around to help a PI write his/her DMP, the librarian can also be written into the grant to support data management.

IT on campus

- Storage/repo use
- Help with technical questions
- Education to researchers
- Librarians as middle man between IT/PIs

6.2.3 List of skills/core competencies for librarians

- Metadata (what is it and why it's useful)
- Preservation/data security
- Weeding/retention
- Perspective – interdisciplinary connections
- Metrics/bibliometrics/assessing impact
- Knowledge of funder requirements/interpretation
- Repositories – how to find them, what exists
- Scholarly communication
- Ethics of information/privacy/copyright/IP

6.2.4 Resources to help librarians prepare for talks

- Data curation profiles
- JISC
- Libguide for DMPTool
- Tutorials/recorded webinars/screencasts
- Annotated bibliographies
- List of relevant journals
- DataONE
- Databib
- E-science portal from NE NN/LM RNO
- ICPSR
- Data/research life cycle training
- Modules of data management curriculum (several different ones)

6.3 Environmental Scan

This scan is a way to diagnose where your library is with respect to DMPTool. It can be used as a before picture – after improvements, it will be easy to identify major improvements due to DMPTool focus and use. The general framework for campus interactions around the DMPTool has librarians in middle. Other groups are either advocates for librarians or can lead library to users:

- Collect DMPTool data – Where do we stand now? Any users? Get this information from Perry
- Grant writing courses, grad students, postdocs
- Those that have been POs or administrators at the funder level
- Faculty on grant review proposals
- Office of sponsored projects- already have a relationship? Any existing contacts that can be used? What grants are being applied for at your institution?
 - Could tell you who has applied for grants
 - Times that might be appropriate to do outreach based on grants deadlines
 - List of grants researchers are applying for
- Department administrators (can connect via office of sponsored projects)

- Department heads (potential users and/or advocates)
- IT – are they already working in this space? Check with both central IT and departmental IT staff
- ULs- can help identify advocates
- Liaison librarians- do they know of faculty with grant needs?
- Open access/policy team – helps advocate for open data. Fits into their charter
- Office of research – make sure resources are up to date on institution's websites
- Committees: look for relevant committees that could be used as outreach tool (e.g., committee on IT, research, data security, etc.)
- IRB – important for policies etc.

6.4 Use cases outline

This outline can be used to interview or survey potential use case examples.

6.4.1 Context/Background

- Institutional profile (# of researchers, grant dollars, staffing)
- What are the expectations for data management support on your campus?
 - Where do the pressures come from?
 - Who's responsible?
- What level of data management support do you have at this point? Staffing? Joint buy-in?
 - What level of maturity do your services have?
- What barriers have you had to overcome?
 - InCommon/Shibboleth?
 - Have you overcome them, and if so, how?

6.4.2 Process for Getting Involved

- What led to using DMPTool?
- Who's involved in facilitating the DMPTool process on campus?
- What was the process of customizing and adding resources like?
- How have you integrated DMPTool into your campus environment (ie. Library websites, VPR websites, OSP websites)?

6.4.3 Usage

- What domain areas have used the DMPTool the most on your campus, and where has the most demand come from?
- What training or promotion of the DMPTool have you done on your campus, and what do you feel has been most beneficial?

6.4.4 Outcomes

- What have you learned through interaction with the DMPTool?
- What benefits have you seen come from use of the DMPTool?
- What advice might you have for your peers in deciding whether to adopt the DMPTool?

