

# Collaborative Research Data Management Literacy Education for Research Labs

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# Introduction



# Data Literacy Instruction

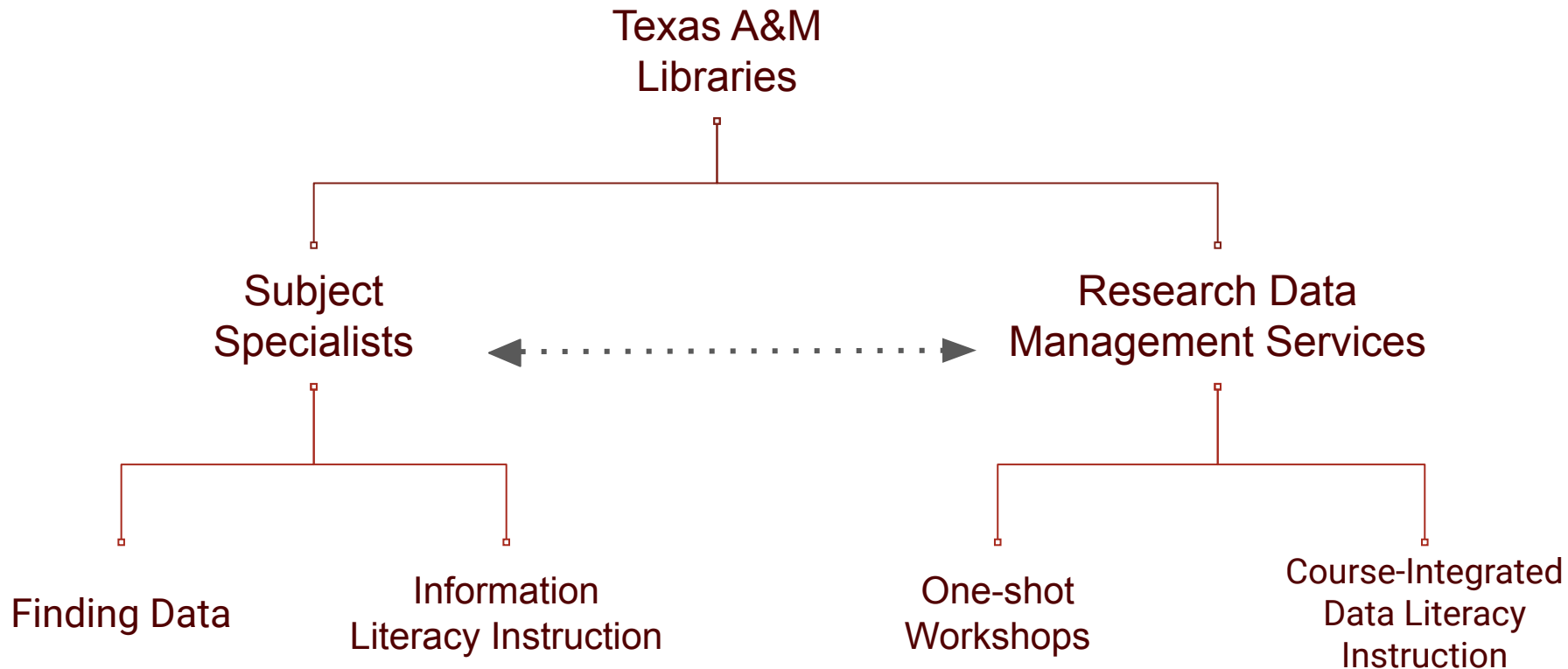
## Traditional modes of data literacy instruction

