

Utvikling av gjenbrukbart undervisningsmateriale: Erfaringer fra prosjektet DocEnhance

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Innledning

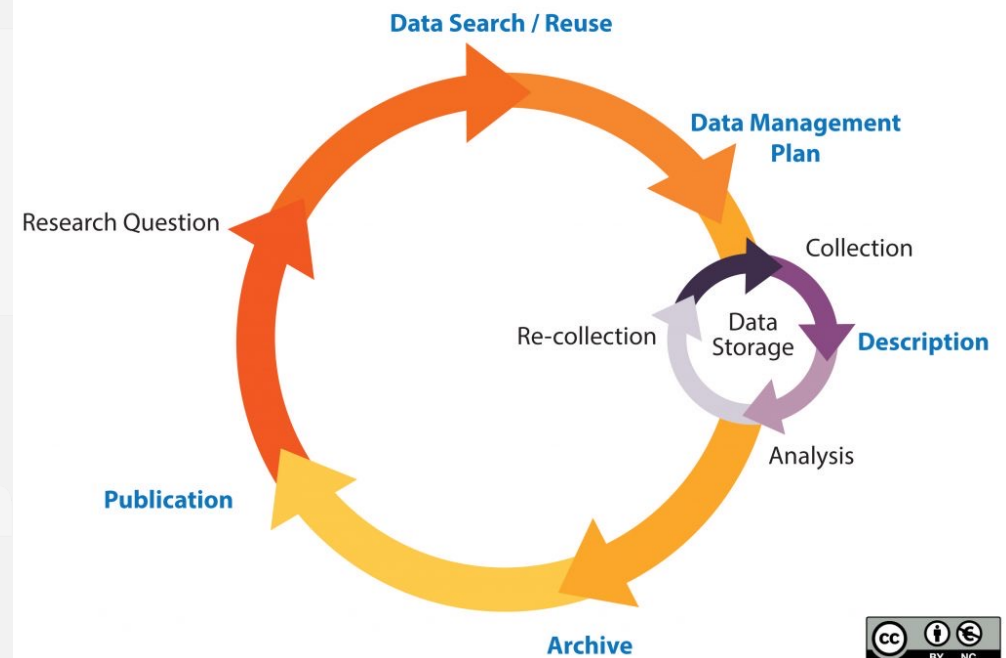
- Om oss
 - Helene N. Andreassen (lingvistikk, m.m.)
 - Henning Hansen (bokhistorie, m.m.)
 - Leif Longva (økonomi)
 - Noortje Dijkstra (geologi)
- (nettbasert) undervisning for studenter, stipendiater og ansatte



Forskningsdatahåndtering (RDM)

- RDM-undervisningen ved UiT
 - «alle hjelper til» (undervisningsansvaret ambulerer)
 - Tverrfaglighet (både hos deltakere og lærere)
 - Kollegaveiledning
 - Revidering
 - Skype/Zoom
- RDM-undervisningserfaring (& erfaring med nettbasert undervisning) → DocEnhance