6.4.5 Prospective use cases authors/institutions

- Large institution, research intensive, significant staff resources, library based
 - Amy Hodge at Stanford
 - Somebody at UCSD
 - Patricia Hwse at PSU
- Large institution, not flagship, library based
 - Spencer Keralis at University of North Texas
 - Brad Houston at University of Wisconsin – Milwaukee
- Large institution, research intensive, significant staff resources, not library based
 - Jon Crabtree at UNC
- Small institution, research intensive, not significant staff resources, library based
 - Sue Perry at UCSC
- Non-traditional research institution
 - City of Hope?
 - HHMI?
 - USGS
 - Smithsonian
- One person, full-time assignment
 - Stephanie Wright at UW
- One person, part-time assignment
 - Yasmeen Shorish at JMU
- DMPTool as a focal point for an institution
 - Dave Comeaux at Tulane

6.5 Webinars

The proposed webinar series would be focused on librarians new to using the DMPTool as a centerpiece of their data curation services and education

6.5.1 Proposed webinars

- Introduction to the tool
- Customizing the tool (technical/steps)
- Content for customization – how to decide on content; what's most important
- How to perform an environmental scan (multiple webinars?)
 - how to figure out who's important at your campus
 - how to talk to them
- Case studies – how librarians have successfully used the tool
- How to give the sales pitch to various audiences
- Data curation profiles webinar (Purdue person might do this)
- Other tools and resources that work with/complement the DMPTool
- Beyond funder requirements: more extensive DMPs (institutional versus funder requirements)

- special cases: government, hospitals, thesis offices
- Governance – how to get involved; different levels of involvement

6.5.2 An outline of webinar: Introduction to the tool

View	Script (moving the cursor for highlighting as appropriate)
Homepage	Purpose of the DMPTool – facilitate researchers in development of a data management plan both for the purposes of grant submission but also for own data management planning. In addition to fulfilling funder requirements the DMPTool provides users with additional resources valuable to self-education.
Funder requirements	<p>In terms of meeting funder requirements, the DMPTool supports a wide range of funder templates. These are created through extensive research by the DMPTool team and more are being added. If there is a funder that is not listed but important to your community, please let us know.</p> <p>This table shows which resources are available for the different funder type. For example, here you can see that there is a template for the funder/division and consequently there is a checkmark indicating that the funder is supported in the DMPTool. Here we have links to valuable information provided by the funder. This is not complete in all case as some funders provide more information than others. In the future we will be including links to resources from funders that may not yet have specific guidelines and hence would not have a template. In these cases, there would be no rtf file and no check mark.</p>
Homepage	<p>Going back to the homepage we see on the right hand side a preview of a plan created using the tool. This can be viewed on full by clicking on it and in the future we will be incorporating a collecting of plans covering different domains / funders. Beneath this is recent DMP news, which can also be expanded by clicking on it. The same material can be located under the DMP News tab in the top Navigation bar.</p> <p>To get started with the tool you click on 'Get Started' at the top right. If you are not logged in, clicking on 'My Plans' will take you to the same screen.</p>
Login screen	Here a user logs in with an existing account or by creating a new account. When creating a new account users select from the institutions listed or select 'none of the above'. The distinction is that the institutions listed have configured shibboleth login with the DMPTool. Therefore, if your institution is already configured, users login with their existing institutional identity
Institutional Login	For example, the University of XXX
Login screen	<p>The benefit of shibboleth configuration is that users will be exposed to institution specific resources and information. More on this in the 'content for customization' webinar.</p> <p>Let me show you a new, non affiliated user. (ACTION: Select new user)</p>

