

UNIVERSITY OF OSLO

Data management planning

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Digital Scholarship Center
University of Oslo Library

March 4, 2022

Materials developed as a part of the *Skills development for research data* project: <https://www.ub.uio.no/english/about/projects/rdm-skills>



Agenda

- What is a data management plan (DMP)?
- 10 rules to writing a DMP
- DMP templates
- Q&A



The Data Management Plan (DMP)

- Is a **living** document that accompanies the research project
- Specifies the **types** of data that will be generated
- Describes how you plan to **manage** your data (organize, document, classify, store, license)
- Conveys whether and how the data can be **shared**
- **Agreement** between project members
- A **tool** to keep overview over data



Why use a DMP?

- Comply with sponsor requirements
- Save time during and after project
- Easier to share and publish data
- Make your data reusable and reproducible
- Ensures security and quality of data
- Helps identify resource requirements, time dependencies or problems



F
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A
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I
nteroperable



R
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Which DMP template to choose?

If you:

Consider using:

Want a simple and text-based template

[UiO's DMP template](#)

Have human and society data

[NSD's DMP tool](#)

Use Sigma2's resources

[Sigma2's easyDMP](#)

Have life science data

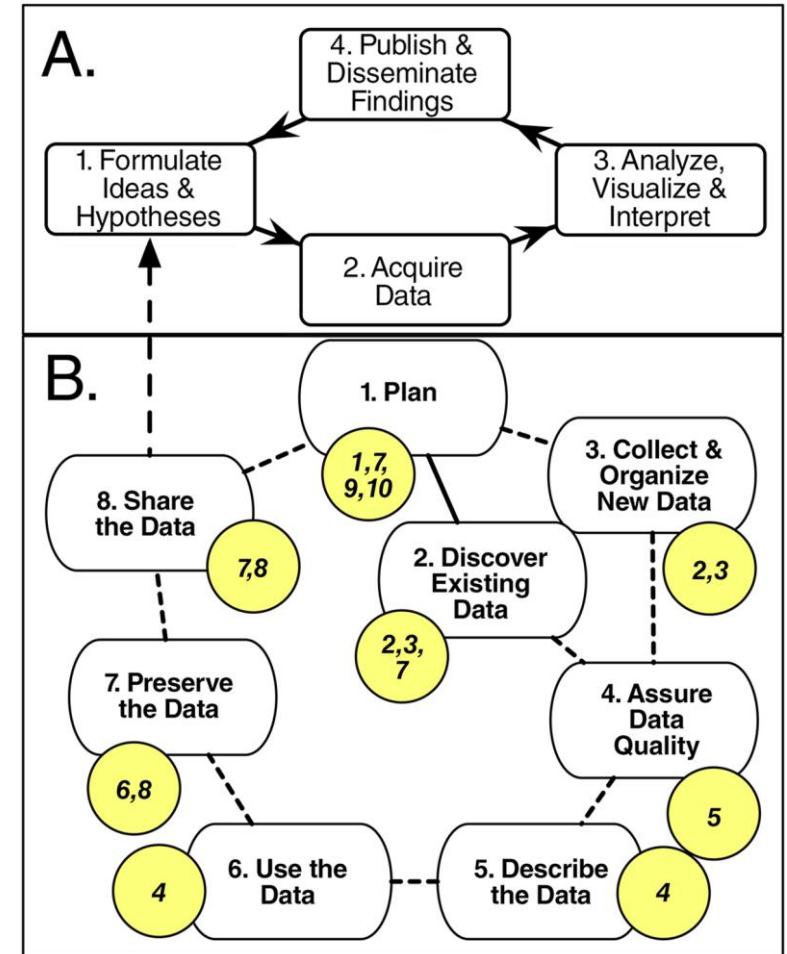
[ELIXIR's template](#)

Are working in an EU project

[Digital Curation Center's DMPOnline](#)

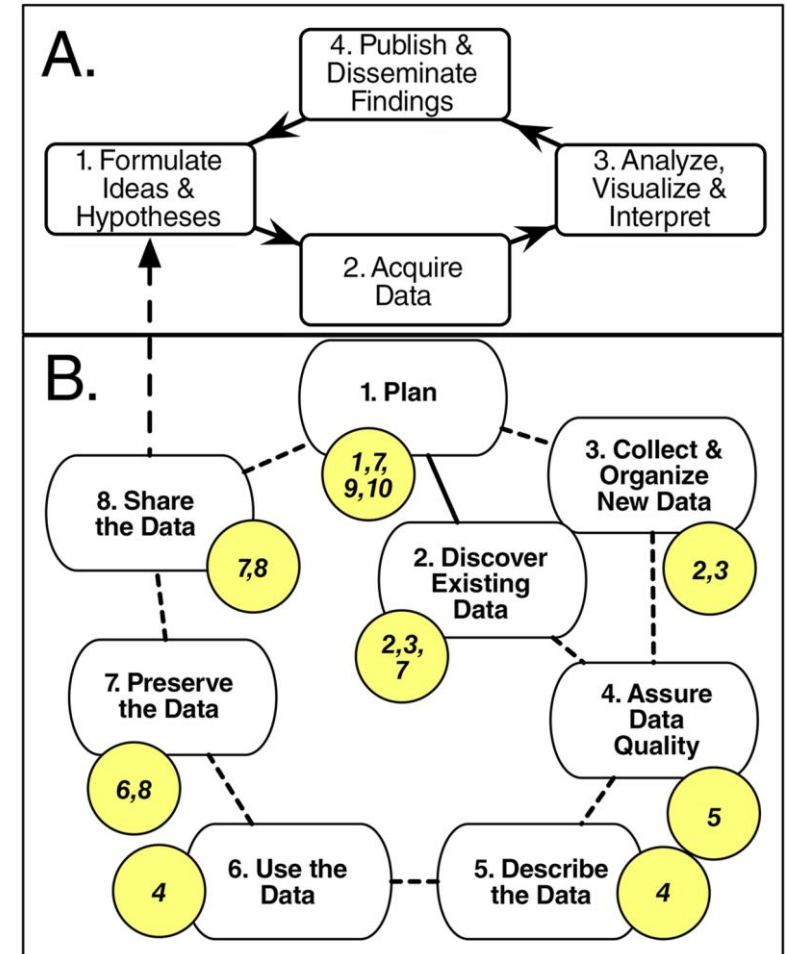
10 Simple Rules to Writing a Data Management Plan

1. Determine research sponsor requirements
2. Identify data to be collected
3. Define how data will be organized
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HORIZON EUROPE

Open Science across the programme

Open
Science

Mainstreaming of open science practices for improved quality and efficiency of R&I, and active engagement of society

Mandatory immediate Open Access to publications: beneficiaries must retain sufficient IPRs to comply with open access requirements;









Data sharing as 'open as possible, as closed as necessary': mandatory **Data Management Plan** for FAIR (Findable, Accessible, Interoperable, Reusable) research data

- Work Programmes may incentivize or oblige to adhere to **open science practices** such as involvement of citizens, or to use the **European Open Science Cloud**
- Assessment of open science practices through the **award criteria** for proposal evaluation
- Dedicated support to **open science policy actions**
- **Open Research Europe** publishing platform



- Assess the need to develop a data management plan in relation to all projects awarded funding.
- If you decide that a data management plan is not needed, you must provide an explanation.*
- Final version of the DMP delivered with the final report of the project.

