

Research Data Management: Faculty Member

Basics:

1. Name of the interviewee:

2. Department or center:

2. Institution:

Information on the research project and the interview

Participation is voluntary. Information gathered by interviews will be used for planning research data management (RDM) trainings and services for doctoral students. The interview e-form is part of the

interview and works as an introduction to different phases of the RDM. Interviewers can ask some additional questions besides of the e-form. Interviewees can interrupt their participation in the research project or refuse to answer to the questions any time. Endurance of the interview is about 1-2 hours. Interviewee fills the e-form during the interview one module at a time.

Confidentiality in the research publication and in the research data

Preservation and potential reuse of the research data The confidentiality of the interview will be secured so that any materials that include personal information will not be handed over to any third party. Names of the interviewees or names of other people that possible come out during the interview will be deleted or changed for code names in the research publication and in the archived research data. The status (doctoral student), organization, faculty, department, discipline and sex will be told. Research publication can include direct citations with no names of the interviewees, but with the organization, status, faculty, department, discipline and sex of the interviewee. When the research project has ended, the excel sheet containing interviewees' answers to the questions, will be handed over the Data Archive to be permanently preserved and used for research, education and studying purposes. More identifiers will be deleted during the archiving process (anonymisation) if needed. Information on the Data Archive: http://www.fsd.uta.fi/shared/resources/2014_esite_tutkittaville_ENG.pdf

Interviewers will gladly answer all the questions concerning this interview.

Jukka Rantasaari
Head of Library Services
Turku University Library
+35841 5447762
jukka.rantasaari@utu.fi

Luottamuksellisuuden turvaaminen ja tutkimusaineiston säilyttäminen yllä kuvatulla tavalla / Approval of securing the confidentiality and preserving the research data as told above

- Hyväksyn yllä kerrotun / I approve
- Hyväksyn yllä kerrotun seuraavin varauksin / I approve with next reservations

Moduuli 1: Data Sets

Definition of data set: Data set is all the data gathered, collected, and analysed for a research project. It may consist of several data types (e.g. excel files, pictures, etc.)

Data set 1:

5. Data set 1: Description of the data set:

6. Data set 1: Research question or purpose of the data:

7. Data set 1: Funding sources:

8. Data set 1: Name(s) of the Doctoral Student(s) working on this data set

Data set 2:

9. Data set 2: Description of the data set:

Data set 2: Research question or purpose of the data:

Data set 2: Funding sources:

Data set 2: Name(s) of the Doctoral Student(s) working on this data set:

Data set 3:

Data set 3: Description of the data set:

14. Data set 3: Research question or purpose of the data:

Data set 3: Name(s) of the Doctoral Student(s) working on this data set:

Data set 3: Funding sources:

Module 2 – The Lifecycle of the Data Set

For each data set identified in the previous section please complete the following tasks:

Please describe the lifecycle of the data set: E.g. from where, how, and in what way the data have been collected or acquired. How it will be processed, analysed, and visualised. Other possible phases that have impact on the contents of the data set. Will it be published?

18. Please identify where and how you interact with the doctoral students who are working with the data.

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Module 3: Learning about Data

19. What kind of agreements are made between researchers, and between researchers and research subjects? What kind of issues have to be taken into account in agreements?

As you know, there are many critical facets to handling, managing, sharing and working with data. From your perspective, what are the most important skills for your doctoral students to learn in these areas?

Module 4: Acquiring External Data

Please indicate how important you believe it is for your students to be knowledgeable in each of the competencies listed below by the time they graduate by choosing a response below. Please also indicate your perception of the present competencies of your students.

Discovery and Acquisition of Data

Skills may include: Locates and utilizes disciplinary data repositories. 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.

Discovery and Acquisition of Data: importance

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

22. Discovery and Acquisition of Data: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA

Additional Questions:

1: Are data sets from outside of your project used in your research, or the research of your doctoral students?