Registration screen	New users are required to provide some very basic information. Although not required, institution is beneficial if we are to track use/demand by users at a particular institution. (ACTION: back)
Login screen	We'll go in with a test account for UCSD. (ACTION: Login)
My plans	<p>First, you will see at the top right hand side that you are logged in and under 'manage profile' you can change your email address, username etc.</p> <p>Upon login users are taken to their 'my plans' page. This lists all previous plans and provides the opportunity to review, edit, delete and share. We'll talk more about this in a moment. Right now, lets look at creating a new plan.</p> <p>First, a user selects a plan type based on the funder drop down list. This list reflects the table you were shown earlier under the 'Funder requirements' tab. You then select 'go'. (ACTION: choose NSF generic and select go)</p>
Plan description page 1	This page is essentially the plan metadata. With the exception of the title, this information does not appear on the plan itself and is for your record. (ACTION: hit next)
Types of data produced	<p>The next set of questions will be determined by the type of plan the user has selected. In this case, the first question asks the user to provide a short description of the data that is to be collected. Rather than focus on the details of the questions itself I want to orient you towards some of the functionality that is common across all questions / funders.</p> <p>At the top you can see the section title and the guidance provided by the funder. In this case "Types of data produced: Types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project." Beneath this, in the green headed box, is additional guidance provided by the DMPTool. If an institution has specific guidance they would like to provide, it would be found in this box. The full information can be viewed either by scrolling or clicking on 'full'.</p> <p>If the user wants additional support in answering the question they can select from the list of resources on the left. You will see that there are two sections here; 'Institution specific' and 'General'. The general resources are viewable by all user, regardless of how they logged in. The Institutional Resources are determined by the institutional contact, such as you, and will link to internal documentation / support. This is covered in more detail in the 'content for customization' webinar. What you should know is that these can be customized for each question within each funder template. Hence the list of links will change from page to page.</p> <p>On the left hand side is the navigation, or progress marker. The bold text indicates where you are and you can immediately see how many sections follow. As you complete these and move on, a check mark will accompany each step.</p> <p>The center text box allows for free text entry and some basic formatting can be applied using the panel above. Beneath this you can save your work, preview your work in a new window or save and continue to the next screen. (ACTION: enter some text and then 'save and next')</p>
Data and metadata	So here you can see that UCSD has provided many more resources in the area of data and metadata standards. (ACTION: enter some text and click through to page 5)

standards	
Plans for archiving and preservation	<p>In this example you can see that there is a third box in the middle section. A suggested answer text box has supplanted the DMPTool help box. This is an example of customization. An institution may have specific policies of information that needs to be included in a DMP and they can include that information directly within the template as opposed to as a link in the right hand side panel. In this case, UCSD has some suggested text and the user can simply copy and paste this into the text dialogue box below.</p> <p>Another thing to point out here is that there are no check boxes next to steps 3 and 4 on the left hand side. This is because no text was entered. In the case of questions 1 and 2 a check mark is provided. The tool does not distinguish between placeholder or nonsensical text and complete entries.</p> <p>(ACTION: save and next)</p>
Finish page	<p>Once all answers have been completed you see a preview of the plan and have the option to export in plain text or rich text format. This enables the user to include the plan as part of an existing grant document and apply final formatting as necessary. Exporting is not a requirement at this stage as the plan is saved within 'My plans' and can be exported later.</p> <p>(ACTION: click 'My plans')</p>
My plans	

7. IMLS project Communication and Updates

7.1 Project communication

The group had a discussion about the best way to keep interested parties informed on the progress of the IMLS DMPTool project.

- Use UCLA/DMPTool for weekly digest of activities. This should be written to be outward facing (Sloan group plans on monthly updates– timeline update; broader vision)
- Use Confluence wiki for internal documents and correspondence
- Create an IMLS listserv- status updates, help, etc. This would be open subscription. Based out of CDL
- Start planning for Meeting #2 in September. Consider inviting authors of case studies

7.2 Potential meetings and conferences for IMLS outreach and education

- MLA in May – Lisa F. is going
- IDCC – February 2014 in California
- Research Development Conference: (Susan Borda)

- Domain specific conferences: ESA/AGU/Intecol (Carly and Amber)
- CNI – San Antonio in April 2013
- DLF
- Open Repositories
- ALA – summer in Chicago (too big?)
- ACRL – Indianapolis (UVA person going)
- RDAP/ASIST – Baltimore in April (UVA person going)
- IASSIST – May in Germany
- SLA – San Diego in June
- Internet librarians conference
- MLA regional chapters (July meeting – Lisa on planning committee). San Diego
- Educause (big, regional)
- ASERL – local
- DataONE users group
- Science Librarian Boot Camps
- ASEE

7.3 DMPTool Blog: ideas for content related to IMLS Project

- Librarian profiles – how they are using the tool; data management in general
- Funder podcasts/interviews
- Data repository podcasts/interviews
- Posts that highlight good answers to FAQ about the DMPTool