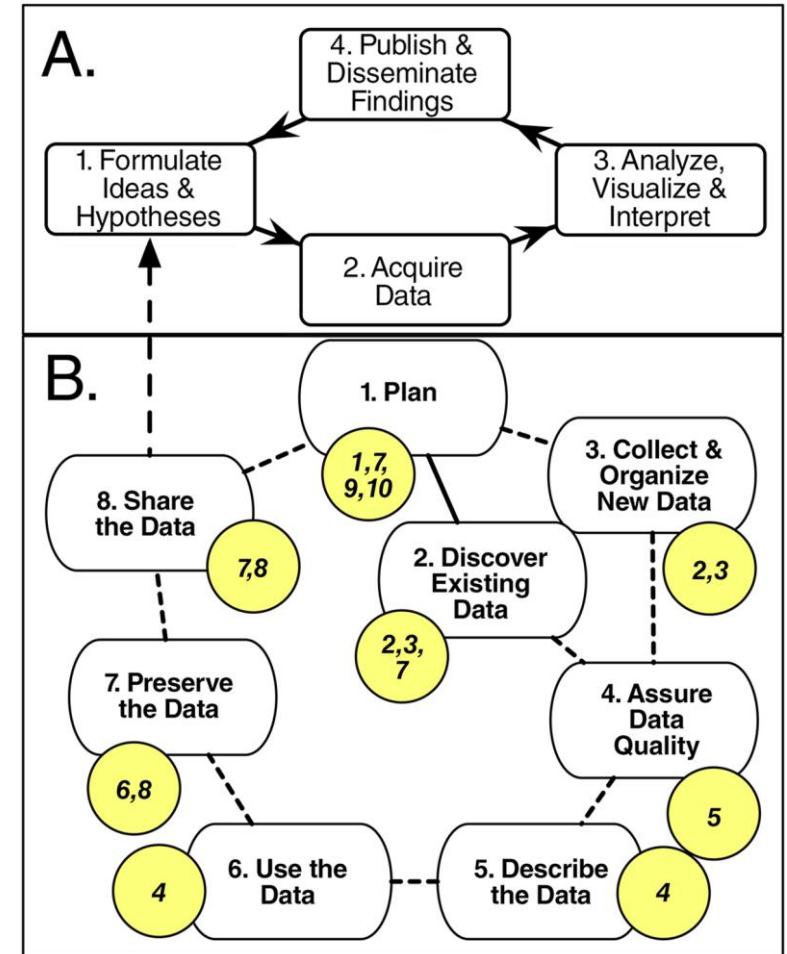
Sponsor Requirements

-  DMP template or content requirements?
-  Storage requirements?
-  Metadata and documentation requirements?
-  Publishing data openly?
-  Archiving requirements?
-  Which repositories are approved?
-  Licensing requirements?
-  Other legal requirements?



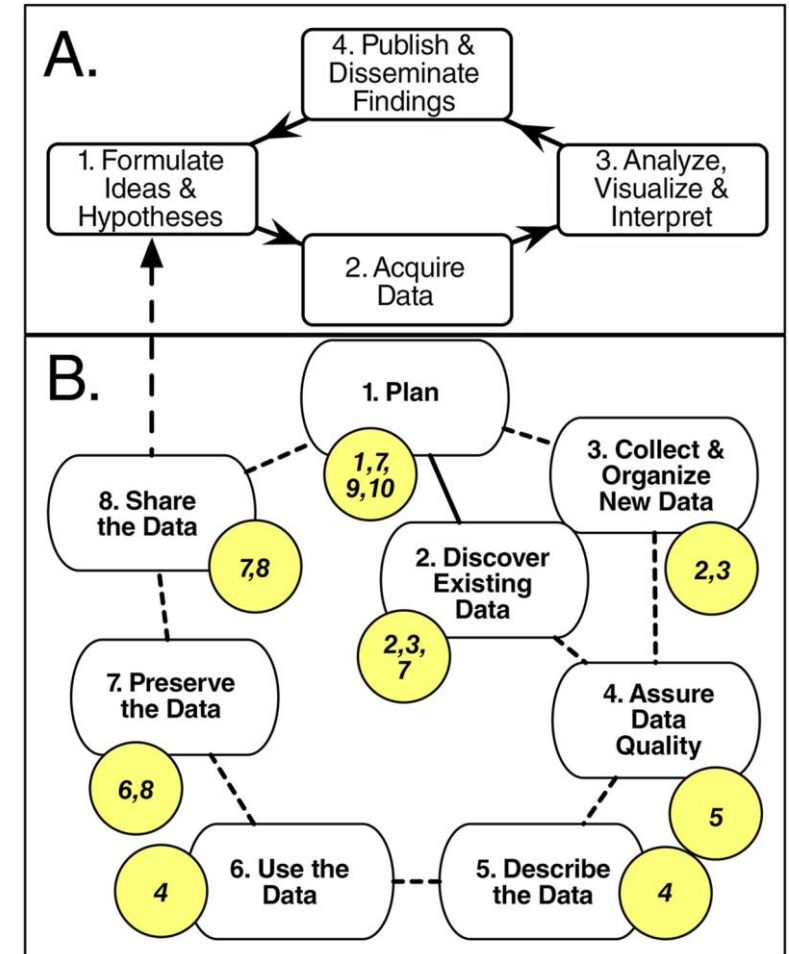
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Identify data to be collected



Origin of Data

Existing data or new data?

If data is reused: What is the scope, volume, format?

How are different data sources integrated?



Types of Data

What type(s) of data will be collected?

What is the scope, quantity and format of the material?

What is the total amount of data collected (MB/GB/TB/PT)?



Data Collection

How, where and when will data be collected?

What resources are required?

Who is responsible for data collection?

Example dataset description

Type: accelerometer output

File format: .csv

Sensor: AX3 Axitivity

File size: ~ 15 x 1 MB

Protocol: see SOP-123 in protocol folder

Classification: green

Purpose: measure head movement of audience and musicians

Setting: musical performance at a music festival on (date)

Administrative and Physical Data

Important to think about how non-digital or administrative data will be managed.

