Agenda

- Introduction:
  Evaluating the Effectiveness of Data Management Training
- Background:
  DataONE Community Engagement and Outreach (CEO) Working Group Educational Activities
- Methods:
  Literature Reviews and Survey Design
- Results:
  Best Practices/Guidelines and Current Revision of the Education EVAluation (EEVA) Survey Instrument
- Future:
  Iterations of EEVA, Testing, and Project Documentations

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Introduction

Introduction

- DataONE Summer Internship Program
  - “Developing a Survey Instrument for Evaluation of Teaching Materials”
- Three key phases:
  - Literature review
  - Design and development
  - Outreach

www.dataone.org/internships

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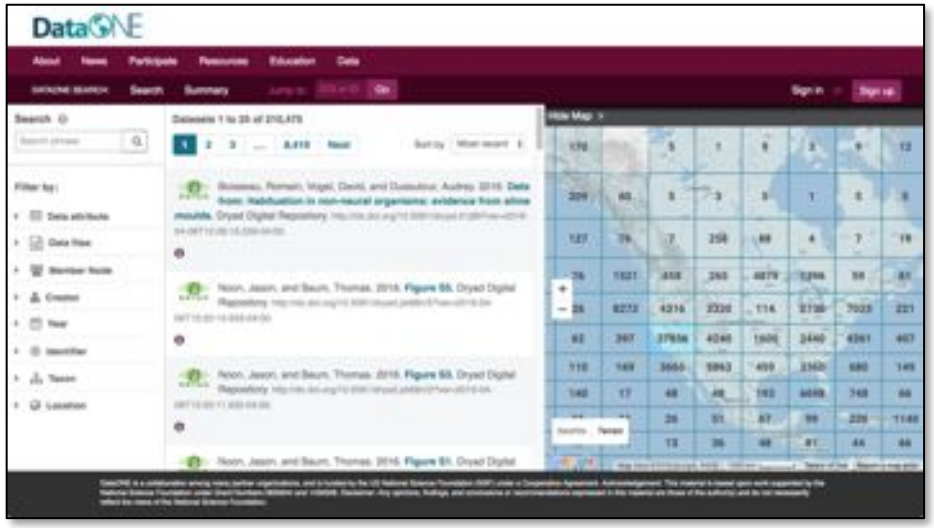
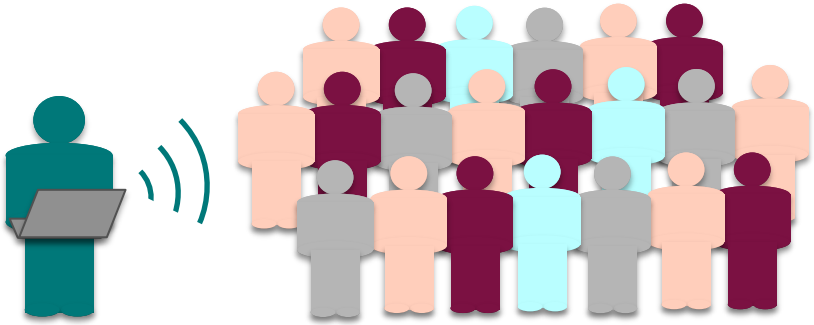
Background: DataONE Education

Online and In-person Training and Resource-based Training





Online Training: DataONE Webinar Series

DataONE
Data Observation Network for Earth

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Home » Education » Webinars

Education

Online
- Data Management Modules
- Webinars
- Screencast Tutorials
- Data Stories
- Education EVAluation

Training Activities
- In Person

Webinars
- Webinar Information
- Upcoming Webinar

Previous Webinars
- 2017
- 2016
- 2015

Find it Fast
- Search for Data
- Data Management Planning
- Best Practices
- Software Tools

Webinars

Upcoming Webinar:

From Rolling Deck to Repository (R2R): Lessons Learned in Managing Data for the US Research Fleet
Tuesday, March 14, 2017
9 am Pacific / 10 am Mountain / 11am Central / 12 noon Eastern
Click here for information and to register

Previous Webinars and Discussion

The DataONE Webinar Series

The DataONE Webinar Series is designed to engage participants in relevant and cutting-edge topics within the Earth and environmental sciences. Please join us for discussions on open science, the role of the data lifecycle, and achieving innovative science through shared data and ground-breaking tools.