The Research Data Management Lifecycle





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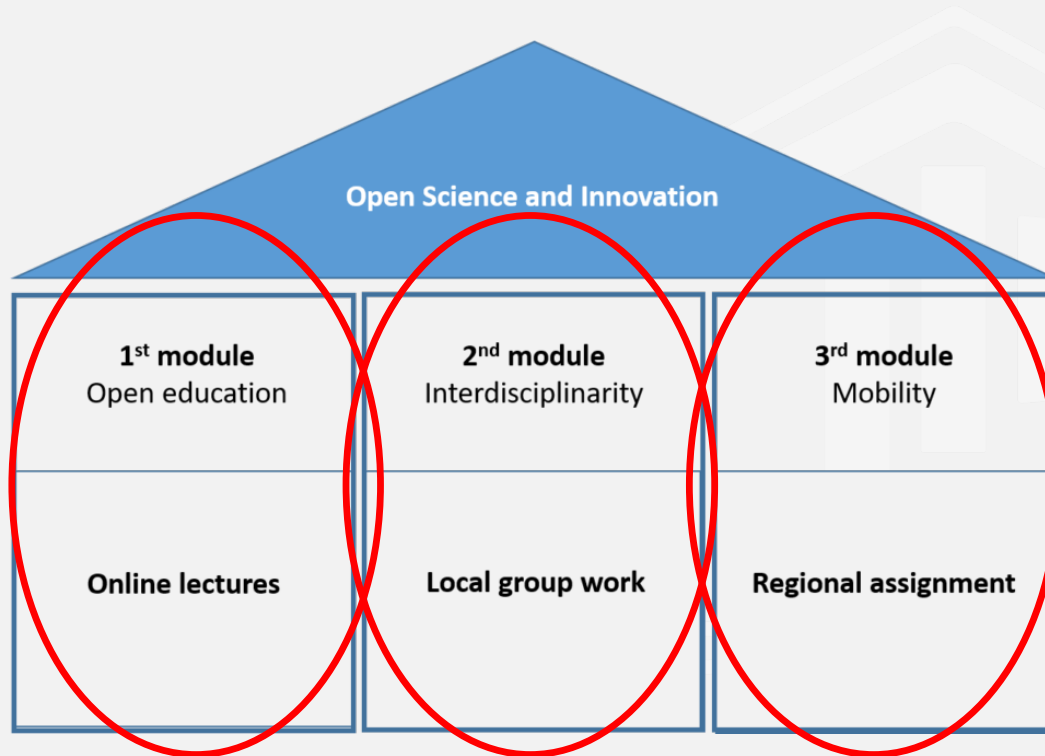
Arbeidsgruppen vil bestå av Helene og meg, i tillegg til deg.

Håper du slår til. Vi kan love blod, svette og tårer ... :/

Leif

- Mål: styrke stipendiaters mulighet på arbeidsmarkedet via Transferable skills
- Tre kurser:
 - Career management & Entrepreneurship
 - Supervision
 - Data stewardship
- Tidsplan: pilotrunder 2021 og 2022. Ferdigstilt desember 2022
- Pilotinstitusjoner Karlstads universitet og University of Chemistry and Technology, Prague
- Plattform: Moodle (<https://phdhub.eu/>)
- *Krever sitt...*

Data Stewardship-kurset



Modul 1: Selvgående onlinekurs
(DocEnhance plattform)

Modul 2: Gruppeøvelser (lokal tilpassing)

Modul 3: Praksis hos partnerinstitusjoner
(non-academic setting)

Data Stewardship: Modul 1

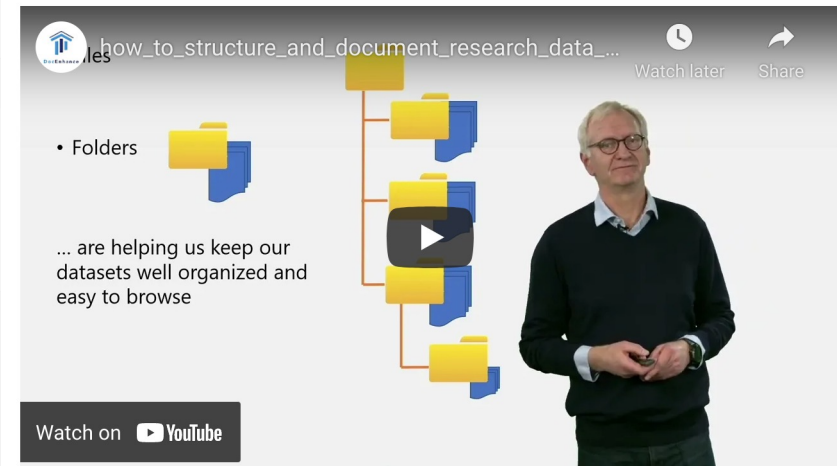
1.4 The FAIR data principles

In the [interview with Kenneth Ruud](#), there was mention of the term FAIR principles. These principles were drafted in 2014 during an international meeting and published in 2016 by Wilkinson et al.. The FAIR principles are a set of guidelines developed to optimise the reusability of research data, and they form the basis for the good research data management practices introduced in this online course. Learn more about what is behind the acronym FAIR in the following video:



5.1 Organizing a data set

Why does it matter what names you give your data files and the folders? Well in fact, this may be crucial, in order to avoid mixing up your data and ruining your analysis. You do not want to risk that! In this video, you will learn the basics of how to organize your data in files and folders.



