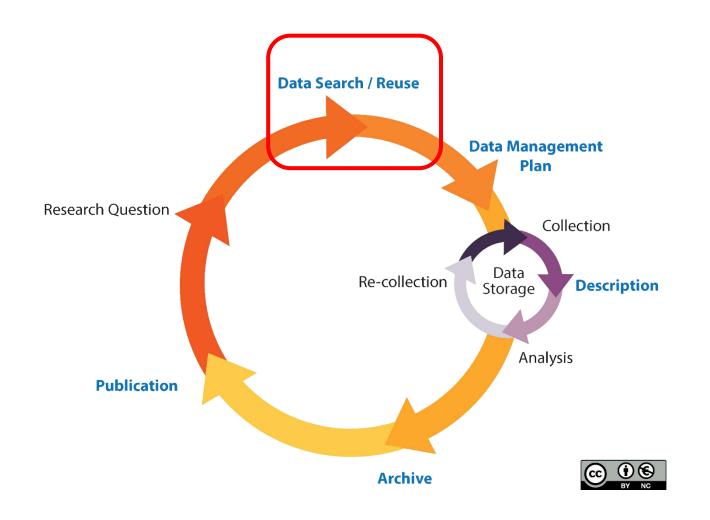


How to search and cite research data

Tromsø, 19 April 2023

Andreas Klein & Anna Karpova
University Library





Adapted original source: The University of California, Santa Cruz, Data Management LibGuide, Research Data Management Lifecycle, diagram, viewed May 2, 2016 at http://guides.library.ucsc.edu/datamanagement

Purpose

Part 1

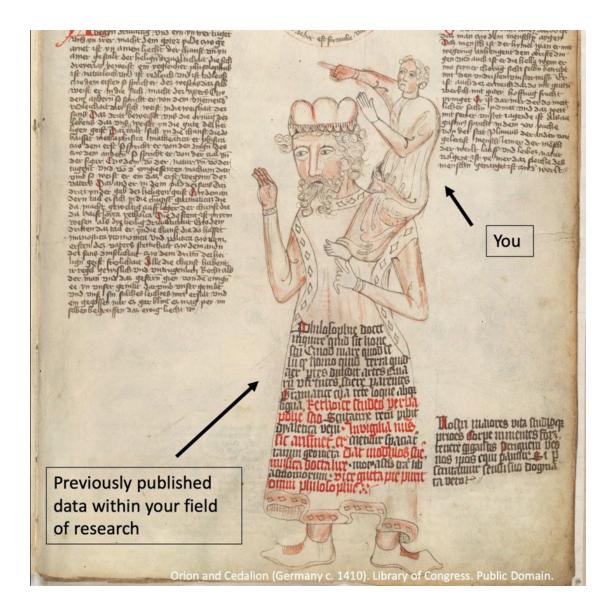
- Understand the purpose of searching for research data.
- Know 3 ways of searching for data: The search engine, the repository registry, and the repository.