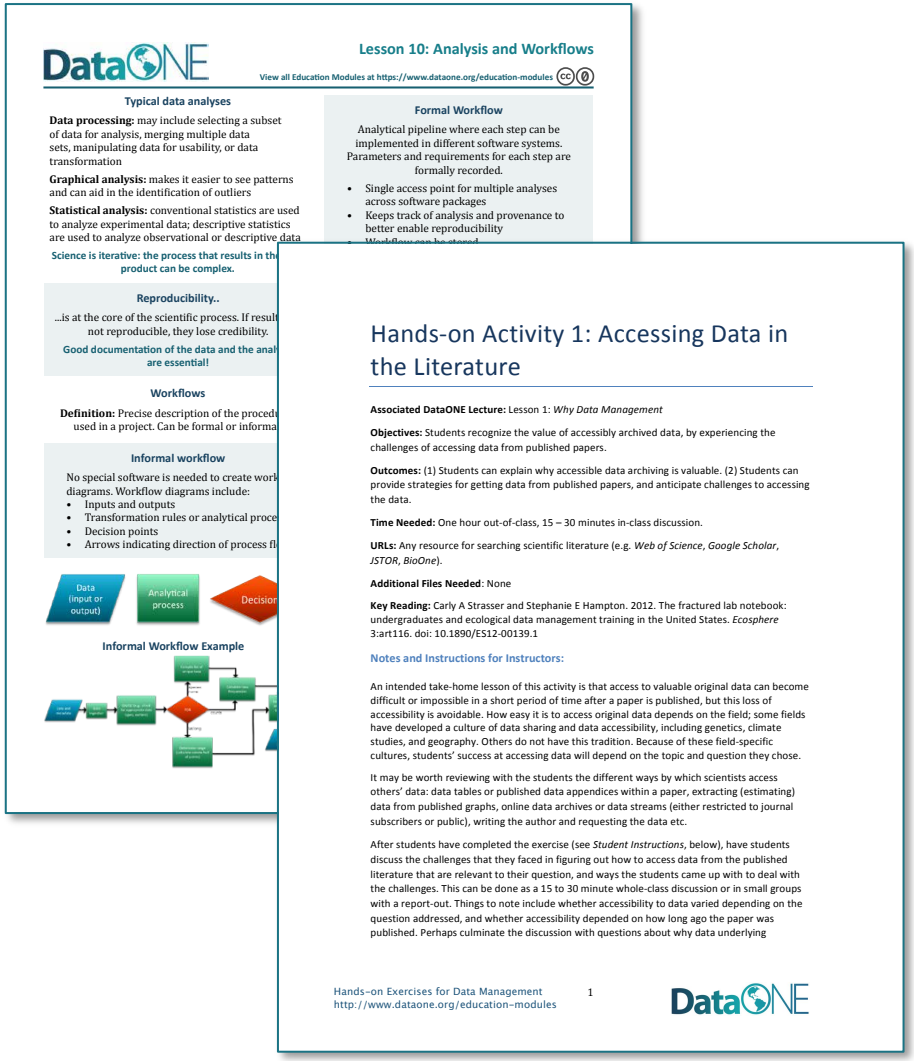
Webinars follow an academic calendar and run September through May, pausing during the summer months. Previous webinars have included:

- Building Collaborative Bridges: Opportunities and Challenges for Data Sharing and Citation
- DataONE: Current services, new tools and future developments
- Research Computing Skills for Scientists: Lessons, Challenges, and Opportunities from Software Carpentry

www.dataone.org/webinars

In Person Training: Sessions and Workshops

Resources:
Data Management Modules



www.dataone.org/education-modules

ESIP Data Management Training

EXPLORE

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Welcome to the DMT Clearinghouse

The Data Management Training (DMT) Clearinghouse is a registry for online learning resources focusing on research data management.

It was created in a collaboration between the U.S. Geological Survey's Community for Data Integration, the Earth Sciences Information Partnership (ESIP), and DataONE.