Examples can include:

Applications

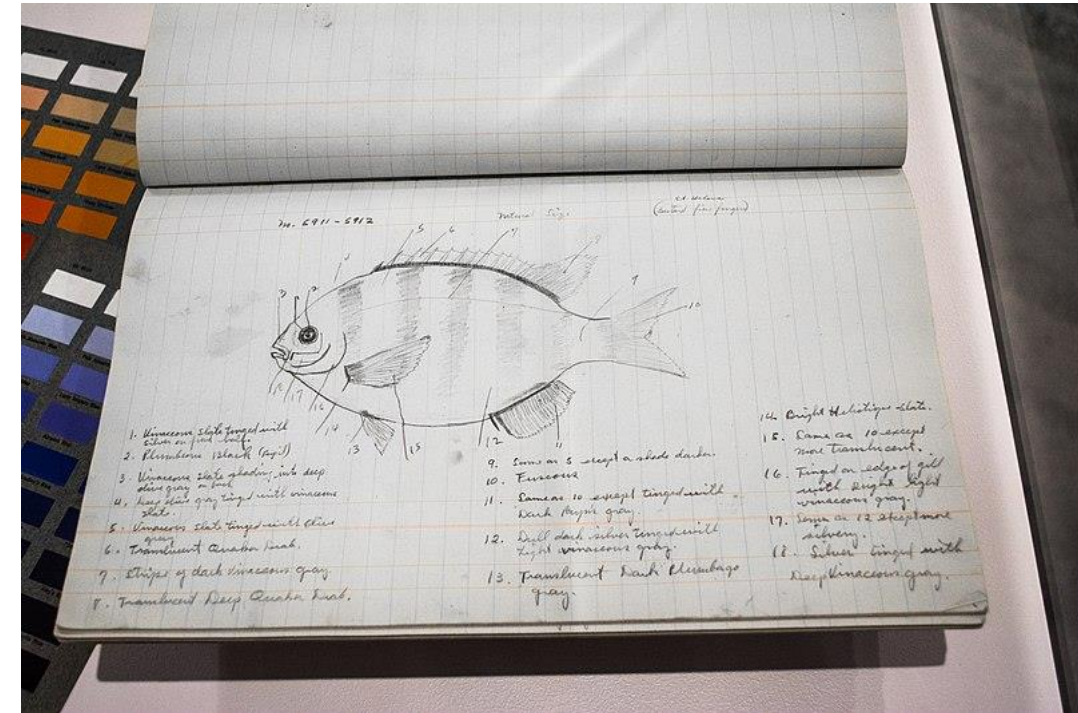
Forms

Field notebooks

Lab notebooks

Physical artifacts

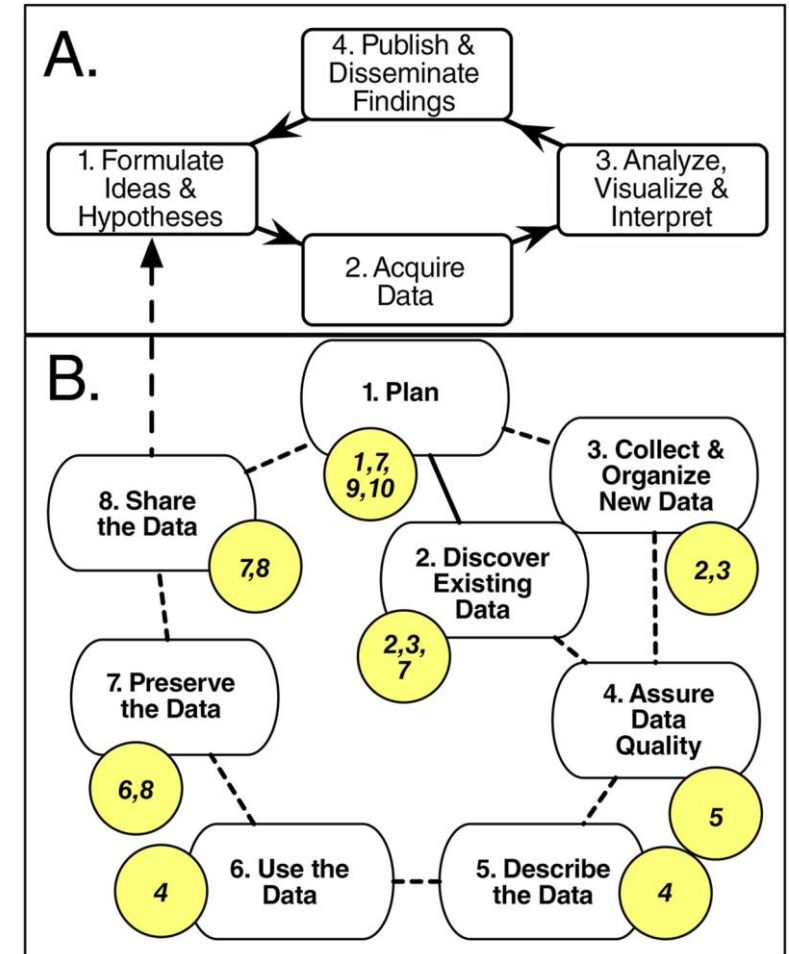
Protocols



by Tim Evanson, CC-BY-SA

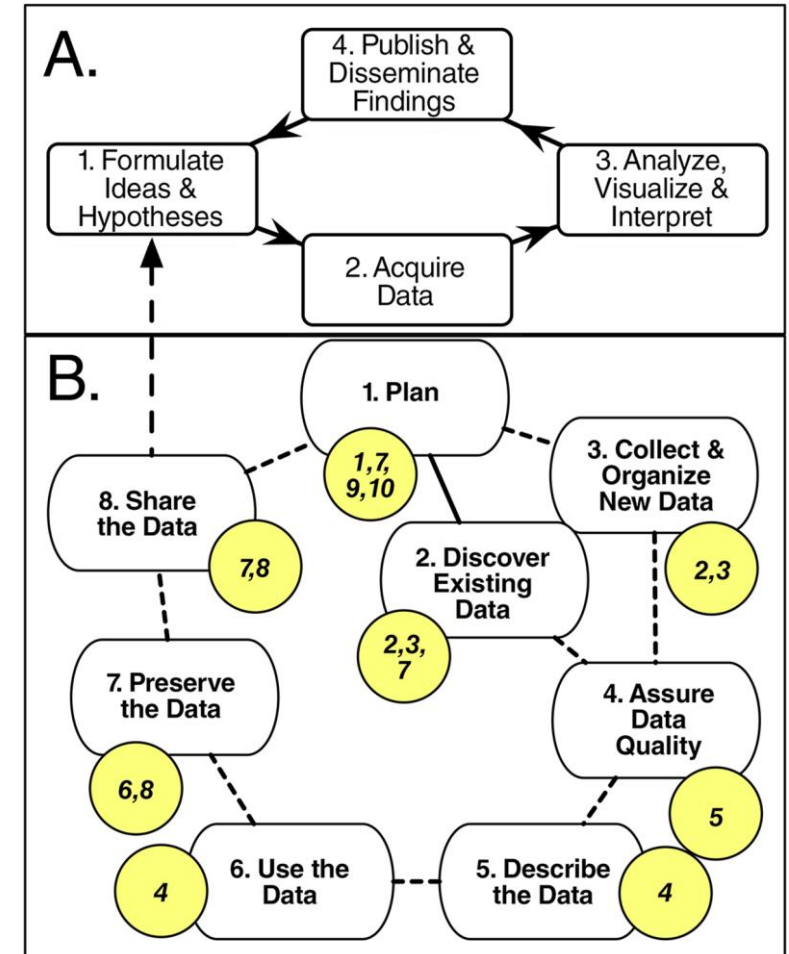
