



Supporting research data management and use of FAIR principles in citizen science projects by university libraries

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What is citizen science?



Citizen Science is a research method, where citizens partake in developing research questions and designs, and in collecting and/or analysing data. The collaboration between scientists and citizens may facilitate collecting and analysing data sets profoundly larger than the scientists can do on their own.

Watch a video about a citizen science project:



A project of Danish university libraries^a



Aim

To propose guidelines for good research data management of Citizen Science (CS) projects.

Questions asked

- What challenges do CS researchers face?
- What is good RDM in CS projects?
- How can FAIR principles support CS projects?
- What is the library's role in CS projects?

Methods

We interview CS researchers and do literature searches to identify challenges and existing procedures. We wish to adopt several RDA outputs into the guidelines.

Watch a video about the Ten principles of citizen science^b:



The FAIR principles in citizen science

Watch a video about how a citizen science researcher uses the FAIR principles in his project:



Which RDA outputs may benefit guidelines for good research data management of citizen science projects?

RDA outcome or recommendation

Data Foundation and Terminology

Data Citation of Evolving Data

Data Discovery Best Practice for Data Providers

Data Discovery Best Practice for Data Repositories

Legal Interoperability of Research Data: Principles and Implementation Guidelines

Relevance for citizen science (CS)

Ensure that researchers and librarians share language when organising data.

CS data grow and evolve, therefore, assign PIDs to extracted datasets for discovery and citation.

CS data should be deposited in recognised repositories, identified by a PID, adhere to community-specific metadata standards, clearly state how to be cited, have guidance on data usage and ascribe a usage license. Data contributors should use ORCIDs.

Libraries that support publication and archiving of CS data must consider e.g. searchability, identification, evolving data, author identification, PIDs and usage license.

CS researchers have intellectual property rights concerns and often handle personal data. Can the Principles and their practical implementation guidelines support CS researchers and librarians?

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References and acknowledgement

^a WP4 of the DEFF project "Identificering af fag- og forskningsbibliotekernes rolle ift. udbredelse og understøttelse af Citizen Science"

^b European Citizen Science Association, 10 Principles of Citizen Science Drawings are courtesy of Frits Ahlefeldt-Laurvig, CC-BY-NC-ND