

Dublin City University.

Introduction to Research Data Management

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Definition of Research Data



- “That which is collected, observed, or created in a digital form, for purposes of analysing to produce original research results.”
- “Research data is defined as recorded factual material commonly retained by and accepted in the scientific 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.”
- “Evidence which is used or created to generate new knowledge and interpretations. ‘Evidence’ may be intersubjective or subjective; physical or emotional; persistent or ephemeral; personal or public; explicit or tacit; and is consciously or unconsciously referenced by the researcher at some point during the course of their research.”

The logo for the Engineering and Physical Sciences Research Council (EPSRC), consisting of the letters "EPSRC" in a bold, purple, sans-serif font, with a green horizontal line above and below the text.The logo for KAPTUR, featuring the word "KAPTUR" in a large, bold, black, sans-serif font.

managing visual arts research data

What is the nature of research data in DCU? According to the recent research data survey...

- 60% Experimental data
- 37% Survey data
- 37% Free Public data
- 33% Interview/Recorded data
- 30% Simulated data
- 23% Archives/Document data

Why Manage Research Data?

- To keep it safe

“But what’s the worst thing that can happen?”

Photos: Fire at University of Southampton data recovery

Mountbatten building - University of Southampton fire data recovery

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SOURCE: Harvey Rutt

Faisal Alani

Published: 1 Mar 2011

Mountbatten Building



Source: Wikimedia Commons

Why Manage Research Data?

- To keep it safe
- To stop you drowning in the irrelevant stuff
- In case you need the data later
- To avoid accusations of fraud or bad science

*“Your next collaborator could be yourself,
In 12 months time”*

- To share data so others can learn from or re-use it
- To get credit for producing the data

Ball, A. & Duke, M. (2015). 'How to Cite Datasets and Link to Publications'. DCC How-to Guides. Edinburgh: Digital Curation Centre. Available online: <http://www.dcc.ac.uk/resources/how-guides/cite-datasets#sthash.P39aa8dg.dpuf>



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- To get credit for producing the data
- Because somebody else said to do so

A Data Management Plan (DMP) is a **brief** plan written at the start of the project to define:

- How data will be created? (if it is to be created)
- What methodology & standards will apply?
- Who will access it?
- Where it will be stored?
- How it will be backed up? (and secured)
- How it will be shared? (if it is to be shared)
- How it will be preserved? (and for how long?)

- Provide clarity around nature of the data, the methodology for collecting the data, and the standards to be used for documenting the data.
- Help to foresee (and mitigate) staffing, training, and monetary requirements.
- Complies with funder requirements...

“Guidelines on Data Management in Horizon 2020”

https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

- Keep it simple, short, and specific
- Make sure implementation is feasible
- Justify any resources or restrictions needed



Help from the DCC



A Digital Curation Centre
'working level' guide



How to Develop a Data Management and Sharing Plan

Sarah Jones (DCC)



Digital Curation Centre, 2011.
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<https://dmponline.dcc.ac.uk>

www.dcc.ac.uk/resources/how-guides/develop-data-plan