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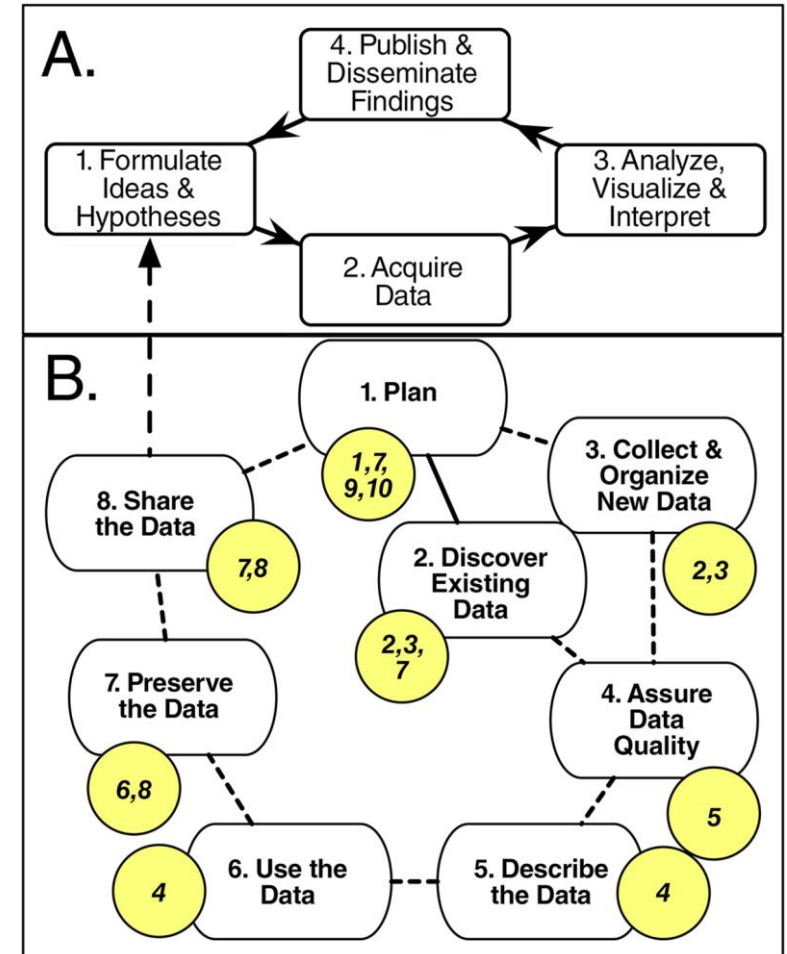
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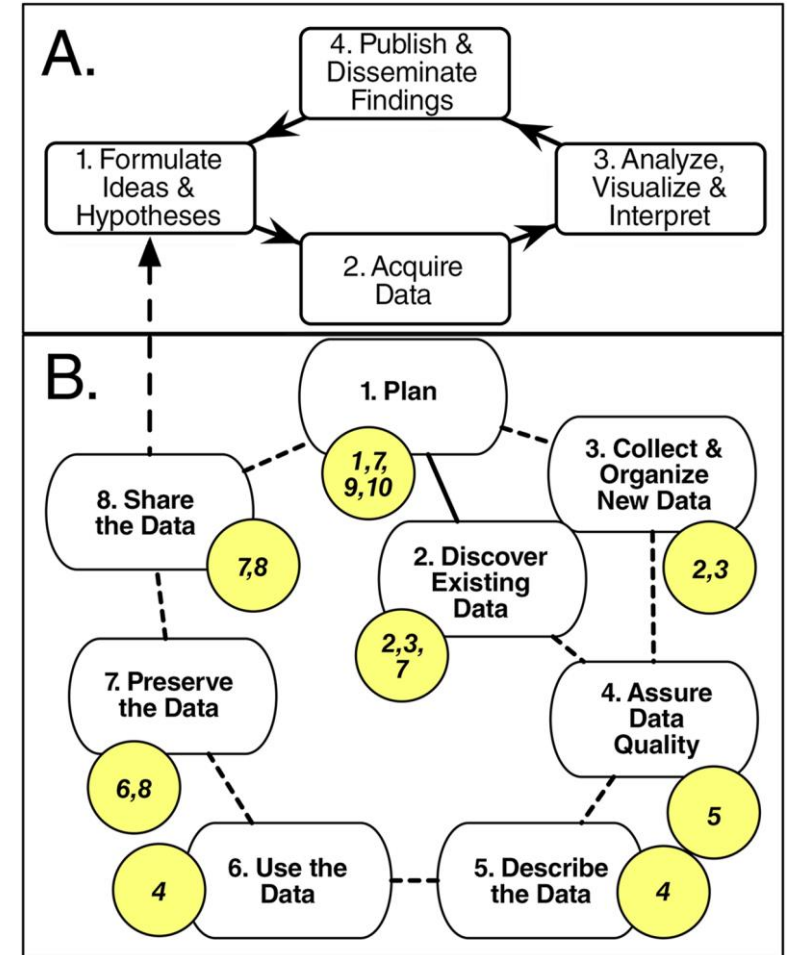
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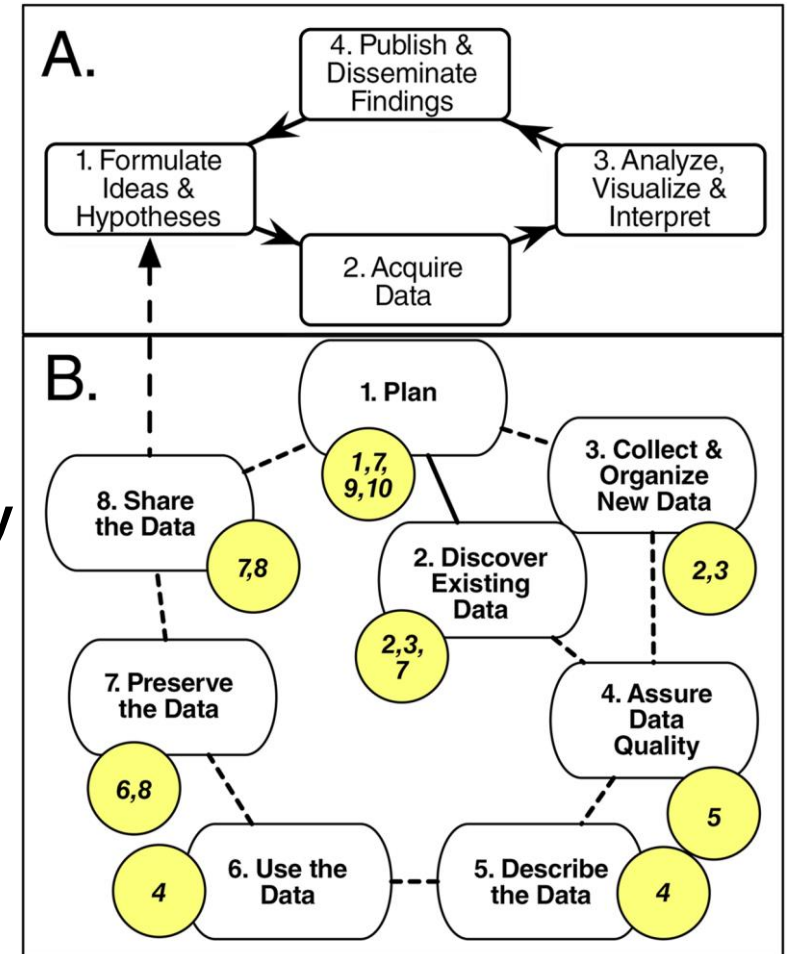
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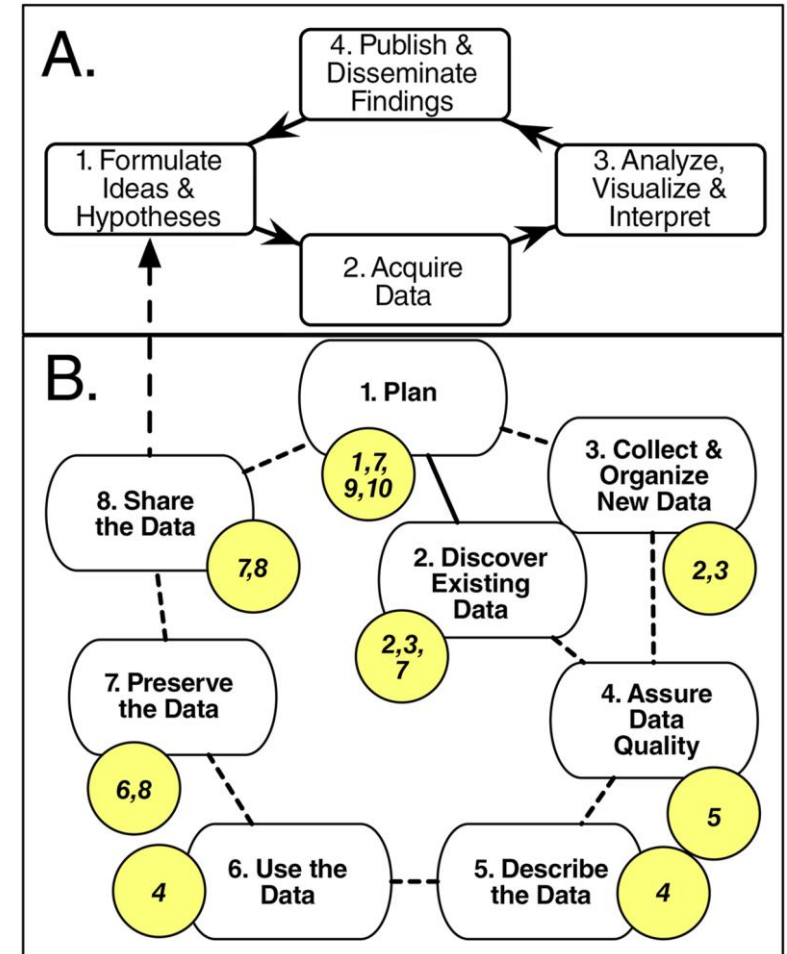