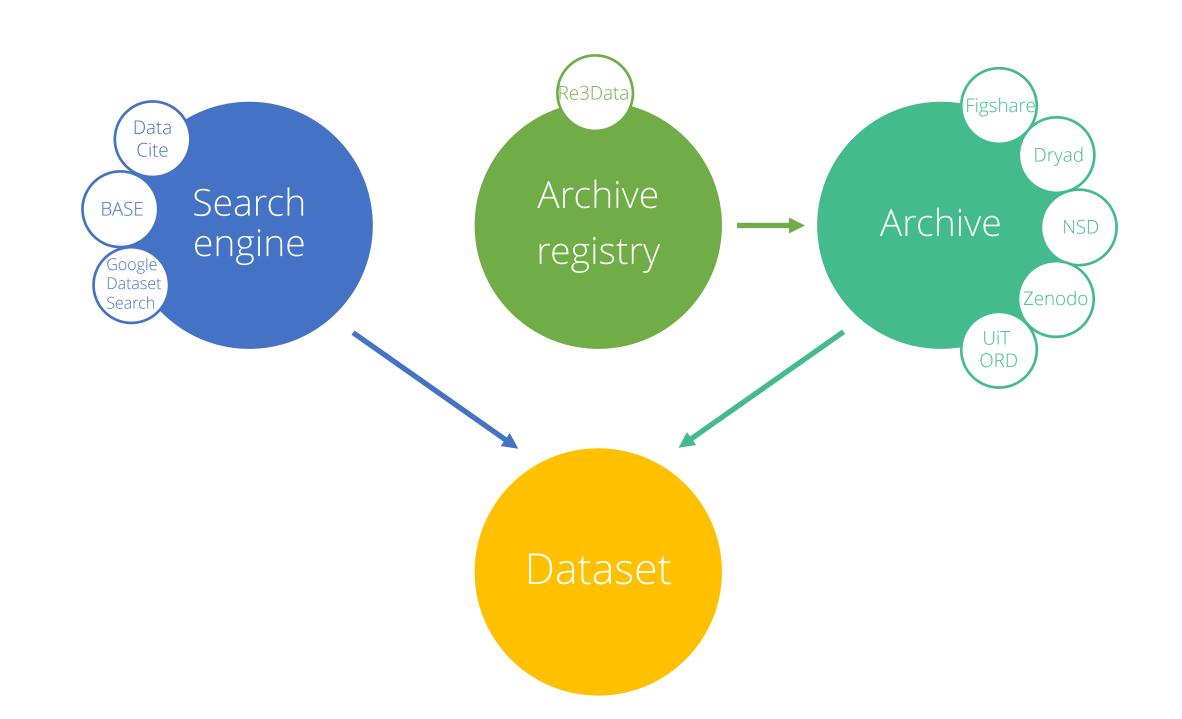
Part 2

- Understand the purpose of citing research data.
- Understand the structure of the data citation and its bibliographic reference.

Some benefits of having access to other people's research data

- Get a deeper understanding of, and an increased trust in the text you're reading.
- Data: A source available for use in your own argumentation.
- If possible, avoid starting your data collection from scratch.
- If relevant, adjust method and focus of your planned data collection.





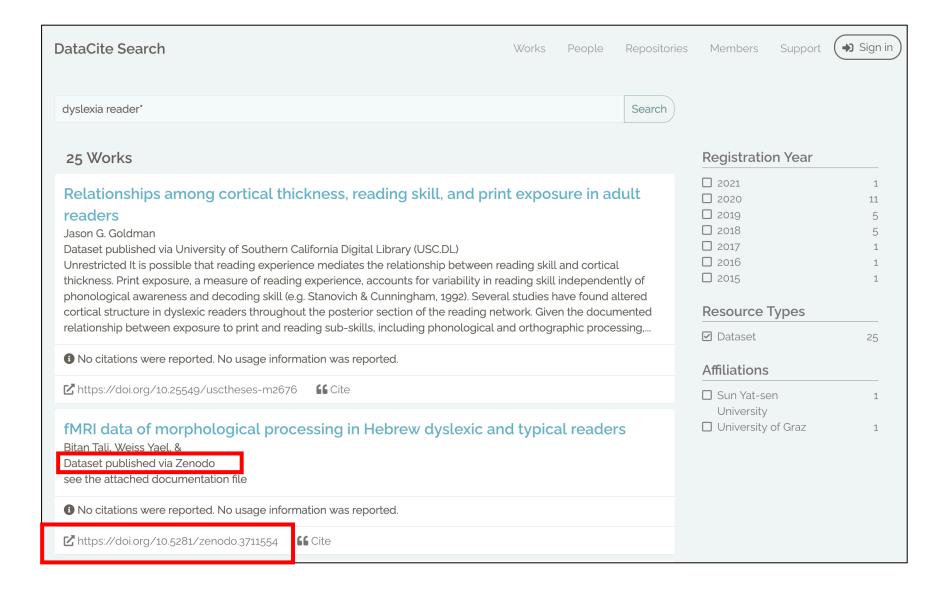
Searching data: The search engine

DataCite

- Multi-disciplinary search engine for datasets with a DOI
- Metadata free to access
- Refined search options



https://search.datacite.org/



Filtering & access

- Restrict to «dataset»
- Restrict time period if needed
- Click DOI to go to the dataset

- The dataset itself is **not** in DataCite, but in the repository Zenodo.
- You download the files from here
- Check license information about how the dataset can be reused

