Research Data Management for Oxford Researchers

Research data management is an umbrella term, covering both **dealing with data on a day-to-day basis** during a research project and **longer term issues** such as preservation and sharing.

While it includes working with structured data (the sort that might be stored in a table or database), it certainly isn't limited to that – it also covers textual sources, images, recordings, and much more.

Good data management is about making the research process as efficient as possible:

- In the short term, making sure you can **find the information you need** when you want it
- In the longer term, ensuring the information collected **remains useful**

Start early and think ahead

A key principle of good data management is **forward planning** – the earlier you start, the easier it tends to be. (On the other hand, it's never too late to make some improvements.)

- Have you considered making a **data management plan**?
    - A tool such as DMPonline (https://dmponline.dcc.ac.uk/) can help with this
    - Many funders now require a data management plan as part of funding bids
- Do you have good systems in place for **organizing your material**? Are there changes you could make to make life easier for yourself?
- Are you using the most appropriate **software or other tools** for the job?
    - There's a lot of choice out there: the Research Skills Toolkit (http://www.skillstoolkit.ox.ac.uk/) provides an overview
    - Colleagues may also have useful recommendations
- Are you recording all the **contextual information** needed to ensure your data remains intelligible?
- What are your **long term plans** for your data? What do you need to do now to facilitate these?
    - Many funders now require researchers to make their data publicly available at the end of the project – does this apply to you?

Help and advice

- The **Research Data Oxford** website (http://researchdata.ox.ac.uk/) is a central source of guidance and further information
    - Book a Data Health Check (http://researchdata.ox.ac.uk/healthcheck/) for personalized advice
- The IT Services Research Support team (http://research.it.ox.ac.uk/) can provide technical advice, including help with funding bids
- The Bodleian Data Library (http://www.bodleian.ox.ac.uk/data) provides advice on finding and using data in research, plus support for data archiving and sharing
    - Subject librarians (http://www.bodleian.ox.ac.uk/subjects-and-libraries/subjects/librarians) can also provide help

Storage and backing up

We all know that it's important to **store things safely**, and to make sure they're properly **backed up**. It's worth keeping copies of your data in two or three different places – in case of fire or theft, for example.

- You may be entitled to space on a departmental server – this is often a good option
- IT Services' HFS back-up service (http://help.it.ox.ac.uk/hfs/) is available free of charge to University staff and postgraduates
- For sensitive data, it's important to ensure that appropriate security is in place – visit the Information Security website (https://www.infosec.ox.ac.uk/) for advice

Data sharing and curation

Data is a valuable resource. A lot of effort goes into producing a dataset, and it can often be useful beyond the lifetime of the project that created it.

- Consider ultimately **preserving and sharing** your data by depositing it in a **repository or archive**
    - As well as being useful to other researchers, people using and citing your data can help boost your academic reputation
- Many archives exist, many of them specializing in data from a particular discipline – see Re3Data.org (http://www.re3data.org/) for a catalogue
- ORA-Data (http://www.bodleian.ox.ac.uk/bdlss/digital-services/data-archiving) is Oxford's own institutional data archive
    - It also acts as a catalogue for Oxford research data deposited elsewhere, thereby facilitating discoverability and citation
- The Digital Curation Centre's website (http://www.dcc.ac.uk/) is another useful source of information

Although data sharing is usually done towards the end of a project, it pays to plan for it from the beginning.

- Shared data needs to be **consistently presented** and **properly documented** – that is, accompanied by any auxiliary information needed to interpret it properly
- If you're working with human subjects (conducting interviews, for example), you'll need to get appropriate consent

It's a lot easier to think about this sort of thing when you first collect or compile the data, rather than having to go back and fill in the gaps later.

Training

- The Data Training Calendar (http://researchdata.ox.ac.uk/portfolio/data-training-calendar/) lists upcoming University of Oxford courses, including those provided by IT Services and the Bodleian Libraries
- The Skills Hub (https://weblearn.ox.ac.uk/portal/hierarchy/skills/) offers details of further University training provision

This document is available online at http://researchdata.ox.ac.uk/induction.