University of Massachusetts Medical School
eScholarship@UMMS

University of Massachusetts and New England Area Librarian e-Science Symposium

2017 e-Science Symposium

Apr 6th, 2:00 PM

A Collaborative Clearinghouse for Data Management Training and Education Resources

Chung-Yi Hou
National Center for Atmospheric Research/University Corporation for Atmospheric Research

Nancy Hoebelheinrich
Knowledge Motifs, LLC

David Bassendine
Blue Dot Lab

See next page for additional authors

Follow this and additional works at: http://escholarship.umassmed.edu/escience_symposium

Part of the Curriculum and Instruction Commons, Earth Sciences Commons, and the Scholarly Communication Commons


http://escholarship.umassmed.edu/escience_symposium/2017/program/6

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in University of Massachusetts and New England Area Librarian e-Science Symposium by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.
Presenter Information
Chung-Yi Hou, Nancy Hoebelheinrich, David Bassendine, John C. Nelson, Tamar Norkin, John Faundeen, Amber Budden, Matthew S. Mayernik, and Erin Robinson

Keywords
Data Management Training, Exchange of Good Practices, Training/Education Development, Research Data Training Registry, Learning Resource Catalog

Creative Commons License
This work is licensed under a Creative Commons Attribution 4.0 License.
A Collaborative Clearinghouse for Data Management Training and Education Resources

Sophie Hou
(hou@ucar.edu)
National Center for Atmospheric Research
University Corporation for Atmospheric Research

Nancy J. Hoebelheinrich
(nhoebel@kmotifs.com)
Knowledge Motifs, LLC

e-Science Symposium
Thursday, April 6, 2017
Key Contributors

• JC Nelson
  • Upper Midwest Environmental Sciences Center, US Geological Survey (USGS), La Crosse, WI

• Tamar Norkin
  • Core Science Analytics, Synthesis & Libraries, USGS, Denver, CO

• David Bassendine
  • Blue Dot Lab, Atlanta, GA

• John Faundeen
  • Earth Resources Observation and Science (EROS) Center, USGS, Sioux Falls, SD

• Amber Budden
  • Data Observation Network for Earth (DataONE), Albuquerque, NM

• Erin Robinson
  • Earth Science Information Partners (ESIP), Boulder, CO

• Cassandra Ladino
  • Eastern Geographic Science Center, USGS, Reston, VA
Rationale for Creating a DMT Clearinghouse

Started with discussions within ESIP Data Stewardship’s DMT Working Group from ESIP Summer 2015 about what researchers need.

• “What training materials are out there and where are they?”
• “Which ones make the most sense for me, given my domain and timeframe?”
• “I want training materials that are associated with the framework that my colleagues are using so that we can use the same language!”
We Found a Funding Opportunity!

• Put in a proposal in late 2015 to the USGS Community for Data Integration (CDI) for seed funding along with:
  • USGS
  • DataONE
  • ESIP

• Process for approval:
  • CDI Voting – We received many votes and were invited to submit a proposal.
  • Proposal was funded and project started in April 2016.

• Special thanks to our web developer, Drupal experts, and our coordinating committee.
Phase 1 Completed:
The Initial Launch of DMT Clearinghouse!

http://dmtclearinghouse.esipfed.org
Demo

• Home Page
• Browse and Search Functions
• Log In
Exercise

• Submission Process
  • Using “Advertising your data: Agency requirements for submitting metadata” as the case study.
Advertising your data: Agency requirements for submitting metadata

Submitted by superadmin on Thu, 2012-11-08 18:37

Overview:
This training module is part of the Federation of Earth Science Information Partners (or ESIP Federation’s) Data Management for Scientists Short Course. The subject of this module is “Agency Requirements for Submitting Metadata.” This module was authored by Nancy Hoebelheinrich from Knowledge Matrix LLC. Besides the ESIP Federation, sponsors of this Data Management for Scientists Short Course are the Data Conservancy and the United States National Oceanic and Atmospheric Administration (NOAA).

As an overview, we will touch the following topics in this module:
- How the agencies persuade you to make metadata available about your data by submission or publication. Metadata can be defined as descriptive information about your data of the type that is usually found in search portals.
- Specifically, we will be talking about the National Science Foundation (NSF’s) required Data Management Plan that motivates you to make metadata available.
- The National Aeronautics and Space Administration (NASA’s) Data and Information Policy that encourages you to make metadata available.
- The National Oceanic and Atmospheric Administration (NOAA)’s Administrative Order 212-15 that directs you to make metadata available.
- How the practice of submitting or publishing metadata is promoted by the E-Government Act of 2002 (44 USC 3522).

Other topics we’ll discuss include the timeliness of the metadata submission, and some dissemination tools and techniques that can help you make your metadata available to the public.