You are free to:

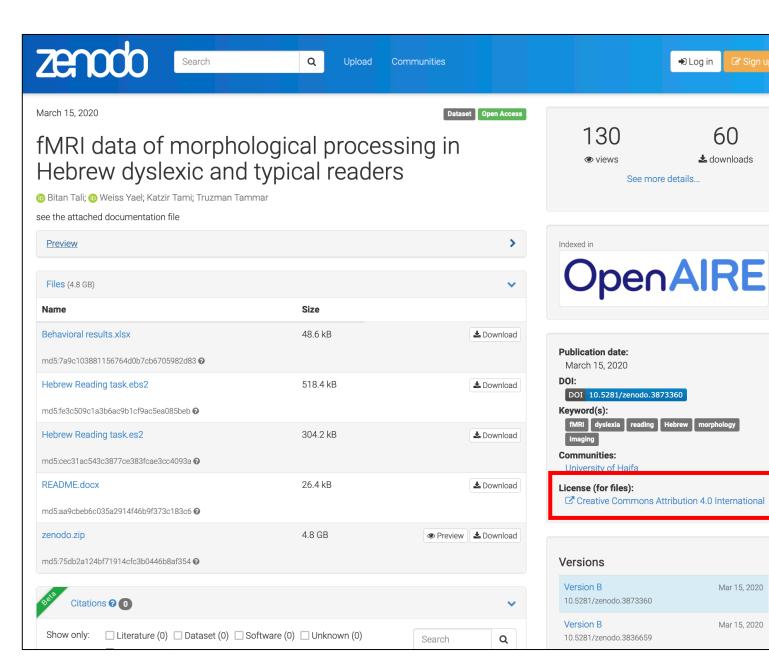
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60

♣ downloads

Mar 15, 2020

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Searching data: The search engine

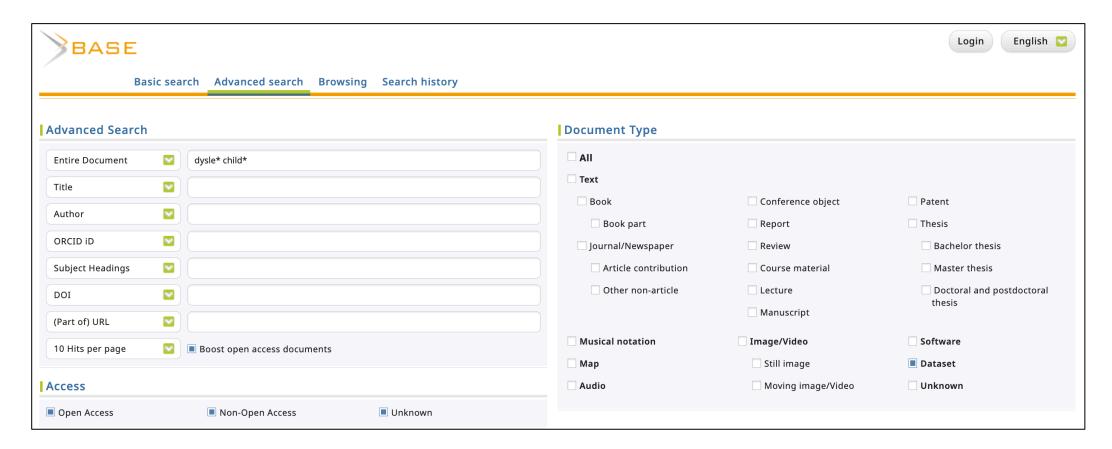
Bielefeld Academic Search Engine (BASE)

- Multi-disciplinary search engine
- Research data: BASE harvests metadata from different repositories (in addition to metadata in DataCite)
- Metadata free to access
- Refined search options

We look at an example in the browser!



https://www.base-search.net/



Search tips

- Use the «help»-function to find out how to do complex searches
- Restrict to «dataset»
- Few/too many results? Narrow down, broaden, change search terms

