

Curtin University Library

8 steps to make your data more FAIR

The FAIR principles describe how research outputs should be organised so they can be **findable, accessible, interoperable and reusable**. Major international and national funding bodies, including the ARC and NHMRC, promote FAIR data to maximise the integrity and impact of their research investment.

The FAIR principles are designed to support knowledge discovery and innovation both by humans and machines. Making your research data FAIR can increase visibility and impact of yourself and your work, maximise potential from your data assets, and improve the reproducibility of your research.

Findable

Describe your research data to maximise discovery.

1 Consider the information you will need to accurately interpret and reuse a dataset in your discipline, then include this detailed information with your data. Make use of keywords, controlled vocabularies and a thesaurus to maximise its chance of being found online.

Give your research data a unique identifier.

2 A Digital Object Identifier (DOI) can be used to cite your data or link it to your author identifier (ORCID), institution, grant, publications, and project, providing a full picture of your body of works.

Accessible

Register your research data online.

3 You may choose to publish your data openly or only publish the metadata to a data repository. Either option can make your data more FAIR.

Define access rules, protocols and requesting.

4 If your data is not available openly, define access rules and protocols, and describe how access can be requested. Make sure to keep your contact details up to date. If you no longer have custodianship of the data, don't forget to update the access information.

Interoperable

Use open, unencrypted, uncompressed forms.

5 Use open, non-proprietary file formats and share your data in its unencrypted and uncompressed form. Include software and source code where possible to ensure others can reuse and reproduce your research result.

Adopt common metadata schema and data description standards.

6 These allow inter-disciplinary interoperability, data exchange, and machine readability.

Reusable

Apply a licence and explain how your data can be reused.

7 Creative Commons licenses are widely used and easy to understand. Bear in mind that a Creative Commons non-derivative license is not appropriate for data as while it allows access, it prohibits adoption and reuse.

Obtain participant consent.

8 If your data contains personal information, ensure that you plan for obtaining participants consent so that you can make a de-identified version of the data available.

Following the FAIR guiding principles will strengthen your research data management strategy. Even if you don't intend to share your data with anyone yet, you will most likely reuse your own data. So, take the 8 steps to make your research data more FAIR and be the best collaborator of your future self!

Contact ResearchData@curtin.edu.au if you require assistance publishing or making your data more FAIR.