

Introduction to RDM: activities, roles and requirements

Digital Curation Centre

Regional Roadshow – East Midlands

Day 2 - Wednesday 8th February 2012

A Quick Introduction

- What is research data management?
- Who is involved and how?
- What skills and support are needed?



What is Research Data Management?



- **Caring for,**
 - **Facilitating access to,**
 - **Preserving and**
 - **Adding value**
- to digital research data throughout its lifecycle.

Typical Activities

- Creation and sharing of data
- File naming and description
- Restriction of sensitive data
- Data storage
- Selection and disposal
- Data licensing
- Data management planning



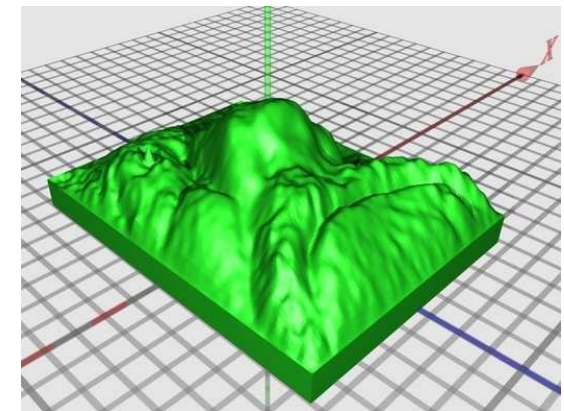
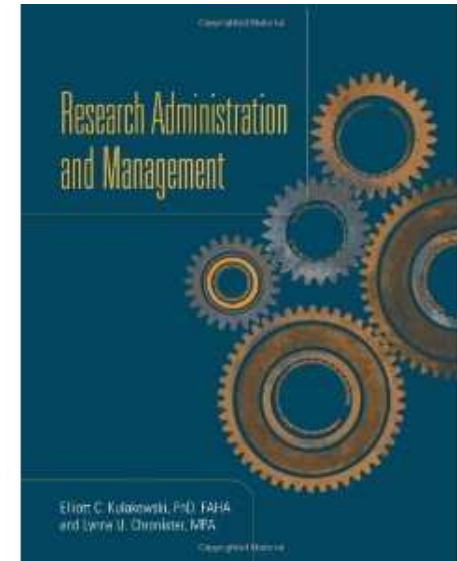
DIMP*online*
The  Data Management Planning Tool

What Kinds of Data?



10/29/04	124.761606	129.27356	122.260995	209.6621
11/1/04	119.977679	129.534731	124.739135	176.3164
11/2/04	130.46875	135.839924	130.84732	168.2891
11/3/04	135.895502	149.510531	140.795689	120.6861
11/4/04	134.127052	140.495868	132.823819	206.1381
11/5/04	129.851598	137.880438	124.888856	189.6751
11/8/04	123.797241	131.84633	126.146789	202.4961
11/9/04	118.435374	130.691651	112.877008	140.3661
11/10/04	112.401212	121.561443	114.237637	125.2981
11/11/04	112.388488	128.496503	113.302591	192.2231
11/12/04	129.011813	138.880759	128.517198	108.7011
11/15/04	127.077465	139.289941	129.528986	127.4061
11/16/04	124.9785	135.363241	127.454638	129.6691
11/17/04	124.294035	133.242253	124.704841	244.5671
11/18/04	125.663717	135.159011	125.476984	169.2711
11/19/04	123.704853	127.612613	124.25382	170.4011
11/22/04	118.926697	122.818967	115.379664	134.9701

L^AT_EX



What are the Drivers?



Organisation for Economic Co-operation and Development describes data as a public good that should be made available

Research Councils UK in its code of good research conduct says data should be preserved and accessible for 10 years +



Research Funder data policies increasingly demanding of institutional commitment and provisions...

Funder Expectations

- Familiarise yourselves with funder demands with respect to data management
- Drive home that explicit link between research income and appropriate data management infrastructure
- Local research support should be able to help




EPSRC

EPSRC expects all those institutions it funds

- to develop a roadmap that aligns their policies and processes with EPSRC's expectations by **1st May 2012**;
- to be fully compliant with these expectations by **1st May 2015**.
- Compliance will be monitored and non-compliance investigated.
- Failure to share research data could result in the imposition of sanctions.

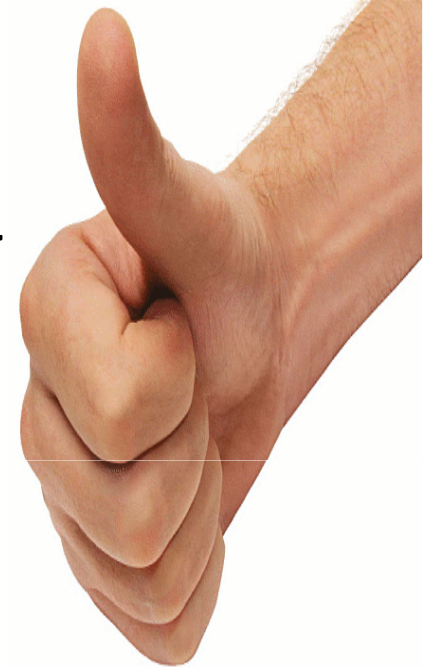
Funder Breakdown

	Policy Coverage		Policy Stipulations					Support Provided			
Research Funders	Published outputs	Data	Time limits	Data plan	Access/sharing	Long-term curation	Monitoring	Guidance	Repository	Data centre	Costs
AHRC	●	●	●	●	●	◐	○	●	○	◐	○
BBSRC	●	●	●	●	●	●	●	●	●	◐	●
CRUK	●	●	●	●	●	●	●	◐	●	○	○
EPSRC	●	●	●	○	●	●	●	◐	○	○	●
ESRC	●	●	●	●	●	●	●	●	●	●	◐
MRC	●	●	●	●	●	●	○	◐	●	○	◐
NERC	●	●	●	●	●	●	●	●	●	●	◐
STFC	●	●	●	●	●	●	●	◐	●	◐	○
Wellcome Trust	●	●	●	●	●	●	●	●	●	◐	●