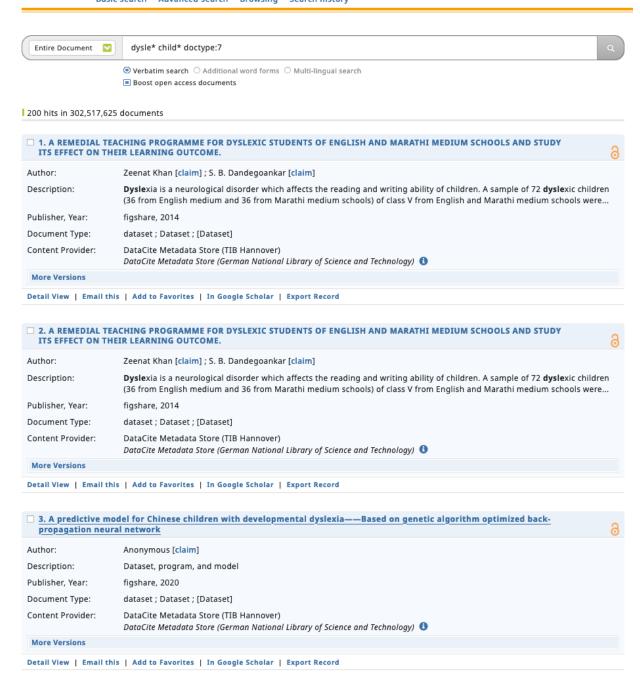
Metadata

- Access
- Description
- Year of publication
- Content provider

 Tip! If the dataset is not marked with an open access symbol, go to the repository and check whether you can get access through application.



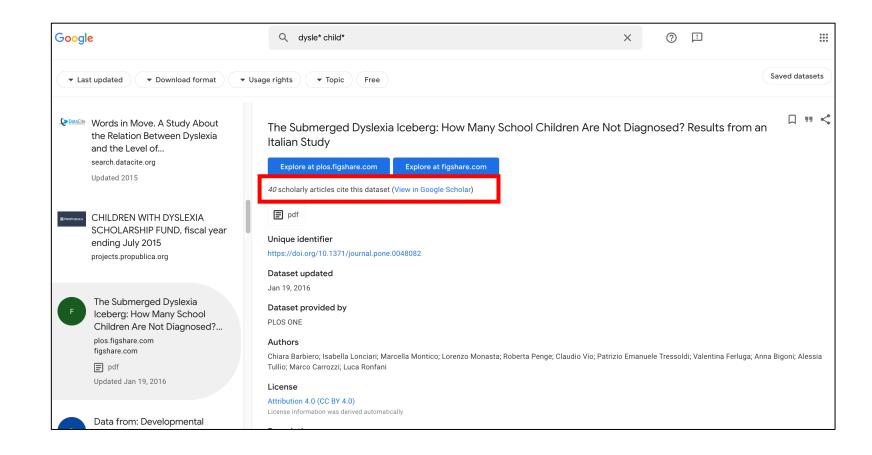
Basic search Advanced search Browsing Search history



Searching data: The search engine

Google dataset search

- Multidisciplinary search engine
- Indexes data from e.g. DataCite
- Open metadata



Searching data: the search engine

Open Polar

- Multi-disciplinary
- Arctic and Antarctic
- Indexes data from 4600 databases
- Open metadata
- www.openpolar.no





Searching data: The repository registry

Re3data

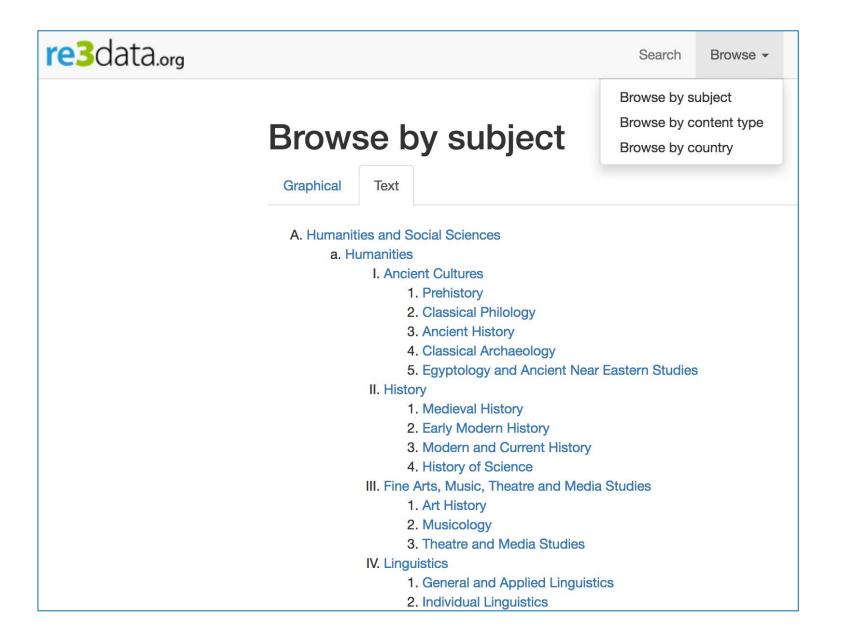
- Around 2800 repositories
- Multi-disciplinary
- Open metadata



