

UC Santa Cruz

Library Staff Presentations and Research

Title

Finding the Signal in the Noise: Normalizing Data Management into Library Literacy Programs

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Overview

UCSC science librarians created a series of data management instructional modules aimed at upper division and graduate students. These were designed to be delivered in one-shot instruction sessions of twenty minutes each. The intent was to create one set of modules for researchers in any science department that would not require further disciplinary customization, and could also fit into an existing instructional program.

We were able to launch a data literacy program on a shoestring, while training ourselves in this rapidly paced field. We integrated data management into our broader information literacy program, while also increasing awareness of our data management services offered by the Library.

Process

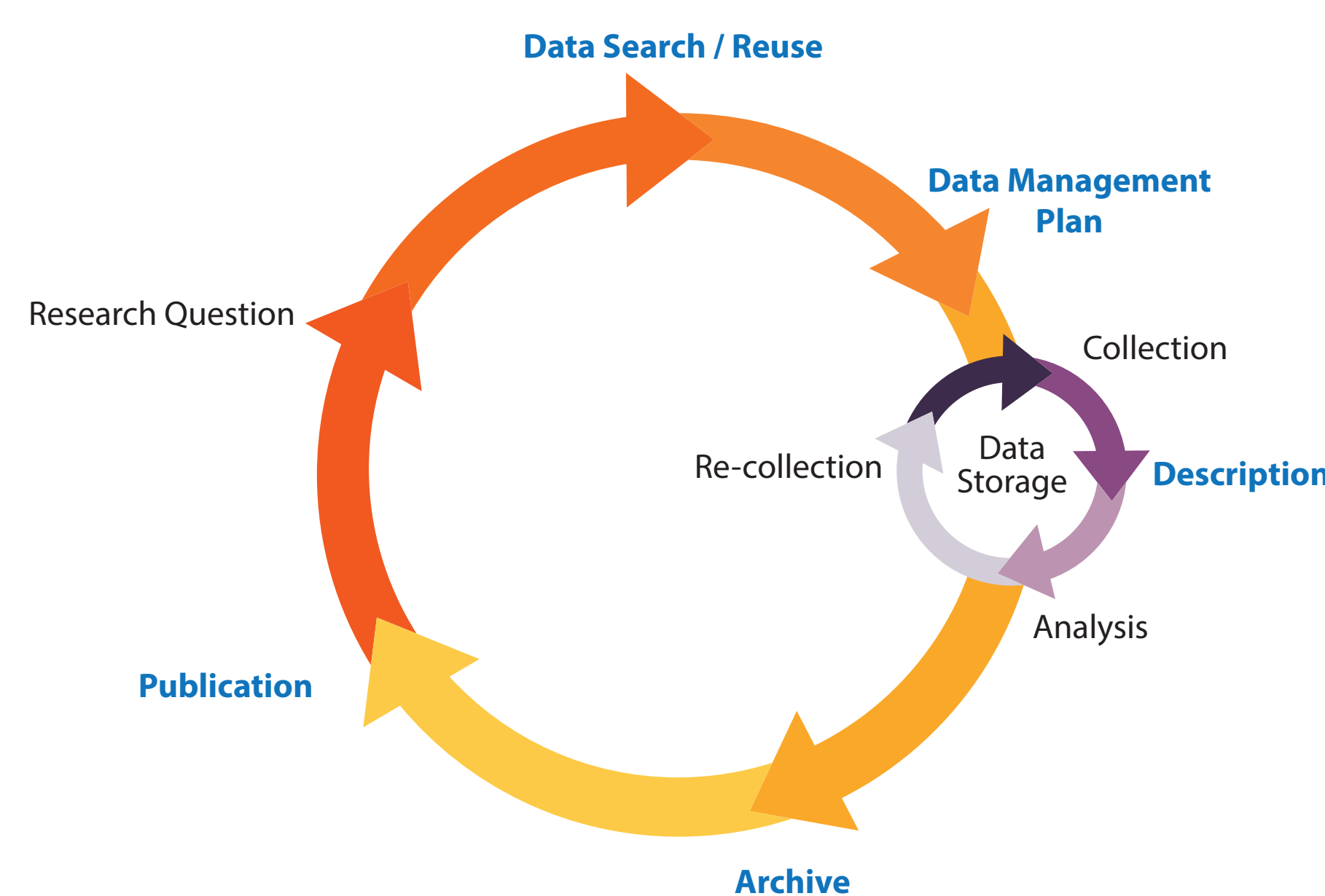
- It took 5 months of weekly working meetings to create first hour long class, teaching ourselves as we went.
- Considered who needed us most (audience), and what we could reasonably take on (scope).
- Made assumptions in order to make progress, assessed successes and misses, pivoted and moved ahead.
- Created lifecycle graphic that became storyboard for our class content.
- Approached our faculty allies for help because it was stressful teaching a class on subject matter we weren't familiar with.

Decisions

- Wanted classes to be practical and action oriented. If a concept couldn't be applied and wasn't vital for context it was removed.
- Wanted one version for all disciplines, ended up with one version for all sciences.
- Targeted graduate students as they are often more accessible and receptive than faculty.
- Chose to highlight ways to search for reusable data at same time as literature search.
- Promoted University of California Digital Library products where practical.

