Research Data Management with the Digital Curation Centre

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1 Who we are

The Digital Curation Centre (DCC) is a collaboration between

- University of Edinburgh
- HATII, University of Glasgow
- UKOLN, University of Bath

Key facts

- Funded by JISC
- Started in March 2004
- Hub of expertise in curating digital research data
- Observe, reach out, innovate, support JISC

We identify and collect best practice, and disseminate out to the community through peer-to-peer discussions, training events and guidance materials.
2 What we do

Curation Reference Manual

- Ongoing project to build a comprehensive textbook for digital curation
- Advice, in-depth information and criticism of current techniques and best practice
- Advanced level
- Chapters include:
  - Appraisal and selection
  - File formats
  - Preservation metadata
  - Preservation strategies
  - Scientific metadata

Briefing papers

- Concise overviews of digital curation topics, aimed at managers and absolute beginners
- Awareness level
- Papers include:
  - Making the case for research data management
  - Appraisal and selection
  - Curating eScience data
  - Data citation and linking
  - Data protection
  - Freedom of Information
  - ... and many more

We’ve been writing briefing papers since the beginning, but a whole load more are on the way now as a result of our involvement with providing support to JISC’s Managing Research Data programme.
How-to guides

- Practical introductions for people embarking on unfamiliar digital curation tasks
- Working level
- Guides available:
  - How to appraise and select research data
  - How to cite datasets and link to publications
  - How to develop a data management and sharing plan
  - How to license research data

The third one on the list is about developing a Data Management Plan, and is thus pertinent to our discussions today.

3 Data Management Plans

Recommendation 9. Each funded research project, should submit a structured Data Management Plan for peer-review as an integral part of the application for funding. — Liz Lyon (2007), Dealing with Data: Roles, Rights, Responsibilities and Relationships (University of Bath)

Why? Writing and using a Data Management Plan helps

- to co-ordinate the actions of data stakeholders
- to ensure all necessary tasks are accomplished
- to ensure data are properly curated
- with releasing data in a timely fashion
- with sharing data as openly as possible
- with preserving data for future use
4 Genesis of DMP Online

1. Monitor and analyse data-related policies of major funding bodies

Sarah Jones (2009), *A Report on the Range of Policies Required for and Related to Digital Curation* (Glasgow: DCC)

Funders’ data plan requirements

Below is an abstract of UK funders’ requirements for data plans:

- Summary of UK research funders’ expectations for the content of data management and sharing plans (PDF)
- The DCC also provides full details on funders’ data policies.

2. Synthesise funders’ requirements for research data management planning

Martin Donnelly and Sarah Jones (2009), *Data Management Plan Content Checklist version 1.0* (Edinburgh and Glasgow: DCC)

Version 1.0 of the checklist had 51 questions and headings. After a period of consultation, version 2.0 was released, with 115 questions and headings.

3. Map from DCC Checklist to funder requirements

At this stage we were happy we had the checklist about right, so we mapped the DCC questions back to the funder questions. These, of course, had changed in the meantime, so getting the mappings right meant some further tweaking. The result was version 3.0 of the checklist with 118 questions and headings.
That is, you’ll appreciate, rather a lot of questions. And while it would be useful for researchers to answer most or all of them when embarking on their project, it’s much more than is needed at the grant application stage, and probably too much to deal with in one go. So what we felt was needed was a software tool that could present researchers with only those questions they needed to answer at the application stage, but which would let them come back and fill out the rest once the project was funded. So that is how we came to develop DMP Online.

4. DMP Online

DMP Online has four functions:

1. Create, store and update Data Management Plans
2. Meet funders’ specific data-related requirements — CAUTION: awaiting validation
3. Provide specific guidance from funders and institutions
4. Export Data Management Plans in various formats
We begin by logging in...

... and selecting ‘Start a new plan’.

The tool asks us at what stage we are (application stage or post-award)...

... and the type of funder (RCUK, non-RCUK, US, etc.).

Finally, we choose the actual funder from a list.

Now we can start filling in the details of our project. Name, budget, etc.

We now get a summary screen showing several plan sections, how many questions are in each and how many we’ve filled in. We click on ‘Edit’ to start answering the questions.

In each section we see the funder’s original requirement on the left, how it breaks down to DCC questions in the middle, and we fill in the boxes on the right.

As we type, help text pops up on the far right. This could be a single line or several paragraphs, and may contain links to external resources.

We can save the plan and return to it later. Once we’re happy with it, we can export it. There’s a choice of simple or advanced export. The difference is that the advanced export lets us filter out questions and change the order in which they appear.

Either way, there’s a choice of output formats and presentation styles.