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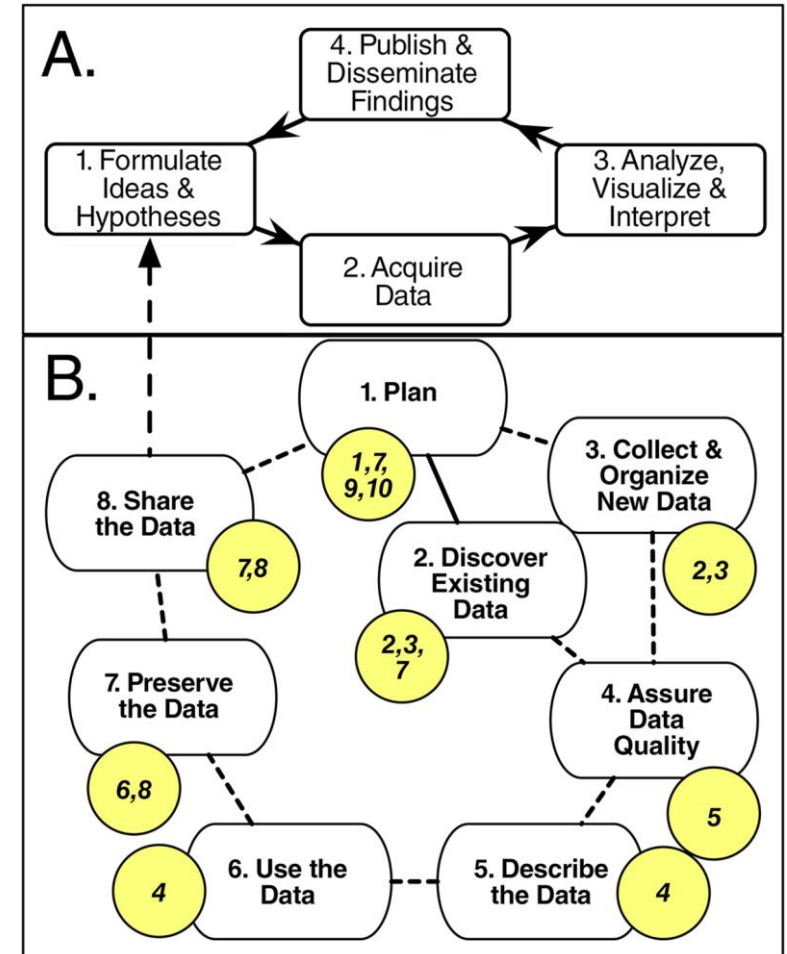
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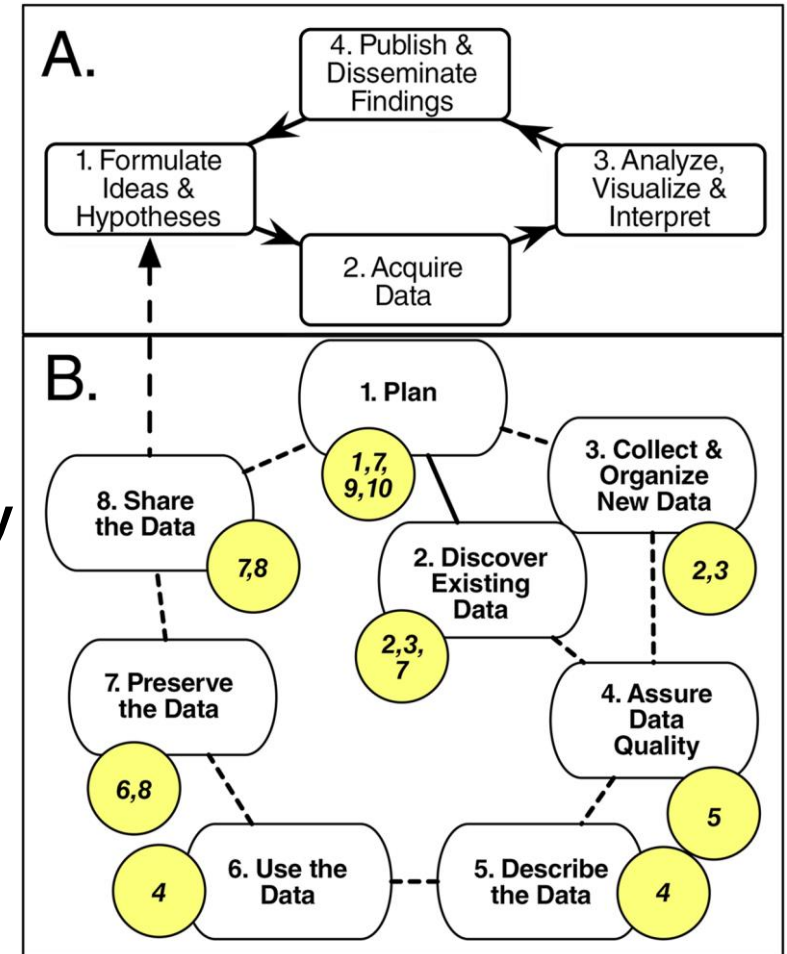
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Upcoming sessions