http://www.re3data.org/

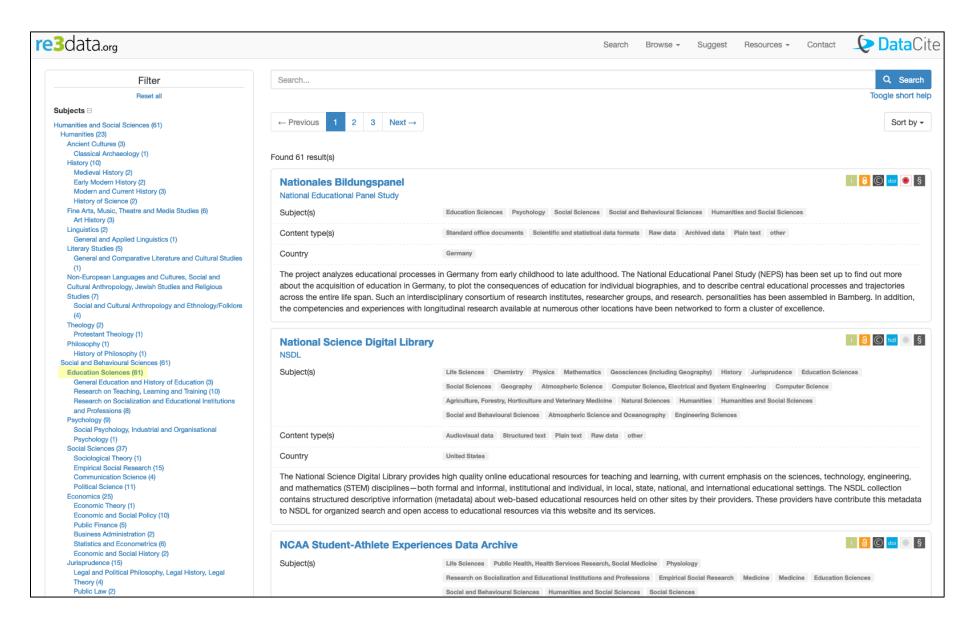
Browse by subject: Text

Use the hierarchy to do a refined search for *your* (sub) discipline



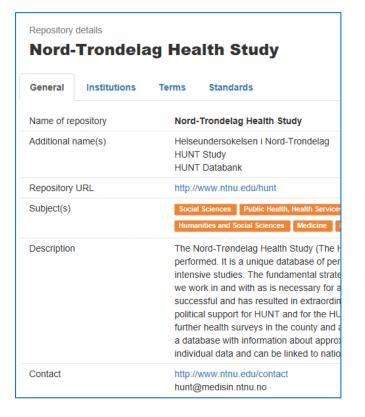
Main metadata easily findable:

