

## Research Data Management - BRDM 2019 Course

Dear Participant,

To obtain information of participants' perceptions of the importance of research data management in the different phases of data lifecycle, and to obtain information of their current skills and competencies, we kindly ask you to answer the questions below.

We will use the participants' anonymized answers in teaching and developing the course, and as a part of research project on RDM. The anonymized data will be preserved in Finnish Social Science Data Archive for research, teaching and learning purposes.

Thank you for your participation in the survey!

### 1. Faculty

- Humanities
- Education
- Science and Engineering
- Medicine
- Law
- School of Economics
- Social Sciences

### 2. Study Programme

- Health Sciences
- Survey
- Natural Sciences

Please indicate how important you believe it is for you to be knowledgeable in each of the competencies listed below by the time you graduate. Please also tell how well do you think you'll manage the competence now.

### **Discovery and Acquisition of Data**

Skills may include:

Locates and utilizes disciplinary data repositories or other external data sources. Evaluates the quality of the data available from external sources. Not only identifies appropriate external data sources, but also imports data and converts it when necessary, so it can be used locally.

3.

#### **Discovery and Acquisition of Data: Importance**

- Not important
- Somewhat Important
- Important
- Very Important
- Essential
- I don't know or NA

#### **4. Discovery and Acquisition of Data: Competence**

- Don't have competence
- Somewhat competence
- Good competence
- Very good competence
- Ultimate competence

### **Databases and Data Formats**

Skills may include:

Understands the concept of relational databases, how to query those databases, and becomes familiar

with standard data formats and types for their discipline. Understands which formats and data types are appropriate for different research questions.

5.

**Databases and Data Formats: Importance**

- Not important
- Somewhat Important
- Important
- Very Important
- Essential
- I don't know or NA

**6. Databases and Data Formats: Competence**

- Don't have
- Somewhat
- Good
- Very good
- Ultimate

**Data Conversion and Interoperability**

Skills may include:

Is proficient in migrating data from one format to another. Understands the risks and potential loss or corruption of information caused by changing data formats. Understands the benefits of making data available in standard formats to facilitate downstream use.

7.

**Data Conversion and Interoperability: Importance**

- Not important
- Somewhat Important
- Important

- Very Important
- Essential
- I don't know or NA

**8. Data Conversion and Interoperability: Competence**

- Don't have
- Somewhat
- Good
- Very good
- Ultimate

**Data Management and Organization**

Skills may include:

Understands the lifecycle of data, develops data management plans, and keeps track of the relation of subsets or processed data to the original data sets. Creates standard operating procedures for data management and documentation.

9.

**Data Management and Organization: Importance**

- Not Important
- Somewhat Important
- Important
- Very Important
- Essential
- I don't know or NA

**10. Data Management and Organization: Competence**

- Don't have

- Somewhat
- Good
- Very good
- Ultimate

### **Data Quality and Documentation**

Skills may include:

Recognizes, documents, and resolves any apparent artifacts, incompleteness, or corruption of data sets. Utilizes metadata to facilitate an understanding of potential problems with data sets. Documents data sufficiently enough to enable the reproduction of the research results and the data by others. Tracks data provenance and clearly delineates and denotes versions of a data set.

11.

#### **Data Quality and Documentation: Importance**

- Not Important
- Somewhat Important
- Important
- Very Important
- Essential
- I don't know or NA

#### **12. Data Quality and Documentation: Competence**

- Don't have
- Somewhat
- Good
- Very good
- Ultimate

### **Metadata and Data Description**

Skills may include:

Understands the rationale for metadata and proficiently annotates and describes data so it can be understood and used by self and others. Develops the ability to read and interpret metadata from external disciplinary sources. Understands the structure and purpose of ontologies in facilitating better sharing of data.

13.

**Metadata and Data Description: Importance**

- Not Important
- Somewhat Important
- Important
- Very Important
- Essential
- I don't know or NA

**14. Metadata and Data Description: Competence**

- Don't have
- Somewhat
- Good
- Very good
- Ultimate

**Cultures of Practice**

Skills may include:

Recognizes the practices, values, and norms of his/her chosen field, discipline, or subdiscipline as they relate to managing, sharing, curating, and preserving data. Recognizes relevant data standards of his/her field (metadata, quality, formatting, etc.) and understands how these standards are applied.

15.

**Cultures of Practice: Importance**

- Not Important

- Somewhat Important
- Important
- Very Important
- Essential
- I don't know or NA

**16. Cultures of Practice: Competence**

- Don't have
- Somewhat
- Good
- Very good
- Ultimate

**Ethics and Attribution**

Skills may include:

Develops an understanding of intellectual property, privacy and confidentiality issues, and the ethos of the discipline when it comes to sharing and administering data. Acknowledges data from external sources appropriately. Avoids misleading or ambiguous representations when presenting data.

17.

**Ethics and Attribution: Importance**

- Not Important
- Somewhat Important
- Important
- Very Important
- Essential
- I don't know or NA

**18. Ethics and Attribution: Competence**

- Don't have
- Somewhat
- Good
- Very good
- Ultimate

**Data Curation and Re-use**

Skills may include:

Recognizes that data may have value beyond the original purpose, to validate research, or for use by others. Is able to distinguish which elements of a data set are likely to have future value for self and for others. Understands that curating data is a complex, often costly endeavor that is nonetheless vital to community-driven e-research. Recognizes that data must be prepared for its eventual curation at its creation and throughout its lifecycle. Articulates the planning and activities needed to enable data curation, both generally and within his/her local practice. Understands how to cite data as well as how to make his/her data citable.

19.

**Data Curation and Re-use: Importance**

- Not Important
- Somewhat Important
- Important
- Very Important
- Essential
- I don't know or NA

**20. Data Curation and Re-use: Competence**

- Don't have
- Somewhat
- Good



- Very good
- Ultimate

### **Data Preservation**

Skills may include:

Recognizes the benefits and costs of data preservation. Understands the technology, resources, and organizational components of preserving data. Utilizes best practices in preparing data for its eventual preservation during its active lifecycle. Articulates the potential long term value of his/her data for him/herself or others and is able to determine an appropriate preservation timeframe. Understands the need to develop preservation policies and is able to identify the core elements of such policies.

21.

#### **Data Preservation: Importance**

- Not Important
- Somewhat Important
- Important
- Very Important
- Essential
- I don't know or NA

#### **22. Data Preservation: Competence**

- Don't have
- Somewhat
- Good
- Very good
- Ultimate