Data organization, metadata, and documentation

Mar. 9, 9:00 AM, Zoom

Data classification and storage selection

Mar. 11, 9:00 AM, Zoom

Copyright and licensing

Mar. 15, 9:00 AM, Zoom

Sharing and archiving research data

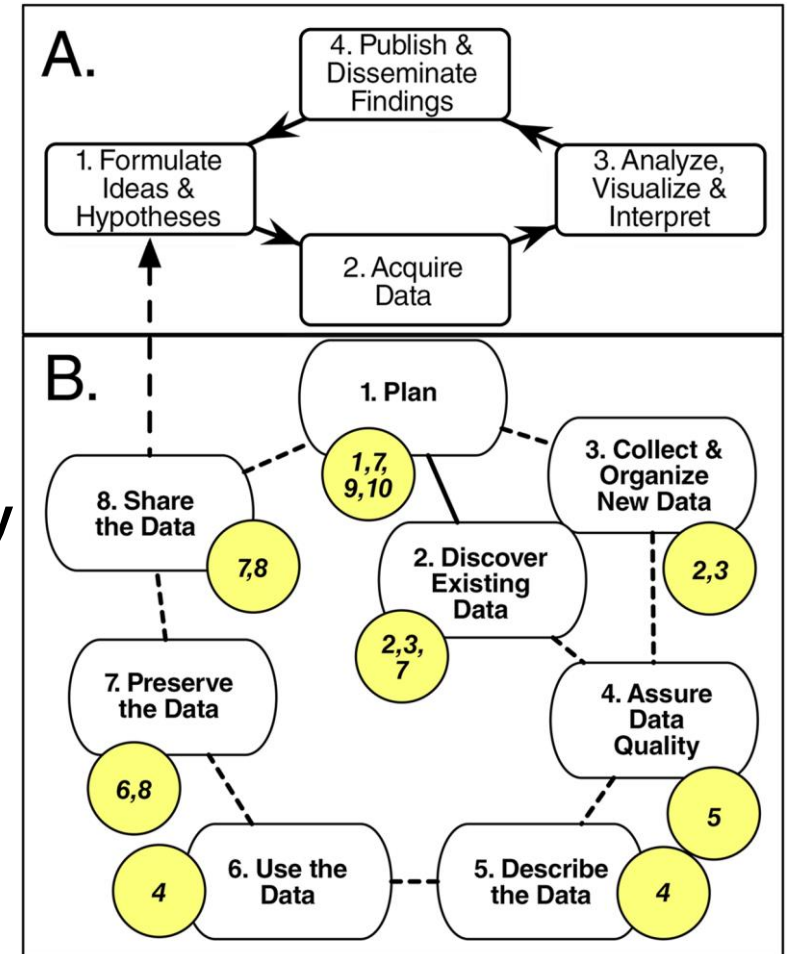
Mar. 17, 9:00 AM, Zoom

Finding and reusing research data

Mar. 18, 9:00 AM, Zoom

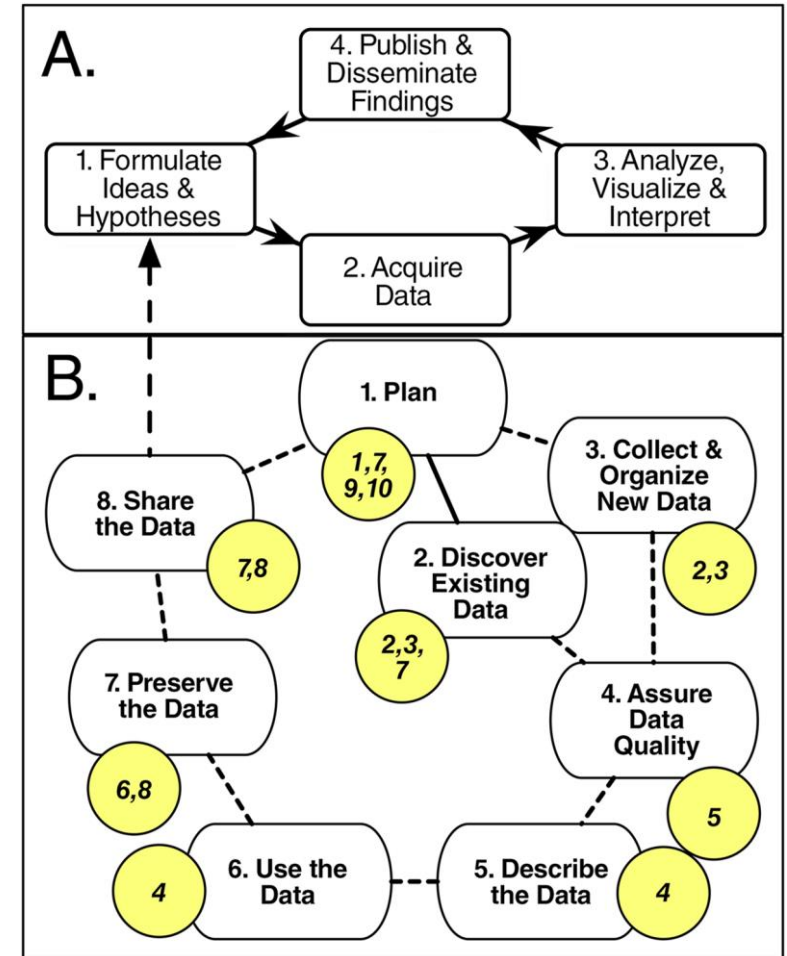
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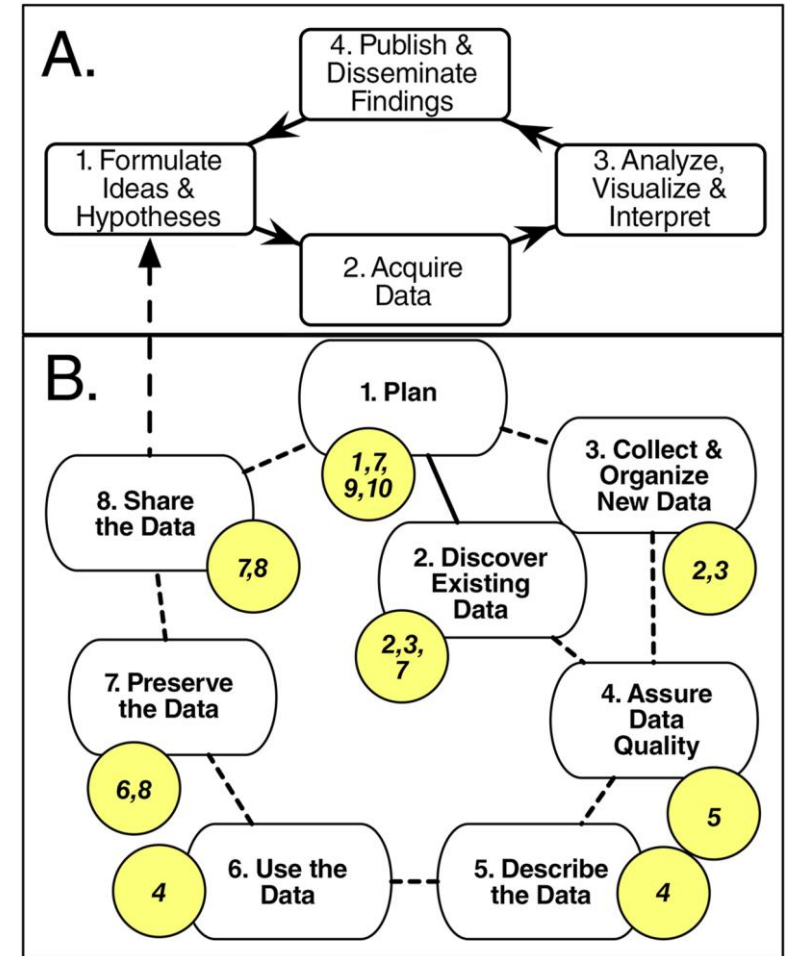
Assigning roles and responsibilities

- What are the roles of each participant in the project (not just in data management)?
- Who else outside of the project will be contributing?