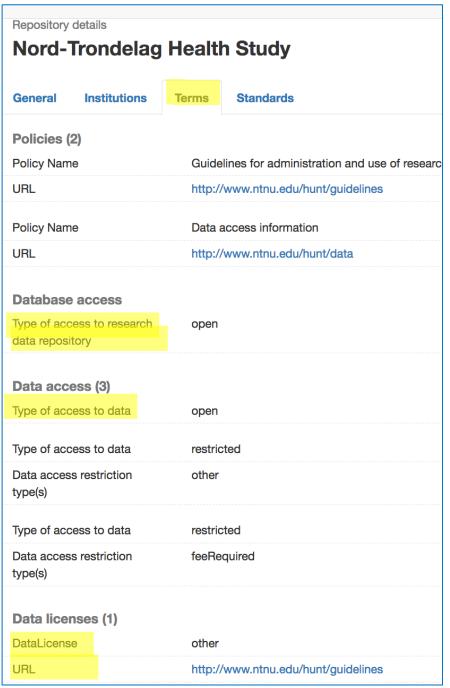
- Subject
- Content
- Country
- Short description



Terms:

- Information about access to data
- Link to guidelines

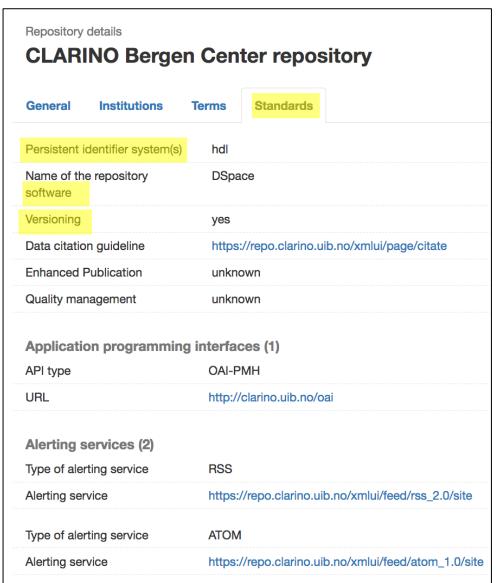




Standards:

- Information about persistent identifiers
- Software
- Version control





Searching data: The repository

Zenodo, Dryad, Figshare:

Internationally widely used repositories



UiT Open Research Data:

UiT's institutional data repository





- Multidisciplinary
- Free
- Good help menus



Norwegian Centre for Research Data (NSD)



About NSD

Norsk

My page



Find data

NSD has extensive collections with data about people and society. Some data collections are documented in English, while others are only documented in Norwegian. Please contact us if you need help to find what you are looking for.

Search for webpages and research data (beta version)



European Social Survey (ESS)

A cross-national survey using high methodological standards to provide freely available data for 38 countries. NSD is data archive for the ESS survey.

Norwegian Research Data

Data from norwegian researchers, Statistics Norway and other research institutions. Top level documentation in English.



Data about people

Norwegian Research Data (Top level documentation in English)

NSD's Opinion Poll Archive

School Election Surveys

European Social Survey (ESS) (In english)

microdata.no (Register data)

Data about regions and institutions

Statistics about education and research (DBH)

The Commune Database

Statistics about churches

School Election Data

Data about the political system

Forvaltningsdatabasen

Storting (Parliament)

Regjering (Government)

Politiske parti (Political parties)

Sentraladministrasjonssundersøkelsene (Central Administration Surveys)



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Microdata.no

https://www.microdata.no/

Microdata @ UiT (info in Norwegian only)

NORSK SENTER FOR FORSKNINGSDATA



Statistics Norway

https://www.ssb.no/

Calculate price changes with CPI

See the advance release calendar

the rent?

CALENDAR

Calendar

microdata.no makes it easier to analyse register data

- Researchers and students can process and analyse all available register variables.
- Data is available on the population, education, income, the labour market and welfare benefits.
- Institutions that have signed an agreement can manage their own users.
- The solution has an anonymisation interface with embedded privacy protection.

Big batch of variables up-todate

Norsk

113 variables in microdata.no were updated with the latest available data in a new version that was released November 2nd. Population variables are updated to 2020, education, labour market and welfare to 2019.

Income variables now cover 2018.

Read more

Citation of research data

The purpose of data citation

- Help data become more findable and accessible.
- Provide accountability for the dataset.
- Credit the intellectual effort behind dataset creation.