Advertising your data: Agency requirements for submitting metadata

Nancy J. Hoebelheinrich
Knowledge Matrix LLC

Module Leads:
Name: Nancy Hoebelheinrich
Organization(s): Knowledge Matrix
Email: nhoebe@krmatrix.com

Keywords:
data management
online courses
data literacy
data management plans (DMP) training

Attachments:
AdvertisingYourDataAgencyRequirementsSubmittMetadata_final.pdf
## Activity #1

- Providing Required Information

<table>
<thead>
<tr>
<th>Title *</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>URL - the landing page for the learning resource</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author(s) - the individual or organization credited with creating the learning resource.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Authoring Person(s) Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Add new person</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Authoring Organization(s) Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Add new organization</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Access Cost *</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No fee</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact - person or organization to contact in case of questions about the resource's content or status.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Person(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Add new person</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Organization(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Add new organization</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://oedbreeze.cr.usgs.gov/dm-value/" alt="Image" /></td>
</tr>
</tbody>
</table>
### Activity #2

- Providing Recommended Information: About the Learning Resource

<table>
<thead>
<tr>
<th>Description - a brief synopsis, abstract or summary of what the learning resource is about</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
</tr>
<tr>
<td>Format - B I U S X2</td>
</tr>
</tbody>
</table>

**Subject Discipline** - subject domain(s) toward which the learning resource is targeted

Click to select first option, click again to select additional options

**Keywords** - short phrases describing what the learning resource is about

Click to select first option, click again to select additional options

Add new keyword

**License** - link to legal statement specifying the copyright status of the learning resource

Click to select an option

**Usage Rights Information** - restrictions upon use of learning resource not covered by copyright license

Click to select first option, click again to select additional options

**Citation** - format of the preferred citation for the learning resource

See example below.

No particular citation format is required, but a commonly recognized format is recommended, such as *The Chicago Manual of Style*. As an example:

Activity #2 - Continued

- Providing Recommended Information: About the Learning Resource

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citable Locator</td>
<td>Identifier used to locate the citation of the learning resource.</td>
</tr>
<tr>
<td>ID</td>
<td>Identifier that provides the means to locate the learning resource or its citation.</td>
</tr>
<tr>
<td>Type</td>
<td>Namespace prefix for the citable locator, if any.</td>
</tr>
<tr>
<td>Publisher</td>
<td>Organization credited with publishing or broadcasting the learning resource.</td>
</tr>
<tr>
<td>Version</td>
<td>Revision or edition number or date associated with a learning resource.</td>
</tr>
<tr>
<td>Date(s)</td>
<td>Key dates when the learning resource was published/broadcast and/or created.</td>
</tr>
<tr>
<td>Accessibility Features</td>
<td>Available alternatives or enhancements to improve physical accessibility to learning resource.</td>
</tr>
<tr>
<td>Language(s)</td>
<td>Language in which the submitted learning resource is found.</td>
</tr>
<tr>
<td>Primary Language</td>
<td>Language in which the learning resource was originally published or made available.</td>
</tr>
<tr>
<td>Also Available In</td>
<td>Other languages in which the learning resource has been translated or made available other than the primary.</td>
</tr>
</tbody>
</table>
Activity #3

- Providing Recommended Information: Other Names Associated with the Learning Resource
Activity #4

• Providing Recommended Information: Educational Context

- Framework - A community-based organization plan or set of steps for education or training
  - Click to select an option

- Target Audience - intended audience for which the learning resource was created
  - Click to select first option, click again to select additional options

- Purpose - primary educational reason for which the learning resource was created
  - Click to select an option

- Intended time to complete - approximate amount of time the average student will take to complete the learning resource
  - Click to select an option

- Media Type - designation of the form in which the content of the learning resource is represented, e.g., moving image
  - Click to select an option

- Learning Resource Type - category of the learning resource from the point of view of a professional educator
  - Click to select an option
Next Steps: Phase 2 for DMT Clearinghouse

• Seeking Funding Opportunities!

• Sample of Key Objectives:
  • Host at least two virtual crowdsourcing events to encourage submissions of learning resources.
  • Improve the moderation workflow to ensure quality and compliance could be met efficiently.
  • Set up Drupal Link Checker module to check automatically the validity of the links included in the resourced.
  • Establish a framework for conducting usability evaluation.
  • Implement new functions and interface/system features based on user feedback.
• Need ESIP account to submit.
• Help by identifying (and submitting) learning resources.
• Provide feedback on your experiences with the functionality, look and feel of the interface.
• Join us in our usability evaluation and content submission sessions.
• Pass the word!
• Contact:
  • Sophie Hou, hou@ucar.edu
  • Nancy J. Hoebelheinrich, nhoebel@kmotifs.com
  • David Bassendine, david@bluedotlab.org (for ESIP account info)