- Credit courses
- One-shot workshops

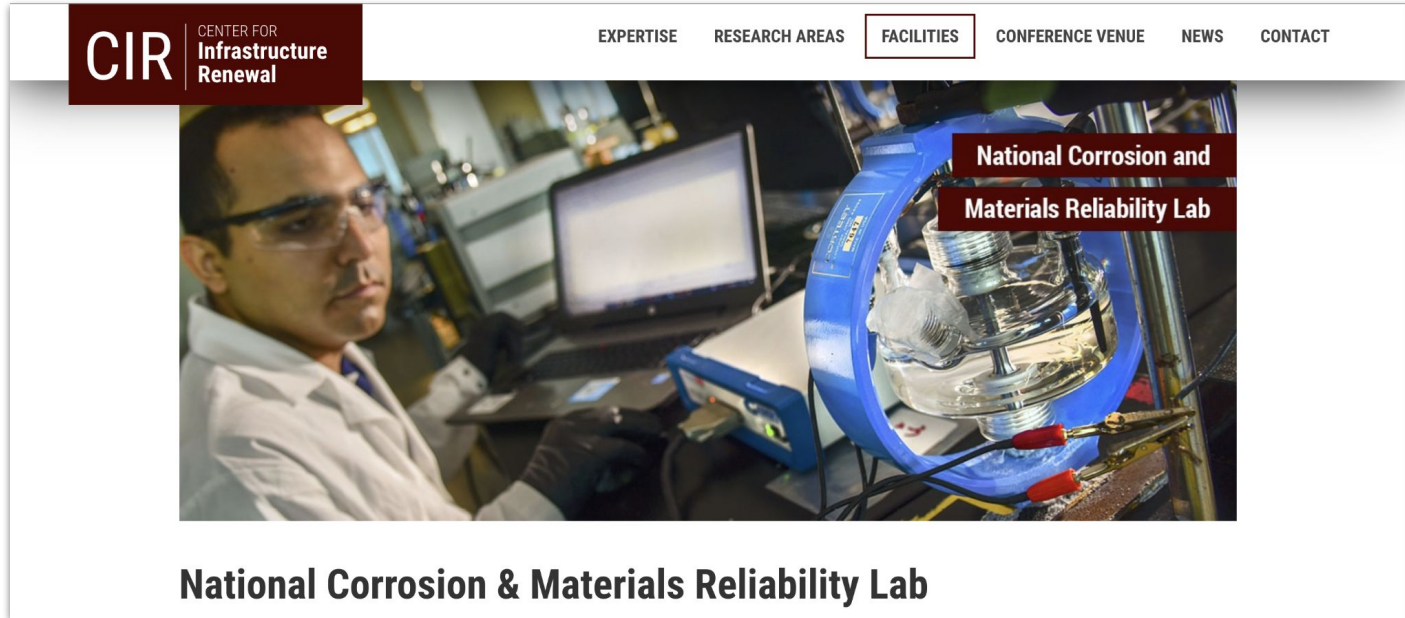
## Applied modes of data literacy instruction

- Labs and research centers
- Internships and capstones

# Data Literacy at TAMU Libraries



# National Corrosion & Materials Reliability Lab



Preserves and extends the integrity of the structures, such as buildings, bridges, pipelines, roads, ports and off-shore platforms.

# Pre-curriculum Planning

Met with Lab Managers to determine RDM needs

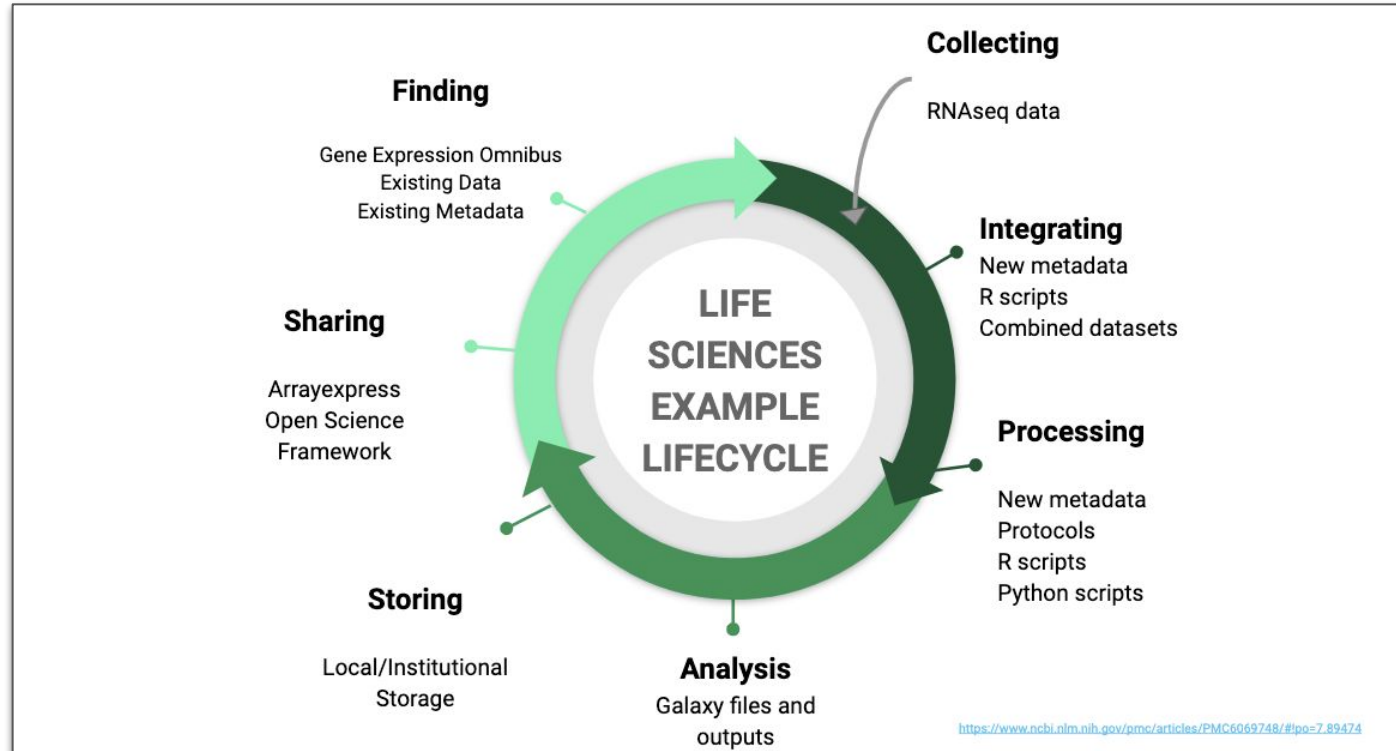
- Problem of lost data due to research student turnover
- Overview of RDM Services
- Looked at their data products and data audiences
- Established set of RDM goals