Data Stewardship: Modul 1



29/04/21

This certification is awarded to

Anna Chmelová

in recognition of the successful completion of the

DocEnhance Data Stewardship course Module 1



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Data Stewardship: Modul 2

- Seks tretimerslange tematiske sesjoner.
- Forventede forkunnskaper: modul 1.
- Deltakeraktivitet i fokus.
- Lærer(team) for organisering og støtte i diskusjoner.
- Fleksibilitet i valg av sesjoner, aktiviteter, eksempler.
 - Ulik tid til rådighet.
 - Ulike deltakergrupper (fag, erfaring).
 - Ulike ønsker med tanke på innhold.

Overordnet lærerguide for modul 2

For the teacher

Content

This module contains teaching material for six three-hour activity:

1. The importance of RDM and open archiving
2. The data management plan
3. Structuring and documenting research data
4. Data storage, file formats, and the FAIR principles
5. Archiving research data
6. Search, cite, and license research data

Material

Each session has the following composition:

- An overview of the session, with time frames
- Session teacher guide
- Assignment texts and other material

All material is downloadable or accessible via links. Modules relevant to the PhD candidates are not supposed to enroll in the course. The relevant material with the PhD candidates/course participants.

Flexibility

The module is built up as an inspirational teacher's resource for a participant group and time constraints. You may also decide

Data Stewardship: Modul 2

Ses

Archiving data is an important step to prepare a dataset and how to on datasets that are either create

Oversikt over sesjonen

Lærerguide for sesjonen

Forberedelsesoppgaver

Oppgavetekster inkl. ev hjelpemidler og fasit/diskusjonsguide

Structure of session 5:

Structure of Session 5

Teacher guide to Sessi

5.1 Pre-assignment tex

5.2 Assignment text - I

5.2 Dummy dataset

5.2 DocEnhance Educa

5.2 Discussion guide fo

5.3 Assignment text - I

Structure of Session 5: Archiving research data

00:00 – 00:15 Plenum: Introduction to session 5

- Plan for the session.
- Recap in plenum & terminology demystifier: What do you need to think about and/or do when you want to archive research data? Teacher or someone else takes on secretary function and writes down keywords (virtual or physical whiteboard).

00:15 – 01:45 Buzz groups & plenum: Preparing and depositing a dataset

- In buzz groups, test archiving research data by entering metadata and converting/uploading files for a given dataset into the DocEnhance Educational Data Archive (for login and repository guidelines, see pre-assignment text 5.1: *Getting ready to work on research data archiving*). Write down comments, questions, or experienced challenges in a shared Padlet. Wrap-up in plenum.
- If needed, the individual buzz groups organise a 5-minute break during group work.
- Material:
 - 5.1 Pre-assignment text: *Getting ready to work on research data archiving*.
 - 5.2 Assignment text: *Preparing and depositing a dataset*.
 - 5.2 Dummy dataset.
 - 5.2 Discussion guide (for the teacher).
 - [DocEnhance Educational Data Archive](#).
 - Shared Padlet for entire group, one column per group.

01:45 – 02:00 Break

- Material: Refreshments and fresh air.

02:00 – 02:45 Buzz groups & plenum: Selecting a research data repository

- In buzz groups, select one of the datasets in the DocEnhance Educational Data Archive and search for a suitable repository. Take notes and be ready to argue for your choice. Wrap-up in plenum.
- Material:
 - 5.3 Assignment text: *Selecting a research data repository*.
 - [DocEnhance Educational Data Archive](#).

02:45 – 03:00 Sum-up and information about the next session

Undervisningsressurser: Åpenhet og gjenbrukbarhet

Tekniske aspekter

Tilgjengelighet: Åpen plattform, universell utforming

Søkbar/gjenfinnbar

Metadata på f.eks. type ressurs, tema, nivå

Juridiske aspekter

Lisens for gjenbruk

Pedagogiske aspekter

Lærerveiledning:
Formål med ressursen,
tydelige instruksjoner for
tenkt bruk.

