

23 Things: Libraries for Research Data

An overview of practical, free, online resources and tools that you can begin using today to incorporate research data management into your practice of librarianship.

Research Data Sharing Without Barriers

Learning Resources

Librarians are learning how to apply the principles of library science to solve problems and to provide new services related to research data.

- A "top ten" list of recommendations for libraries to get started with research data management from LIBER,_ https://tinyurl.com/RDAthing 1
- Relevant concepts are presented and mapped in the e-Science Thesaurus, https://tinyurl.com/RDAthing2
- Understanding the life of research data with the DCC Curation Lifecycle Model,
 https://tinyurl.com/RDAthing3
- 4. MANTRA online training modules for librarians,
 https://tinyurl.com/RDAthing4
- Read the most current literature in the Digital Curation Bibliography, https://tinyurl.com/RDAthings
- Dozens of examples of resource guides created by librarians for patrons to learn more about data on the SpringShare LibGuide Community Site, https://tinyurl.com/RDAthing6

Learning Resources

Data Reference and Outreach

Data Management Plans

Data Literacy

Citing Data

Data Licensing and Privacy

Digital Preservation

Data Repositories

and a Community of Practice

..to help librarians engage in research data management!

Data Reference & Outreach

Librarians are answering questions about data from patrons and conducting outreach to assess the data needs of their researchers and students.

- Begin a conversation with a researcher about data by Conducting a Data Interview, https://tinyurl.com/RDAthing7
- Learn more about a researcher's needs by reading or creating your own Data Curation Profile,_ https://tinyurl.com/RDAthing8
- 9. Develop engagement materials to help your librarians such as the DataOne Librarian Outreach Kit, https://tinyurl.com/RDAthing9

10. Questions about data answered by experts on the DataQ forum, https://tinyurl.com/RDAthing10

Data Management Plans

Librarians are becoming familiar with funder requirements and consulting with researchers to help them write and implement effective data management plans.

11. One example is the DMPTool that lists funder requirements in the United States and builds a plan by asking the researcher to answer a series of questions. Other countries such as the U.K. and Canada have similar tools, https://tinyurl.com/RDAthing11

Data Literacy

Librarians are including data in their information literacy instruction, to recognize when patrons have a need for data and have the ability to locate, evaluate, and use data.

project and book developed a curriculum to help librarians and other teachers incorporate data into information literacy outreach and instruction, https://tinyurl.com/RDAthing12

Metadata

Librarians are helping to organize, classify, and describe research data and developing standards for metadata to help make data more easily discovered, understood, and preserved.

13. Determine what metadata format is appropriate and standard to recommend or apply by using the Metadata Standards Directory, https://tinyurl.com/RDAthing13

Citing Data

Librarians are helping to promote the scholarship of data by encouraging and enabling data citation, assigning identifiers to datasets, creating links between documents and data, and helping users properly attribute credit to data producers.

14. DataCite has resources to help researchers make their datasets citable to help users give attribution and to begin measuring impact by issuing Digital Object Identifiers (DOIs) for datasets, https://tinyurl.com/RDAthing14

Data Licensing and Privacy

Librarians are helping researchers share their data using appropriate licenses and while protecting confidential information about subjects or other sensitive data.

- 15. How to License Research Data from the Digital Curation Centre can help librarians work with researchers to choose a license for the data they share, https://tinyurl.com/RDAthing15
- 16. JISC manages the DATA-PROTECTION email list with discussions on issues related to sensitive data, https://tinyurl.com/RDAthing16

Digital Preservation

Librarians are working with the archival community to develop and implement infrastructure and practices to ensure that data collections are accessible and usable in five, twenty, fifty, or a hundred years or longer.

- 17. Understand vocabularies and standards for digital archives using the Open Archival Information System (OAIS) reference model, trustworthy digital repository certifications such as ISO 16363 and the CoreTrustSeal, and standards for making data FAIR.
- 18. Find tools that are available to help with digital preservation using COPTR, https://tinyurl.com/RDAthing18

Data Repositories

Many libraries are providing institutional repositories to enable their users to publish and archive datasets or helping researchers identify other, appropriate repositories for specific funders, disciplines, or other domains.

- 19. Find an appropriate repository by searching the re3data.org registry of research data repositories, https://tinyurl.com/RDAthing19
- 20. Publish and share data now using free, online data repositories such as <u>figshare</u>, <u>Zenodo</u>, <u>Open</u> <u>Science Framework</u>, or <u>Dataverse</u>

Community of Practice

Librarians are connecting with each other and a larger community of researchers, technologists, funders, publishers, and others to develop solutions and share best practices for research data management.

- 21. An example of a national approach to research data management community-building at a federal level is the Australian Research Data Commons,
 - https://tinyurl.com/RDAthing21
- 22. Some annual conferences that address research data and involve librarians include the International Digital Curation Conference (IDCC), Research Data Access & Preservation Summit (RDAP), International Association for Social Science and Information Services & Technology (IASSIST), and Research Data Alliance (RDA).

23. Join the Research Data Alliance!

Belong to an international community who builds social and technical bridges to enable data sharing. It's free to join by visiting the website, then subscribe to the Libraries for Research Data Interest Group, https://tinyurl.com/RDAthing23

Contact Information

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