# Curriculum



# Pilot Curriculum

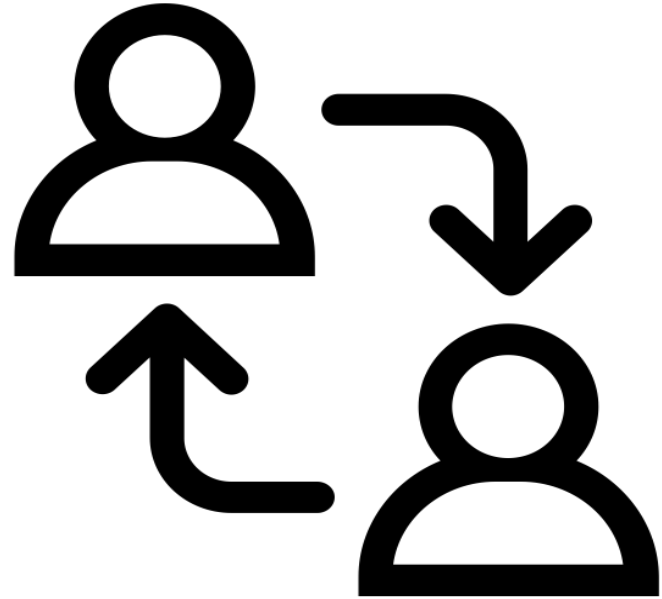
## Data Workflows





# Pilot Curriculum

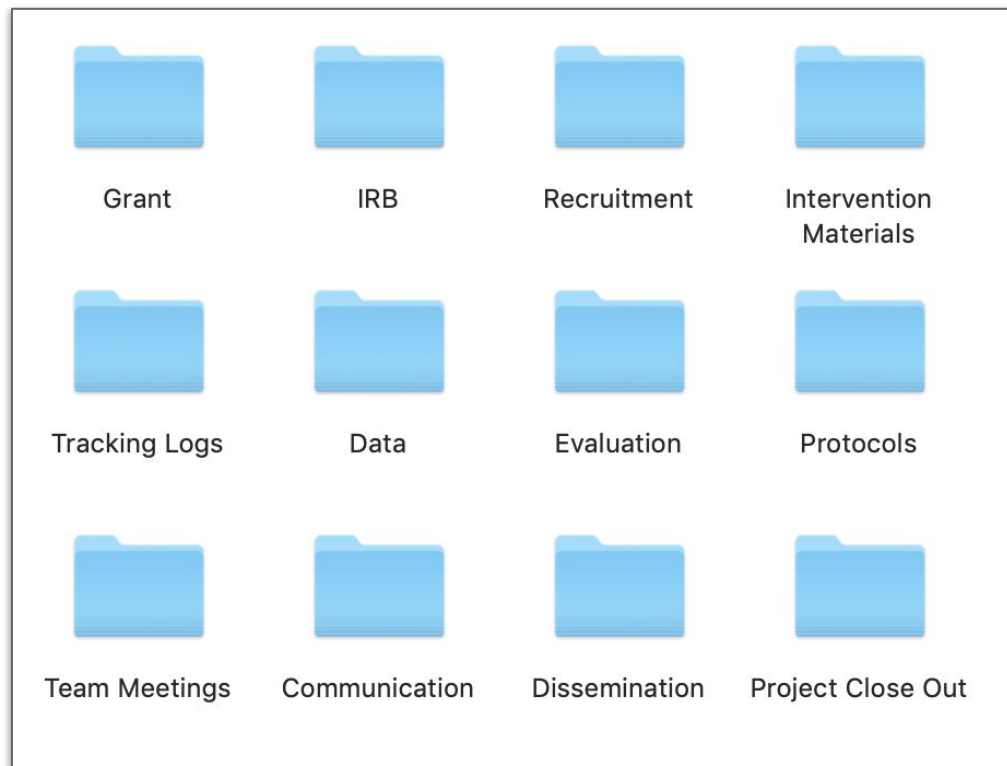
Roles and responsibilities



# Pilot Curriculum

## File Management

- Folder Management
- Filenaming Best Practices
- Data Storage



# Pilot Curriculum

## Data Management Planning Data Documentation (README Files)

### Data Management Plan and other Documentation

*[Include a reference to all the documents that may affect decision making about datasets in this project.]*

