UCL Research Data Policy

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Introduction

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With the growth of electronic data resulting from research, the desire for funders to get maximum benefit from their spending and a general shift to open scholarly practices research data management has become an increasingly important issue for researchers at all stages of their research career. The UCL research data management policy¹intends to help researchers effectively manage their research data.

¹ http://www.ucl.ac.uk/isd/services/researchit/documents/uclresearchdatapolicy.pdf

What is research data?

The UCL Research Data Management policy defines research data as:

'facts, observations or experiences on which an argument or theory is constructed or tested. Data may be numerical, descriptive, aural or visual. Data may be raw, abstracted or analysed, experimental or observational. Data include but are not limited to: laboratory notebooks; field notebooks; primary research data (including research data in hardcopy or in computer readable form); questionnaires; audiotapes; videotapes; models; photographs; films; test responses. Research collections may include slides; artefacts; specimens; samples.'²

In the Faculty of Engineering Sciences at UCL research data will incorporate a broad range of different types of material. Some of this may be data commonly found in other disciplines, whilst other data will very specific to a particular research project.

The EPSRC give the following definition of Research Data: > 'Recorded, factual material commonly retained by and accepted in the [research] community as necessary to validate research findings; although the majority of such data is created in digital format, all research data is included irrespective of the format in which it is created.' Engineering and Physical Sciences Research Council (EPSRC)

What is research data management?

Research data management can be described as:

'an active process by which digital resources remain discoverable, accessible and intelligible over the longer term, a process that invests data and datasets with potential to accrue value as assets enjoying far wider us than their creators may have anticipated. In the world of

² UCL Research Data Policy, Paul Ayris, (2013), p.2

research, such a value-adding process is a significant contributor to the much desired achievement of impact'. 3

³ Pryor, G., 2012. Preface. Managing research data, vii.

The UCL Research Data Management policy

The UCL Research Data Management policy aims to

'provide a framework to define the responsibilities of all UCL members and to guide researchers and students in how to manage the data, enabling research data to be maintained and preserved as a first class research object and made available to widest possible audience for the highest possible impact'

The UCL policy does this by outlining a range of expectations for researchers who should:

Develop and record appropriate procedures and processes for the collection, storage, use, re-use, access, and retention of the research data associated with their research program;

Establish and document agreements for research data management when involved in a joint research project, collaborative research or research undertaken in accordance with a contractual agreement.

Ensure that the integrity and security of their data is maintained;

Be aware of their obligations and potential liability when handling data protected by the UK Data Protection Act (1998);

Plan for the on-going custodial responsibilities for the research data at the conclusion of the research project or on departure from the University;

Include recommendations in Data Management Planning to the Head of Department or research Unit for destruction of research data;

Include within research grant proposals appropriate consideration of the cost and time implications of data storage & management within grant proposals.4

⁴ UCL Research Data Policy, p.4

Why make the effort?

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The above requirements may appear to place a burden on researchers so it is important to outline some of the benefits the policy intends to achieve.

You have to manage research data in the process of carrying out research

In the process of most research research you will produce data. This data could be minimal and in straight forward formats, or it could

be large and in complex formats. Regardless this data needs to managed.

An important reason to consider your research data management needs is to avoid data loss and corruption. Major episodes of data loss can be disruptive to a research project and in worst case scenarios can end a research project.

However it is important to consider research data management beyond backing up data during the research process. It is also important you consider other issues such as how you will collect data, what formats data will be stored in, how to document your methods and how to potentially share your data most effectively.

Funder requirements

Increasingly funders are introducing requirements around research data management. Following the UCL Research Data Management policy will help you with the following.

Complying with funder requirements. If you are funded by the EPSRC and publish a paper there is already an expectation that the related data will be made available where appropriate. Other funders have a variety of expectations but following the UCL policy will help you comply with the majority of these policies.

Apply for research funding: because many research data funders are placing an increased importance on research data management and sharing, considering these issues before you apply will help you in developing funding proposals and demonstrate to researchers that your research will have the maximum possible impact.

Share your research: many research funders are asking researchers to share the research data which supports their publications. I will return to the concerns about sharing in a moment but if you are required to share your research data the UCL policy will help ensure this is done effectively.

EPSRC policy framework on research data

Open Science

Research data management, and in particular, the sharing of research data is part of a broader shift to 'openness' in scholarly research and publishing practices. Sharing research data has a number of benefits to researchers.

Citations have been shown to be higher when the underlying study is exposed. TODO

Further support

Delivering a Culture of Wisdom - The 2011 UCL Research Strategy

Particular issues for the Engineering and Physical Sciences Faculty

Funder policies

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Software Sustainability Institue

TODO description of SSI

How does software fit into EPSRC's research data policy?, Neil Chue Hong, Software Sustainability Institute

Choosing an open-source licence, Neil Chue Hong and Tim Parkinson, Software Sustainability Institute