- Who is responsible for data management during the project?
- Who is responsible for data management and archiving after the project is finished?
- Who will make sure the DMP is being followed?
- Who will be responsible for updating the DMP and how often?



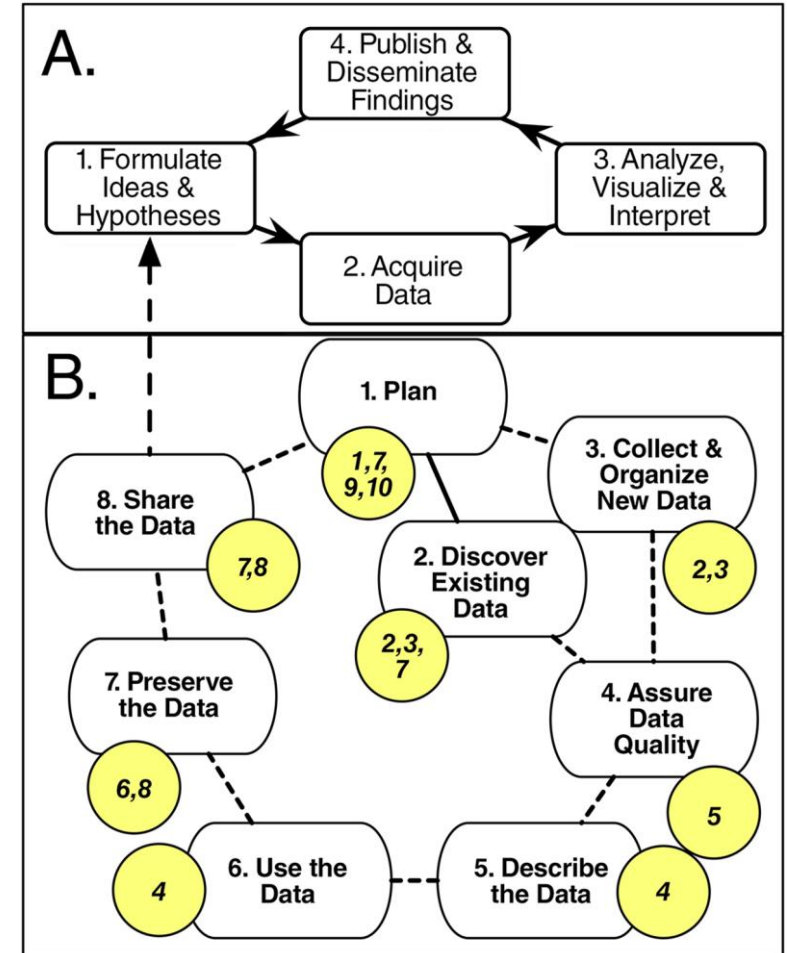
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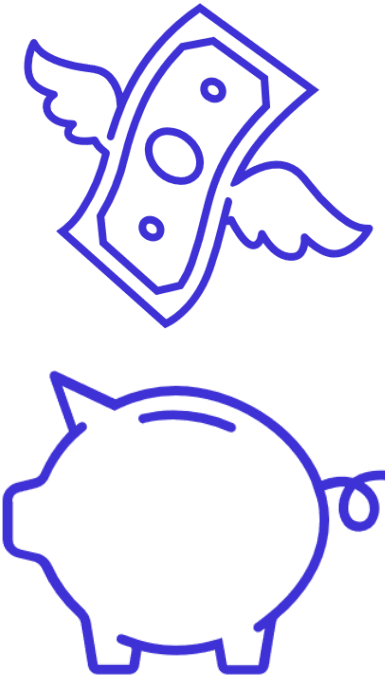
Prepare a realistic budget

Research Council of Norway: “A data management plan is an effective means of identifying costs associated with data management and storage, and can also help you to plan how to cover these costs.”