Lærerveiledningen: En nøkkel

- Tilbakemeldinger på versjon 1: Tydeligere veiledning til læreren nødvendig.
- Lærerveiledning på sesjonsnivå.
 - Bidra til å sikre kvalitet på undervisningen.
 - Bidra til å heve lærerens RDM-kompetanse.
 - Bidra til at læreren tar eierskap til innholdet.

Session 5: Archiving research data

Objective of this session

Archiving data is an important step of the research data management lifecycle. This is the preparation phase, i.e. how to prepare a dataset and how to find a suitable repository of data. In the suggested assignments, participants will work on datasets that are either modified for educational purposes, in the DocEnhance Educational Data Archive.

Learning outcomes of this session

- Understand the basic principles of how research data can be archived
- Identify reputable research repositories for archiving research data

Required previous knowledge (Module 1)

- Section 5.2 – Documenting your data: Metadata
- Section 5.3 – Documenting your data: The Readme file
- Section 5.5 – Preferred file formats
- Section 8.7 – Depositing a dataset into a repository

Pre-session checklist

- Get familiar with the structure of the session (content, timeline, technical requirements)
- Get familiar with the DocEnhance Educational Data Archive and how to give the participants
- Inform the PhD candidates about required previous knowledge for this session
- Distribute the pre-assignment text to the participants, well in advance

Preparation for group work: Pre-assignment 5.1 – Getting ready to work archiving

If you choose to use assignment 5.2 *Preparing and depositing a dataset*, you should carry out pre-assignment 5.1. Here they are asked to test login for the data repository (DocEnhance Educational Data Archive), and they are asked to read through relevant guidelines of the platform that hosts the educational archive, the Dataverse platform. This may be perceived as somewhat difficult or abstract, since they haven't worked with the repository before. It is nevertheless important that they don't spend too much time during the group assignment on how to proceed in preparing and depositing a dataset.

Please consult the section *Tools* in the section *Welcome to Module 2* for practical information about the DocEnhance Educational Data Archive and how you need to proceed when preparing the pre-assignment.

Buzz group work: Assignment 5.2 – Preparing and depositing a dataset

The objective of this assignment is twofold: To train the participants in archiving data and to make them see that the deposit process is not too time-consuming or difficult if you have prepared. We recommend that you organise buzz groups (2-3 people), as this is a more practical task than a discussion task.

Lærerveiledningen: En balansegang

- Andre lærere skal gjøre den konkrete undervisningsjobben.
 - Hva kan vi som kursutviklere påvirke?
 - Hva ønsker vi å påvirke?

«One size does not fit all»

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Jobben er ikke ferdig!

- Data Stewardship ikke et statisk kurs.
 - Feltet utvikler seg raskt → jevnlig vedlikehold.
 - Flexibilitet og lokal tilpasning, raus gjenbrukslisens.

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Oppsummering om prosessen

- Utviklingsprosjekt fra A til Å.
 - Opprinnelig plan
 - Mappe RDM-kunnskap på DocEnhance-konseptet
 - Jobbe med ulike undervisningsmetoder (online-kurs vs. seminaroppgaver)
 - Dialog med interne og eksterne samarbeidspartnere

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Konklusjon

- Det krever relativt mye å lage et gjenbrukbart undervisningsopplegg.
 - Mer informasjon til kollegaer som har bidratt med undervisning i modul 1.
 - Formål, målgruppe.
 - Mer dokumentasjon i form av guider og fasiter for lærere i modul 2.
 - Alle skal kunne bruke ressursene uten å måtte kontakte oss.
 - Mer kvalitetssikring: Stå for det som publiseres, innholdet må ha en viss holdbarhet.
 - Mindre rom for «La oss teste det ut» og «Ups, det må vi huske på neste gang!».

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Konklusjon

- Åpenhet som middel og mål
 - De endelige ressursene skal være åpent tilgjengelig.
 - Ressursene under arbeid har vært tilgjengelige for flere parter:
 - Testing
 - Evaluering
 - Diskusjon
- Egen erfaring
 - Ved å tenke gjenbrukbarhet & gjennomføre evalueringer og tester, har vi vært tvunget til å reflektere i større grad rundt formål og gjennomføring av undervisningen → Bevisst forhold til alle elementer i opplegget.
 - Interne diskusjoner rundt undervisningsopplegg bør utføres i større grad, uavhengig av om ressursen skal publiseres eller ikke.



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