 Full Coverage
  Partial Coverage
  No Coverage

Don't Forget the Benefits!

- Scholarly communication/access to data
- Re-purposing and re-use of data
- Stimulating new networks/collaborations & new research
- Knowledge transfer to industry
- Verification of research/research integrity
- Re-purposing data for new audiences
- Secure storage for data intensive research
- Availability of data underpinning journal articles
- Increased visibility/citation



Keeping Research Data Safe Factsheet

http://www.beagrie.com/KRDS_Factsheet_0910.pdf

Who is Involved?

- Researcher(s)
- Research support officers / project staff
- Lab technicians
- Librarians / Data Centre staff
- Faculty ethics committees
- Institutional legal/IP advisors
- FOI officer / DPA officer / records manager
- Computing support
- Institutional compliance officers
- Funders
- Archive / long-term data repository
- Senior management
- Others...



Approaching the Issue

- What data exist and are being created?
- Where are greatest recoups on investment available?
 - Training?
 - Storage?
 - Policy development
- What are the requirements?
- Who needs to be involved?



Making the most of what you've got

- Local expertise more widespread than you think
 - Ethics committees
 - Data protection office
 - IT Services
 - Repository Service
- If you need help, ask!

Data management support for researchers

Research data takes many forms, ranging from measurements, numbers and images to documents and publications. These webpages will help you plan, create, organise and look after your data

Creating your data



Do you know what formats to use or how to manage IPR and ethics? Who can help you explain this in your data plan?

Organising your data



Can you name your files, structure your folders and control versions in a way that makes data easy to find and use?

Accessing your data



Can you and your collaborators access all of the files you need? How does the storage you choose affect options for remote access?

Looking after your data



How can you store and back-up your data securely? Can the repository help you select and care for your data in the long-term?

From University of Glasgow's Data Management micro-site

Data management planning

- A plan to address critical data management issues:
 - What data will be created (format, types) and how?
 - How will the data be documented and described?
 - How will ethics and intellectual property considerations be addressed?
 - What are the plans for data sharing and access?
 - What is the strategy for long-term preservation?

Integrating is a tricky business

- Make a sound case for investing in data management training
- Draw upon existing policies and mandates wherever you can
- Spend some time identifying current data holdings, researchers' practice and future training needs
- Make sure you are putting your effort where it will count
- Don't reinvent the wheel – augment or adapt existing training and support materials with data management aspects

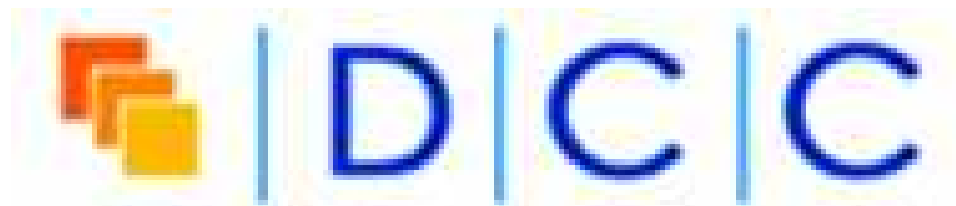
What the DCC can help with

Needs assessment

CARDIO Tool – collaborative assessment & benchmarking of RDM strengths/weaknesses

Data Asset Framework – interviews to scope current RDM practice and recommend improvements

Workflow assessment – methodology for analysing current RDM workflows



Delivering support

Customised Data Management Plans – templates / guidance to be added to DMP Online

Training – institutional/disciplinary tailored courses, online resources

Incremental – repackaging existing support to raise awareness and make guidance more meaningful to researchers

Developing strategic institutional RDM framework

Strategy development – getting key people together to discuss/plan for RDM

Policy development – scoping, defining, embedding research data policies

Costing - assist with the development of costing and pricing for RDM services

Risk management - identify risks in RDM practice and recommend mitigations

Institutional data catalogues - recommend options for exposing metadata about your research data via CRIS systems, repositories, or a mix of these

Exercise: How are you performing?

- Individually, complete the quick data management quiz
- In groups, identify those questions where you answered **A** and explain why you think your institution satisfies the criteria
- Based on your group's discussions...
 - Identify those within your group who are performing well in those areas that you're less confident about
 - Are you still confident about your **A** ratings?
 - For each of your **Bs** and **Cs**, write down one *practical* thing you can do when you return to work in order to edge towards an **A**.



Questions?

- Many thanks
- For more details:
 - Visit <http://www.dcc.ac.uk>
 - Email andrew.mchugh@glasgow.ac.uk



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