- The data management plan that was submitted with the grant proposal for this project can be found in *[blank]*
- Data Sharing Agreement between *[blank]* and *[blank]* can be found in *[blank]*. Contracts between *[blank]* and *[blank]* that involve data management can be found in *[blank]*
- Department and college policies with data management consequences *[blank]*
- Texas A&M Data stewardship SAP can be found [here](#).
- Funder policies on data management are here [\[link\]](#)

### Data Management Workflow and Data Types

*[Describe a typical project workflow in the Lab and define datasets that will be created during this project, and group them according to different management needs. Describe relevant general information about the data groups: are they observational, experimental, simulation, model output or assimilation datasets; How will they be collected? How much data is expected?]*

Data collection and management for this project consists of *[blank]*

*[blank]* groups of datasets will be generated during the course of this project.

1. Dataset Group 1 *[change name to more informative name]*  
Type of dataset: *[observational, experimental, simulation, model output, assimilation...]*  
Collection strategy: *[blank]*  
Amount of data expected: *[blank]*
2. Dataset Group 2 *[change name to more informative name]*  
Type of dataset: *[observational, experimental, simulation, model output, assimilation...]*  
Collection strategy: *[blank]*  
Amount of data expected: *[blank]*

# Workshop for all NCMRL lab employees

Workshop led by RDM Librarians

- RDM best practices workshop tweaked to present lab's RDM Plan
- Lab Managers as co-presenters to address lab specific questions

# Feedback

How easy will it be to implement this data management plan?

Implementation Rating	Frequency
Extremely easy	2
Moderately easy	4
Slightly easy	1
Neither easy nor difficult	4
Slightly difficult	0
Moderately difficult	0
Extremely difficult	0

# Feedback

What information from this training was most helpful? (1 = most helpful and 7 = least helpful).

<b>Most Helpful Training</b>	<b>Helpful Training</b>	<b>Least Helpful Training</b>
File naming and organization	File formats	Data lifecycle
Documentation	Storage solutions	Roles/responsibilities

# Experiences and Opportunities



# Templates

- [Oregon State University Templates](#) provided the framework
  - Data Management Implementation Plan
  - Read Me
  - Roles and Responsibilities
- Templates customized for the lab
- Collaborated to complete the templates





# The Subject Librarian Experience

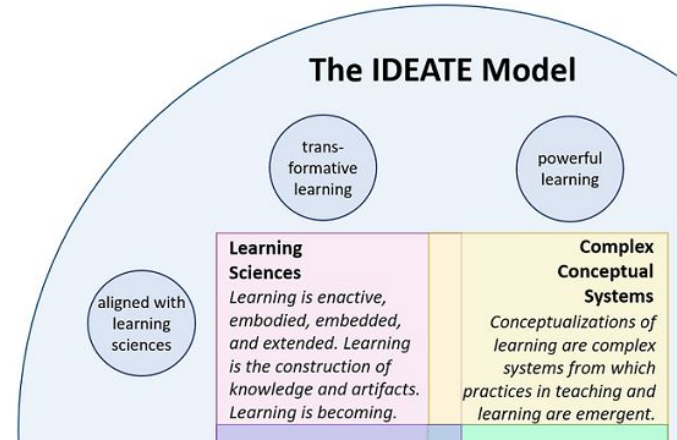
- It started with a request to the liaison
- Not quite my wheelhouse
- Subject expertise did come into play
- Building deeper relationships
- Definitely learning lots along the way!

# Other Labs

- Center for Teaching Excellence IDEATE Community
- Superfund Research Center
- Scaling RDM services for labs



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**SUPERFUND**  
RESEARCH CENTER



# Key Takeaways

- RDM literature emphasizes collaboration
- Best practices for adult learning
- Applied setting primed for high-impact
- Resource intensive approach
- Expertise through collaboration



# Thanks for Attending!

Questions?  
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Collaborative Data Literacy Education for Research Labs: A Case Study at a Large Research University - John Watts, Laura Sare, and David E. Hubbard

<https://digitalcommons.du.edu/collaborativelibrarianship/vol12/iss3/7/>



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