- Yes
- No
- I'm not sure

Additional question 2: What are the major data repositories or sources of data in your discipline (if any)?

Module 5 – Formats

Database = an organized collection of data

Researchers and research groups can use databases as a storage and sharing platform to organize, maintain, update and discovery purposes. Are databases important in your projects and in your discipline? How important it is to manage different data formats and convert data?

Please indicate how important you believe it is for your students to be knowledgeable in each of the competencies listed below by the time they graduate by choosing a response below. Please also indicate your perception of the present competencies of your students.

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.

Databases and Data Format: importance

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

Databases and Data Formats: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA

27. 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.

Data Conversion and Interoperability: importance

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

Data Conversion and Interoperability: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA

Module 6 – Tools

Please indicate how important you believe it is for your students to be knowledgeable in each of the competencies listed below by the time they graduate by choosing a response below. Please also indicate your perception of the present competencies of your students.

Data Processing and Analysis

Skills may include: Is familiar with the basic data processing and analysis tools and techniques of the discipline or research area. Understands the effect that these tools may have on the data. Uses appropriate workflow management tools to automate repetitive analysis of data.

Data Processing and Analysis: importance

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

Data Processing and Analysis: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA

Data Visualization and/or Representation

Skills may include: Proficiently uses basic visualization tools of discipline. Avoids misleading or ambiguous representations when presenting data in tables, charts, diagrams, etc. Chooses the appropriate type of visualization, such as maps, graphs, animations, or videos, based on their understanding of the reason / purpose for visualizing or displaying data.

Data Visualization and/or Representation: importance

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

34. Data Visualization and/or Representation: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA

Module 7 – Organization and Description of Data

Please indicate how important you believe it is for your students to be knowledgeable in each of the competencies listed below by the time they graduate by choosing a response below. Please also indicate your perception of the present competencies of your students.

35. 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.

Data Management and Organization: Importance

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

Data Management and Organization: competence

- Do not have
- Somewhat
- Good
- Very good

- Ultimate
- I don't know or NA

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.

Data Quality and Documentation: importance

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

Data Quality and Documentation: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA

Additional Question:

1: Do you have a system for version control in place for your data?

- Yes
- No

I don't know

42. If you answered "yes", would you specify, what kind of system do you have?

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.

Metadata and Data Description: importance

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

Metadata and Data Description: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA

Additional Questions:

45. Is the amount of documentation and description that your doctoral students currently provide sufficient for you to be able to understand and make use of the data?

- Yes
- No
- I don't know

2: Is the amount of documentation and description that your doctoral students currently provide sufficient for another person outside of your lab to be able to understand and make use of the data?

- Yes
- No
- I don't know

Module 8 – Cultural Practice and Ethical Behavior

Please indicate how important you believe it is for your students to be knowledgeable in each of the competencies listed below by the time they graduate by choosing a response below. Please also indicate your perception of the present competencies of your students.

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.

Cultures of Practice: importance

- Not Important
- Somewhat Important
- Important
- Very Important
- Essential

- I don't know or NA

48. Cultures of Practice: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA

49. 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.

Ethics and Attribution: importance

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

Ethics and Attribution: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate

I don't know or NA

Additional Questions:

52. Do your students know how to cite a data set according to disciplinary standards?

- Yes
- No
- I don't know

2: Who owns the data sets that are created in your project?

Module 9 – Curation and Preservation

Please indicate how important you believe it is for your students to be knowledgeable in each of the competencies listed below by the time they graduate by choosing a response below. Please also indicate your perception of the present competencies of your students.

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.

Data Curation and Re-use: importance

Not Important

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

Data Curation and Re-use: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA

Additional Question:

1: Have you or your doctoral students ever deposited data into a data repository?

- Yes
- No
- I don't know

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.

Data Preservation: importance

- Not Important
- Somewhat Important

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

Data Preservation: competence

- Do not have
- Somewhat
- Good
- Very good
- Ultimate
- I don't know or NA