EC Horizon Europe: “Costs for providing open access to (...) data are eligible and should be budgeted in the proposal.”

Prepare a realistic budget

- Are there costs associated with purchase of **software** or hiring a **data manager**?
- Will you need to purchase new **hardware** or equipment?
- **Storage** costs: How much will it cost during the project (and after!)
- Is there a cost for **archiving**?
- What other resources are required? (e.g. HPC, licenses, ELN, etc.)



DMP Templates

<https://www.nsd.no/en/create-a-data-management-plan/>

<https://dmponline.dcc.ac.uk/>

Examples

Digital Curation Centre – [Example DMPs and guidance](#)

DMPOnline – [Public DMPs](#)

Publicly available Horizon 2020 Data Management Plans:

<https://phaidra.univie.ac.at/search/?page=1&pagesize=10&collection=o:1140797>

Liber DMP Catalogue: <https://libereurope.eu/working-group/research-data-management/plans/>

Services and tools for RDM support:

- Research support and IT staff at your faculty/institute
- Subject librarian for your discipline
- [Research data management website](#)
- Digital Scholarship Center (DSC)
research-data@uio.no
- Norwegian Centre for Research Data (NSD, now Sikt)



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Digital Scholarship Center

[Norwegian
version of this
page](#)

UiO's Digital Scholarship Center (DSC) can help you take advantage of digital tools and methods in your research. We offer support with data management, visualization, digital research methods, and digital skill development.



Research Data Management at UiO

Having proper Research Data Management (RDM) routines will help you save time, enables sharing and reuse of data, and promotes open science. However, RDM in a digital context can be challenging and complex. We offer guidance and consultation on RDM topics including:

- data management plans (DMP)
- classification and storage
- organization, documentation, and metadata
- legal questions (i.e. privacy, copyright, and licensing)
- archiving and sharing

Need advice?

Visit us at the room 230, in the 2nd floor of Niels Henrik Abels hus.

Book an appointment



Or send us an email to research-data@uio.no

Digital research methods

On these pages you will find overviews and user guides on digital research methods for researchers and students. There will be information about relevant digital research methods in many subject areas.

Currently, we have information about text mining - or digital research methods for those working with text data.

Digital scholarship communities

Interested in teaching or helping at workshops? Join us in:

→ Carpentries@UiO

→ [CodeRefinery - Get Involved](#)

Do you have any suggestions for workshops or seminars or questions about the workshops? Send an email to digitalscholarship@ub.uio.no

Carpentry: Training on foundational coding and data science skills

At University of Oslo (UiO), Carpentries workshops based on Software Carpentry, Data Carpentry, and Library Carpentry lessons are offered to facilitate sharing and re-using of code and data among graduates and researchers from all faculties and units.

Open and reproducible research

More and more researchers across disciplines are preregistering their hypotheses, methods, and analysis plans before they collect or analyze the data to increase research transparency and visibility. This course will give an introduction to preregistration and a step-by-step guide on how to do it yourself.

Introduction to open and reproducible research

May 11, 9:00 AM, Zoom

Preregistration of research studies

May 13, 9:00 AM, Zoom

Preregistration on Open Science Framework (OSF)

May 19, 12:00 PM, Zoom

R Markdown: Writing Reproducible Research Papers with R

May 24, 9:00 AM, Undervisningsrom 1, 3rd floor Georg Sverdrups hus

OA-publishing and research visibility

Keep copyrights to your own work by publishing in Open Access journals. Find out your research impact. The course gives you practical support in publishing process and making your research visible.

OA-publishing and research visibility

Mar. 23, 9:00 AM, Zoom

OA-publishing and research visibility

Apr. 26, 9:00 AM, Zoom

Open Science Lunch

Each last Thursday of the month at 12:00 we invite you to join us virtually for an online open lunch to hear about how to make your research more open. We will discuss research transparency and visibility, open publishing, data sharing, and more!

Upcoming



Time and place: Mar. 31, 2022 12:00 PM–1:00 PM, Zoom, [Add to calendar](#)

Open Science Lunch: Building and running a service for sharing curated research data

Learn about how data sharing services are built and run based on an example from EBRAINS Research Infrastructure.



Time and place: Apr. 28, 2022 12:00 PM–1:00 PM, Zoom, [Add to calendar](#)

Open Science Lunch: Open your research to the public

Learn about how you can conduct open science projects in the wild based on an example from MusicLab!



Journal Clubs

Our mailing list:

<https://sympa.uio.no/uio.no/subscribe/open-science-oslo>

University of Oslo

Welcome

Our journal club is open to both staff and students at UiO across all departments. Everyone is welcome to join us - whether you are an enthusiast, a skeptic, or a cautious explorer. Feel free to get in touch if you are interested to participate or contribute!

Our mission

- provide an informal and friendly platform for discussions about meta scientific topics
- help each other get familiarized with open science practices (e.g., pre-registrations, sharing data, sharing preprints, etc.)
- connect students and researchers from various disciplines who are interested in meta science.

Format


Before each meeting, we read an article on meta scientific topics, which we then discuss during the meeting. At each meeting, a different discussion leader will begin by providing a short overview of the paper and facilitate discussion throughout the meeting. Anyone can propose a possible paper or topic to present if we have not covered it already. Grab a cup of tea (coffee?) and join us! Due to the current pandemic, all sessions will be held online (Zoom) for the time being.


 Universitetet i Oslo

 osf.io/mvx54

Z collection

 timo.b.roettger@gmail.com

 Timo B. Roettger

 Agata Bochynska



Materials developed as a part of the *Skills development for research data* project:
<https://www.ub.uio.no/english/about/projects/rdm-skills/>

Thank you!

Contact us at:

research-data@uio.no

Sources

- UiO's [resources for data management](#)
- FAIR [principles](#)
- About DMP from Nature: <https://www.nature.com/articles/d41586-018-03071-1>
- Michener, W. K. (2015). Ten Simple Rules for Creating a Good Data Management Plan. *PLoS Computational Biology*, 11(10): e1004525. <https://doi.org/10.1371/journal.pcbi.1004525>
- Science Europe: [Practical guide](#) to the international alignment of research data management
- The Research Council of Norway: [Open Science](#)