For questions or feedback, please contact clearinghouseEd@esipfed.org

Read More

DataONE Life Cycle - https://www.dataone.org/data-life-cycle

Search

Find learning resources by keyword, name, date, license and cost

Your search terms | Search

Browse

See a list of learning resources by educational framework

Browse

Submit

Submit your learning resources to the Clearinghouse (login required)

Submit

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SEARCH
this esip site

your search terms | search

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Filter

Keywords

- data management (25)
- data sharing (18)
- data management planning (12)
- data life cycle (11)
- data access methods (8)
- data citation (7)
- data literacy (5)
- data preservation (5)
- Federal agency data management requirements (U.S.) (5)
- metadata registries (5)

Show more

Organizations

- Federation of Earth Science Information Partners (ESIP Federation) (34)
- DataONE (10)
- DataONE Community Engagement and Outreach Working Group (10)
- Mozilla Science Lab (2)
- Australian National Data Service (1)
- Oak Ridge National Laboratory (1)
- SlideShare (1)
- U.S. Geological Survey (1)

data management plan

Search

Your search *data management plan* **49 results**

Clear all

Data Management Plans: Elements of a Data Management Plan More

... of Earth Science Information Partners (or ESIP Federation's) **Data Management** for Scientists Short Course. The subject of this module is ...

ESIP Data Management for Scientists Short Course | Data Management Plans | February 2013

DataONE Data Management Module 03: Data Management Planning More

This 30-40 minute module introduces the concept of **data management** planning, discusses requirements for **data management** plans (DMPs). ...

DataONE Education Modules | Plan | May 2012

Data Management Plans: Why Create a Data Management Plan? More

... of Earth Science Information Partners (or ESIP Federation's) **Data Management** for Scientists Short Course. The subject of this module is "Why ...

ESIP Data Management for Scientists Short Course | Data Management Plans | February 2013

Elements of a Data Management Plan: Identifying the materials to be created More

... of Earth Science Information Partners (or ESIP Federation's) **Data Management** for Scientists Short Course. The subject of this module is ...

ESIP Data Management for Scientists Short Course | Data Management Plans | February 2013

Elements of a Data Management Plan: Organization and standards More

... of Earth Science Information Partners (or ESIP Federation's) **Data Management** for Scientists Short Course. The subject of this module is ...

ESIP Data Management for Scientists Short Course | Data Management Plans | February 2013

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Why Evaluate?

Evaluating the effectiveness of training enables:

- Continued engagement with the community to understand current and emerging data management needs
- Enhancement of existing resources as well as the planning and creation of future resources
- Higher value offerings community wide through shared experiences and lessons learned

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Methods

Research and Design

Comprehensive literature review exploring:

- How training is delivered and assessed; modalities and effectiveness
- Types of surveys and best practices for implementation
- Existing survey instruments and tools

Prototype development:

- Usability testing at DataONE Users Group and with CEO Working Group

Implementation

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Results: Tool for Survey Development

Recommended Survey Structure

1. Title
2. Introduction
3. Instructions
4. Evaluation Questions
   - Objectives
   - Content/Substance
   - Reasoning/Topic Knowledge/Argument
   - Organization/Structure
   - Style/Language
   - Visual Aids
   - Interactivity/Technology
   - Timing/Time Management
   - Additional Comments
   - Demographic/Personal Reaction
5. Thank You
6. Related Links/Supporting Resources

EEVA

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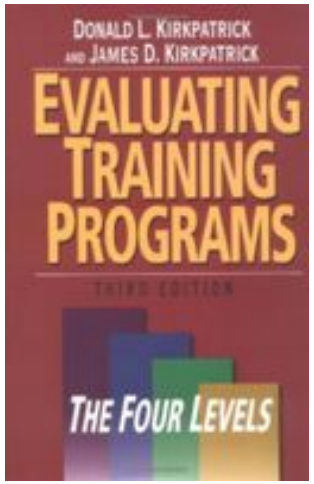
Recommended Survey Structure



Level 1: Reaction	To what degree participants react favorably to the learning event
Level 2: Learning	To what degree participants acquire the intended knowledge, skills, and attitudes based on their participation in the learning event
Level 3: Behavior	To what degree participants apply what they learned during training when they are back on the job
Level 4: Results	To what degree targeted outcomes occur, as a result of learning events(s) and subsequent reinforcement