If It's Blue, We Can Help You

The Research Data Management Lifecycle



Products

- Three short modular classes: 20-30 min each
 - Use alone, combine together or with other content
- Broke each of the classes into short, 3-6 minute sections
 - All sections converted into narrated movies and posted on LibGuides
 - Some sections used as micro-lectures for in person instruction
- Data management best practices checklist and graphic for use in class and on the web
- Our own research management lifecycle graphic

Assessment

Poll Everywhere used for in-class assessment.*

Pro:

- Free for 25 responses.
- Can embed in PowerPoint.
- Can fix student misconceptions in the moment.
- Format handy to analyze.

Con:

- Expensive for large groups.
- Takes class time to execute.

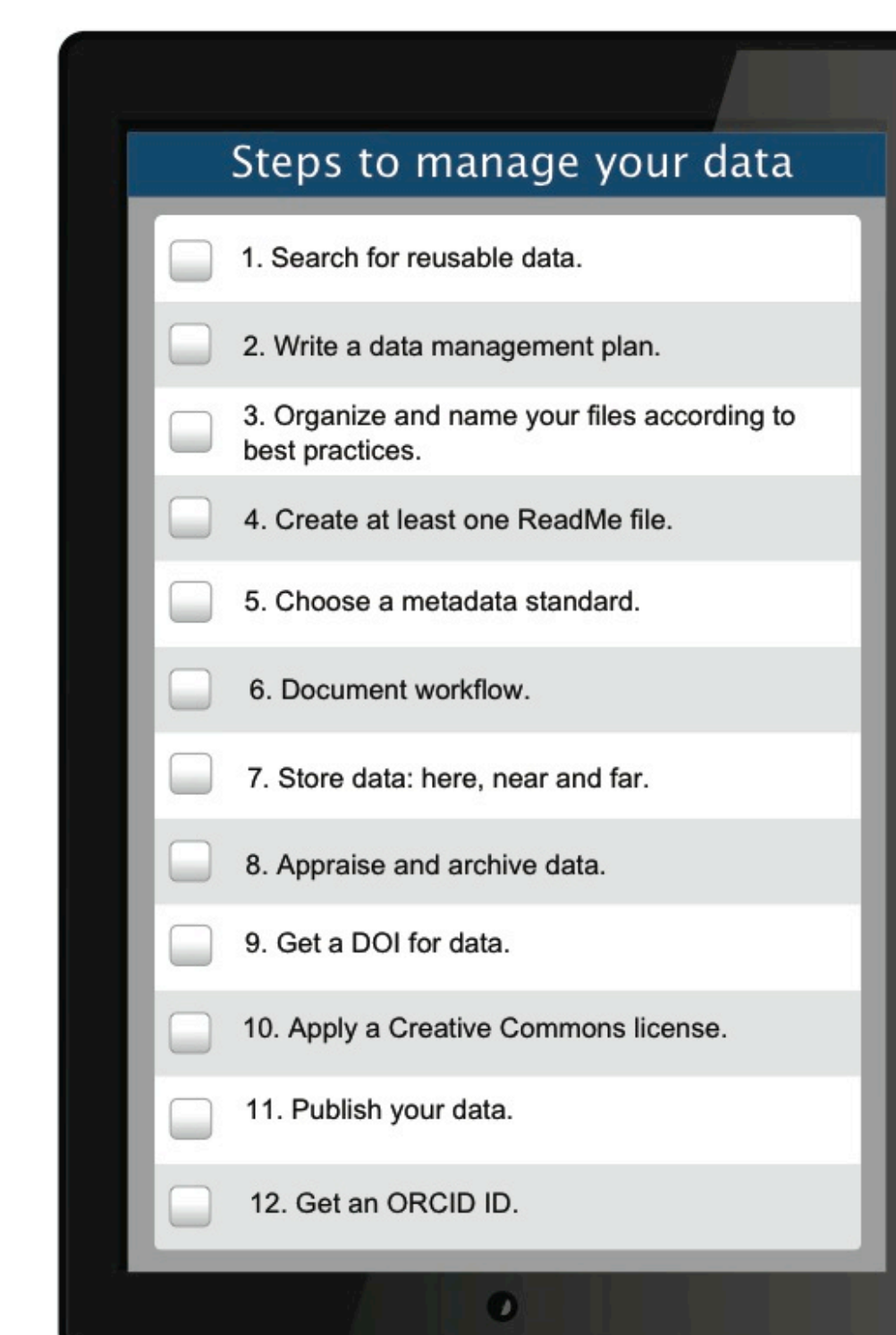


* Also used email surveys for faculty

Normalizing Data Instruction

- Make the data classes short.
- Frame the data literacy instruction as normal, as “what we do,” not something a specialist or a special department has to do.
- Offer data classes in a menu with other library instruction topics from which faculty can choose.
- Target research classes for proactive marketing.
- (in process) Hand off data class content to our non-science colleagues to adapt and teach to humanities and social science researchers.

THE RESEARCH DATA MANAGEMENT CHECKLIST



Lessons Learned

- We doubted file naming best practices would be interesting to students, but many students really appreciated them.
- Students understood that ReadMe files are the key to data reuse.
- Learning to search for data was highly rated for usefulness by undergraduate students.
- As a result of our class, most students volunteered a specific data management action they would take.
- *Both* upper division undergrads and graduate students *overwhelmingly* said data management was important to learn.
- RDM classes often result in RDM consultation requests.