“3TU.datacentrum and Data intelligence training for library staff”

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Introduction

3TU.Datacentrum

- Data archive
- Data labs
- Data services
Data services

Data Intelligence 4 Librarians
• Focus on support staff, particularly librarians
• Supports library’s mission to be a partner in research:

Data intelligence 4 librarians want to contribute to the professionalization and positioning of support staff as a trusted partner in the support of data-intensive research
3 phases:

• Investigation of the training needs
• Design of the course
• Development of the training materials
Phase 1: Investigation of the training needs

• Information sessions with library staff of 3TU
  Need for: technical skills and soft skills
Phase 2: Design of the course

Competence-based modular course, combining online and face-to-face tuition (blended learning)
7 core competences defined:

- Handles ICT skilfully
- Has specific library knowledge
- Develops entrepreneurship
- Develops a systemic view
- Develops advisory skills
- Develops collaboration skills
- Develops training materials
4 modules:

1. Current topics
2. Data management
3. Technical skills
4. Acquisition & Advice
Main goal: gain understanding about the current developments in the working field of the data librarian who is supporting researchers in their research data management.

Do it together!

Image retrieved from: jblog.fr
Module 2: Data management

Main goal: learn to advise researchers on ways to prepare research data for storage and (re)use.

- research process
- data life cycle
- data management plan
- data selection
- data formats
- metadata
- data policy
- data and the law
Module 3: Technical skills

Main goal: learn more about ways research data can be archived and (re)used.

- citing data
- digital objects
- data processing
- enhanced publications
- data labs

Image retrieved from: support.businesswebsite.com
Main goal: gain insight into the factors which positively influence the quality of acquisition or advice

- from acquisition to advice
- phases in acquisition
- Stages of change
- Arguments
- On conversations
- Barriers
- Data interview
- Cases
Phase 3: Development of training materials

- content of the website
- images
- homework assignments & role plays
Welcome

This is the reference material for the course Data Intelligence 4 Librarians developed by 3TU.Datacentrum

News & Agenda

- Data Intelligence 4 Librarians online!

The course in brief

What will you learn?
During the course you will acquire knowledge about ways in which research data can be prepared for storage, archived and (re)used. After the course you will have gained understanding about the meaning of research data in scientific research. You will be able to advise researchers/research groups on efficient and effective ways to add value to their data.

How are we going to accomplish this?
With a didactical mix of group meetings, online study and doing assignments. The contents of this website are intended as reference material. See About the course for detailed information.

Mission

The course Data Intelligence 4 Librarians wants to contribute to the professionalisation and positioning of the library and its employees to be a partner in the support of data-intensive science.
Selection criteria for curating research data

- costs for archiving (can be too expensive)
- difficult to archive (lack of metadata)
- repeatable & low costs associated with (re)creation
- unique data
- irreplaceable data (nonrepeatable)
- repeatable but high costs associated with (re)creation of data
- obligation to preserve data

Environment

content

librarian

researcher

relationship

Data Management Plan
written before the start of a research project:
what data are expected?
Main findings/issues:

- participants appreciated the discussions
- participants were interested to hear from researchers themselves how they deal with data management issues
- participants would have liked more actual use cases
- participants urgently needed practical information about setting up a front office for data management services
- participants liked the invited teachers
- participants appreciated the images included in the course material on the website
- participants did not like to work with Google+
Conclusions

- The development of the course was a leap into the unknown as no similar courses existed in The Netherlands or abroad at that time.

- Our pragmatic approach of just getting started has paid off. Participants while appreciating the course as a whole, have indicated some shortcomings, thereby enabling improvements.
Cooperation with DANS

• Extension of the course to other disciplines
• Learning materials are expanded
• DANS provides one of the coaches, making it a truly joint undertaking
Next steps

- Design of a new, flexible and dynamic learning environment to make the course more interactive, collaborative and constructive.

Photograph retrieved from: http://www.flickr.com/photos/axehd/5843856565/
Since 8\textsuperscript{th} of May, 2013: Coalition founded by 3TU.Datacentrum and DANS:

- Combining expertise and resources
- Align procedures and licenses for users
Support for researchers

• Large time series of numerical data from a drizzle radar

• 3TU.Datacentrum stores and gives access to the data

• Researcher Tobias Otto: “It has taken some time to set up the data archiving process and to create the metadata. But we save that time now by being able to easily access our data”
• Data from Cryo-Tem, advanced electron-microscopy techniques

• 3TU.Datacentrum can store large datasets

• “People may use the same datasets for things we were not looking for, thus generating new science with the same data”
• Event logs from X-ray machines to enterprise information systems

• The DOI makes the data easily found and accessible

• Providing assistants to customize the data

• I think we stand on the threshold of a development where it is no longer acceptable to publish papers without making datasets available
• Majorana Ferminon; bizarre particle because it represents its own anti-particle and it can also be used to build quantum computers

• 3TU.Datacentrum accommodates datasets even though not in the preferred format

• In the world of open science progress will happen faster
Acknowledgment

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