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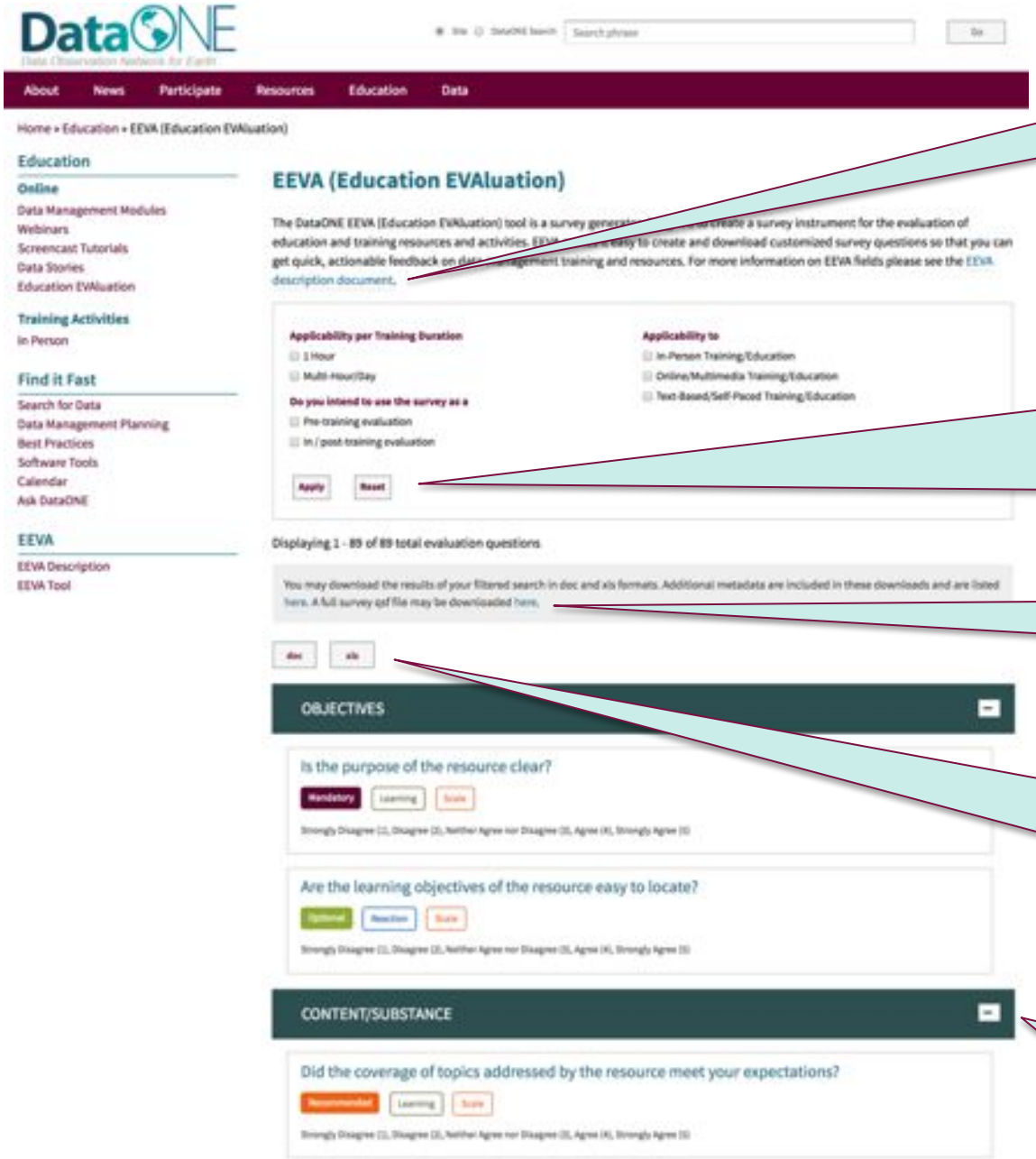

Learn about the tool and how to use it

Filter by:
- Duration of Training
- Type of Evaluation (pre/post)
- Training Format

Download full set to Qualtrics

Download filtered results
- *.doc format
- *.xls format

Expand / collapse question categories

Anatomy of a Question

Survey Question

Question Type
- Scale
- Open-ended
- Multi-choice
- Dichotomous

Is the purpose of the resource clear?