(Parsons et al., 2019)

«making data count»

Research Data Alliance initiatives

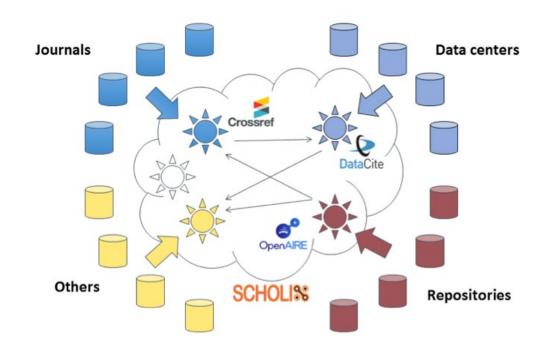
- Scholix Working Group
- Data Usage Metrics Working Group

Development of guidelines for how to collect and share reuse statistics for data, incl. link between article and dataset.

Key elements

- Persistent identifier (e.g. DOI)
- Correct citation of datasets

(Cousijn et al., 2019)

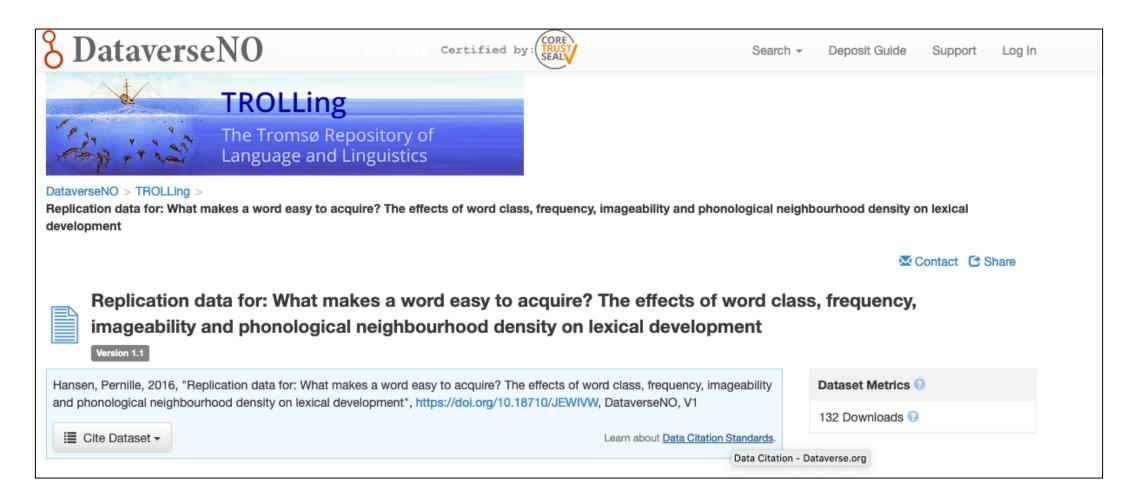


Schematic overview of the proposed multi-hub interoperability framework including the Crossref, DataCite and OpenAIRE hubs as collectors and aggregators of information about links between literature and data scholarly artefacts from respective communities Copyright ® 2017 Adrian Burton, Hylke Koers, Paolo Manghi, Markus Stocker, Martin Fenner, Amir Aryani, Sandro La Bruzzo, Michael Diepenbroek and Uwe Schindler

Citing research data

Is citing research data in any way different or more difficult than citation of other scientific publications?

Citing research data



Citing your research data in your own paper

Notes

- There are three Norwegian CHILDES corpora, but the third is transcribed in a Trondheim dialect, and could not be processed by the automatic tagger.
- The complete frequency list is available at http://dx.doi.org/10.18710/JEWIVW together with data on AoA, VSoA, word class and frequency for the CDI words analysed here (Hansen, 2016).

Guevara, E. (2010). NoWaC: A large web-based corpus for Norwegian. Proceedings of the NAACL HLT 2010 Sixth Web as Corpus Workshop (pp. 1–7). Retrieved from http://www.aclweb.org/ anthology/W10-1501

Hansen, P. (2016). Replication data for: What makes a word easy to acquire? The effects of word class, frequency, imageability and phonological neighbourhood density on lexical development (UiT Open Research Data Dataverse, V1). doi:10.18710/JEWIVW
Hansen, P., Simonsen, H. G., Łuniewska, M., & Haman, E. (in press). Validating the psycho-

Structure of the reference

Hansen, Pernille, 2016, "Replication data for: What makes a word easy to acquire? The effects of word class, frequency, imageability and phonological neighbourhood density on lexical development", https://doi.org/10.18710/JEWIVW, DataverseNO, V1

