Managing Research Data and Data Management Planning

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Overview

Help you think about practical issues to do with creating, accessing, working with and securing data

Introduce you to research data management (RDM) support here and its benefits for you

Inform you about stakeholders: institutions, funders, publishers

See RDM as part of research skills and data literacy

libguides.bodleian.ox.ac.uk/workshops/rdm
Policy on Management of Research Data and Records

There is a formal policy:

“The University of Oxford seeks to promote the highest standards in the management of research data and records as fundamental to both high quality research and academic integrity.”

See Research Data Oxford (RDO)

http://researchdata.ox.ac.uk/
Policy on Management of Research Data and Records

No one would disagree with that but in practice what does it mean?

‘Management’ - Protecting ourselves as projects develop or things go wrong;
Laptop lost or stolen
Hard drive crash
Funding terminated
Team members disperse
Memory fails
Reputational damage
Forgotten passwords
Inherited projects – no metadata
Impact on You

Responsibility is yours as data creators to be aware of policy
Combine with wider research skills development
Respond to funder/publisher expectations in the future
Make use of the support framework at Oxford
Be aware of bigger research picture
What Are Your Concerns?

Why have you come today, what are your concerns

You may want to talk about what you use, e.g. Laptop, PC, server, phone, paper lab book

Or your research environment? E.g. are you on your own in a library or are you in a lab, in the field, working with partners...
Some Principles of Data Management

How can RDM help with these concerns?

Data Management Planning and the research lifecycle

All stages of research
- Before
- During
- After

Data and Metadata

Usable and *citable* for you now (secure storage)

*and* in future (accessible – preservation)
Digital Media

Digital – a key factor in rdm

Strengths of digital
- Perfect copies
- Easy to share
- Convenient

But there are weaknesses *to be managed*
Digital Media

Weaknesses of digital
- *Too* easy to share
- *Too many* copies
- Hardware and software dependent
- Corrupted - Immediate loss
- Inflexible – difficult to repurpose
- Long term use issues - Digital obsolescence and fragility
- Ethical and licensing issues

Curate it
- Collaborate on data management
Management takes Shape

Day to day protocols on collection and use

Disaster planning
  ◦ Multiple storage and backups
  ◦ Data security

Appropriate workflow?

Documentation – Metadata
  ◦ Natural offshoot of literature search/ research diary?

Formalisation of procedures ensures preservation

Preservation as basis of sharing
Getting Support for RDM

Important distinctions in managing your data and how others view it

Dynamic or static?

See where and when support fits in

During or after the project?
  - **HFS** (during but not after)  [https://help.it.ox.ac.uk/internal/sld/hfs](https://help.it.ox.ac.uk/internal/sld/hfs)

  - **RDO** on other options  [http://researchdata.ox.ac.uk/](http://researchdata.ox.ac.uk/)

  - External archival services
Support Frameworks

You are not left to figure this all out yourself!

At Oxford:

◦ The Library and its Subject Consultants
◦ Departmental level support
◦ Research Skills training
◦ Research Data Oxford webpage
◦ Research Data Oxford email
◦ ORA / ORA-Data
Support Frameworks 2

Ethical and legal issues
- Creating data – live participants
- Curec
- Collecting data – Licensing

Research Ethics
- Access Restrictions
- Participation/Confidentiality agreements
- Ethics Committees and Informed Consent

All influence current and future use
Support Frameworks 3

Outside Oxford:
- Digital Curation Centre   www.dcc.ac.uk/
- UK Data Archive/Service  www.ukdataservice.ac.uk/manage-data/plan
- Edinburgh – MANTRA Course  mantra.edina.ac.uk/
- Publications (Rice & Southall 2016, Angus Whyte 2014)
- websites

- Now to focus on Data Management Planning ..
Ask Yourself

If you want to revisit your data ten years from now

Intellectually possible?
  ◦ Is there metadata to help? (How do the pieces fit?)

Technically feasible?
  ◦ Can the files be found and opened

Ethically/ Legally possible

What am I expected to do?

What do I think appropriate

Produces a DMP
Data Management Planning

Growing popular with funders and publishers

What is it?
  About applying principles discussed earlier
  Formalising previously informal stages of research data management
DMP – an outline

Describes the research data being created or collected
Key responsibilities
How the data will be organised
Disaster recovery
Documentation during the collection and analysis phase
Tools
Plan v. Planning - a considered approach
Other Elements

Policy on data storage and security
What facilities and equipment will be required
How stakeholder requirements being addressed
How / If the data will be preserved
How / If the data will be shared
ORA-Data Pre-deposit checklist

DMPOonline tool     www.dcc.ac.uk/dmponline
Benefits to You

Make more efficient use of data

Protect against common problems of ‘fragile’ digital data

Keep you in control of your data

Now and in the future

Increase citations/ impact of research

Extracts from Twenty Questions – add link and citation
Closing

RDM supports practical issues to do with creating and working with data

New interest in metadata

New drive for accessibility and sharing that can’t be ignored

Keeps frameworks relevant to researcher needs

//sites.google.com/a/sheffield.ac.uk/rdm_links/training/disasters

Final observation or questions?
Welcome to the Research Data Oxford website

About RDM
Overview of research data management and funder policies.

Working with data
Data management day-to-day and at the project planning stage.

Sharing data
Sharing, licensing, depositing, and citing your data.

Tools, services, and training
Resources to help with various aspects of data management.

Research data glossary
Terms used in the management of digital research data.

Oxford research data blog
Latest news and views on Oxford research data support.

ORA-Data
Find out more about ORA-Data, the archival catalogue and repository for research data produced by Oxford academics.

Useful links
- Ask a question - Contact Us
- University RDM policy - download or view
- Find out what funders expect - see the funder policies page
- Latest news - Read the Oxford Research Data blog

Recent blog posts
- Using DMP Online with Oxford SSO credentials – instructions now available 29 January 2016
- Seal of approval for ORA-Data 11

researchdata.ox.ac.uk/