Mandatory | Learning | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Question Obligation
- Mandatory
- Recommended
- Optional

Kirkpatrick Evaluation Area
- Reaction
- Learning
- Behavior
- Results

Suggested Response Variable

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Did the coverage of topics addressed by the resource meet your expectations?

Recommended | Learning | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Is the content of the resource relevant to your current data management situation?

Recommended | Reaction | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Is the difficulty of the resource content appropriate to the level of your data management knowledge/expertise?

Recommended | Reaction | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Did the resource stay focused on relevant concerns?

Optional | Reaction | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Did the resource present concepts/ideas that are new?

Mandatory | Learning | Scale

Never (1), Rarely (2), Sometimes (3), Often (4), All of the Time (5)

Are the use cases/scenarios helpful in clarifying the concepts from the resource?

Recommended | Learning | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Are the examples from the resource applicable to your data management needs?

Recommended | Learning | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Did the training program show you how to complete a specific data management task?

Recommended | Learning | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Have the exercises included in the resource encouraged you to discuss the resource topics further with others?

Mandatory | Behavior | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Are a sufficient number of exercises/activities included with the resource?

Recommended | Reaction | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Does the placement of the exercises/activities appropriately support the content of this resource?

Recommended | Learning | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Does the resource contain sufficient diversity of the exercises/activity types?

Recommended | Reaction | Scale

Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5)

Are the citations to the supporting resources clearly identifiable?

Optional | Reaction | Multiple Choice

Yes, No, It was inconsistent

Will you review the additional related links/supporting resources?

Recommended | Behavior | Scale

Not Likely At All (1), Not Likely (2), Neutral (3), Likely (4), Definitely Likely (5)

Are you planning to use the related links/supporting resources?

Mandatory | Behavior | Scale

Not Likely At All (1), Not Likely (2), Neutral (3), Likely (4), Definitely Likely (5)

Is the resource effective at helping you reach your data management learning objectives?

Mandatory | Results | Scale

Not Useful at All (1), Somewhat Useful (2), Useful (3), Very Useful (4), Extremely Useful (5)

89 Survey Questions

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Example *.doc download

Is the purpose of the resource cle

Question Type: Scale
Suggested Answers for the Q
Agree nor Disagree (3), Agree
Question Obligation: Mandat
Evaluation Category: Objecti

Are the learning objectives of the

Question Type: Scale
Suggested Answers for the Q
Agree nor Disagree (3), Agree
Question Obligation: Optiona
Evaluation Category: Objecti

Did the coverage of topics addres

Question Type: Scale
Suggested Answers for the Q
Agree nor Disagree (3), Agree
Question Obligation: Recomm
Evaluation Category: Conten

Is the content of the resource rele

Question Type: Scale
Suggested Answers for the Q
Agree nor Disagree (3), Agree
Question Obligation: Recomm
Evaluation Category: Conten

Is the difficulty of the resource c
management knowledge/expertis

Question Type: Scale
Suggested Answers for the Q
Agree nor Disagree (3), Agree
Question Obligation: Recomm
Evaluation Category: Conten

Training Evaluation

1. Is the purpose of the resource clear?

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
○	○	○	○	○

2. Are the learning objectives of the resource easy to locate?

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
○	○	○	○	○

3. Did the coverage of topics addressed by the resource meet your expectations?

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
○	○	○	○	○

4. Is the content of the resource relevant to your current data management situation?

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
○	○	○	○	○

5. Is the difficulty of the resource content appropriate to the level of your data management knowledge/expertise?

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
○	○	○	○	○

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Future

Future Work

- Track usage of the tool and solicit feedback
- Enhance user documentation
- Generate google version for use in google forms and for integration into SurveyMonkey
- Explore additional functionality including ability to generate filtered Qualtrics downloads

www.dataone.org/education-evaluation

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