Element	Description
Author	Researchers that have produced the data, written an article
Year of publication	Moment when the data were made open
Title	Name of the dataset
Identifier	Unique string that identifies the dataset (doi, handle)
Publisher	Name of the archive

Obligatory

Version	If dataset changes, the version number changes
Reuse license	i.e. elements required by the dataset's license
Type of data	e.g. dataset, corpus, picture archive
Related identifier	Full dataset in the case of subset use

Recommended

In-text citation and bibliographical reference: Full dataset or multiple files from one dataset

In-text citation:

Now I refer to the full dataset (Hansen, 2016).

Now I want to refer to a specific file in the dataset (Hansen, 2016, file name: main data.txt).

Bibliographical reference:

Hansen, Pernille, 2016, "Replication data for: What makes a word easy to acquire? The effects of word class, frequency, imageability and phonological neighbourhood density on lexical development", https://doi.org/10.18710/JEWIVW, DataverseNO, V1

In-text citation and bibliographical reference: One specific file

If the specific file has a persistent identifier (= permanent link): use the bibliographic reference for the file.

If the specific file has <u>no</u> persistent identifier (= permanent link) of its own: use the bibliographic reference for the full dataset.

In-text citation

In this text I refer only to a specific file in the dataset (Leivada and Westergaard, 2019).

Bibliographical reference

Leivada, Evelina, Westergaard, Marit, 2019, "raw data for bidialectals_Universal linguistic hierarchies are not innately wired.txt", Replication Data for: Universal linguistic hierarchies are not innately wired, https://doi.org/10.18710/NTLLUF/XAMMNB, DataverseNO, V1

More information and help



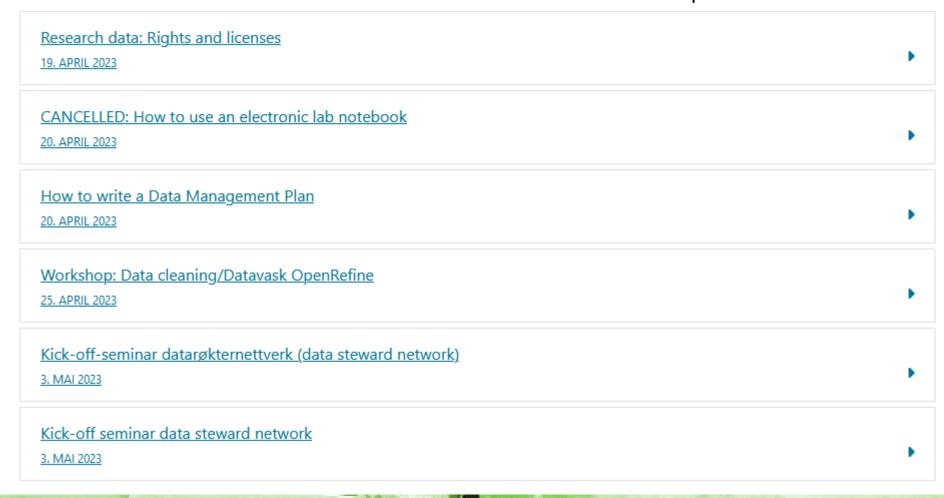
UiT Research Data Portal:

https://uit.no/researchdata/



Email: researchdata@hjelp.uit.no

Scheduled webinars and workshops this fall



References

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- Cousijn, H., Feeney, P., Lowenberg, D., Presani, E., & Simons, N. (2019). Bringing Citations and Usage Metrics Together to Make Data Count. *Data Science Journal*, *18*(1). https://doi.org/10.5334/dsj-2019-009
- Parsons, M.A., Duerr, R.E., & Jones, M.B., (2019). The history and future of data citation in practice. *Data Science Journal*, 18(1), p.52. http://doi.org/10.5334/dsj-2019-052
- Starr, J, & Gastl, A. (2011) isCitedBy: A metadata scheme for DataCite. *D-Lib Magazine, 17,* 1-6. https://doi.org/10.1045/january2011-starr

DataCite Metadata Schema: https://schema.datacite.org/



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