Charles Darwin University, Researcher Workshop

*Why do we care? Why research data? How manage data?*

*07.09.15*

*Dr Richard Ferrers, ANDS Charles Darwin Uni Outreach Officer*
Data Basics

What data do we care about?
Find data for research
Find, access, and re-use data for research - from over one hundred Australian research organisations, government agencies, and cultural institutions.

Browse By Subjects

- Humanities and Social Sciences
- Business, Economics and Law
- Medical and Health Sciences
- Engineering, Built Environment, Computing and Technology
- Biological Sciences
- Environmental Sciences and Ecology
- Earth Sciences
- Physical, Chemical and Mathematical Sciences

http://researchdata.ands.org.au
What do we mean by Research Data?

Diagram sources:
Why manage data?

Research lifecycle – data infused

- Data: Cite data
- Data: Find data
- Data: Plan to manage data
- Data: Collect, store, analyse data
- Data: Publish data

Image source: Bournemouth University
Interactive diagram: http://blogs.bournemouth.ac.uk/research/research-lifecycle/
Why care about data?
Surfing the Information Tsunami – tools to cope

http://commons.wikimedia.org/wiki/File%3APeter_Mel_at_Cortez_Bank.jpg
Image: By PPNF (Own work) [Public domain], via Wikimedia Commons
90% of data generated in the last two years.
IBM. nd. [What is big data?]
Researchers
Increase your citations by up to 69%


http://dx.doi.org/10.7717/peerj.175
Title: Data reuse and the open data citation advantage
Funders
Funders & Policy

Australian Research Council
ARC Discovery Grant requirements
February 2014

Australia – Declaration of Open Government 2010

Australian Code for the Responsible Conduct of Research (NHMRC, 2007)
Section 2: Management of Research Data & Primary Materials

Australia’s Chief Scientist
“The collaborative response to global challenges isn’t possible unless we get [research infrastructure] fundamentals right first, and one of those fundamentals is sharing high quality research data.” Aug 2014
NESP – DEPT OF ENV’T. DATA AND ACCESSIBILITY GUIDELINES

“Government agencies and research communities have identified the need to promote open access to public sector and publicly funded information. The Australian Government's position is that information funded by the Government is a national resource that should be managed for public purposes. Open access to Government funded information is the default position of the Department with exception only for privacy, security or confidentiality reasons. “

CDU POLICY 55
RESEARCH DATA MANAGEMENT POLICY

“Research data management is a shared responsibility. Researchers, staff members and students must work in partnership to implement good practice in research data management compatible with the University’s commitment to the highest ethical standards in research ...”

Governments

“Making research data openly available helps to build then sustain… Australia’s comparative advantage. Australia’s research data is a significant national resource…”

“The Government also understands the importance of investment … [so] committed a further $300 million in the 2015 budget to continue to support NCRIS.”

Senator Scott Ryan
Parliamentary Sec,
Education & Training

Open Research Data
Showcase, 19 June
2015
Publishing data
“...a condition of publication in a Nature journal is that authors are required to make materials, **data and associated protocols** promptly available to readers without undue qualifications”.

http://www.nature.com/authors/policies/availability.html
Research Data Management

<table>
<thead>
<tr>
<th>Store data: MANAGED</th>
<th>Connect data: CONNECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>(who), (why), (how, what), literature</td>
<td>(what not), licensing.</td>
</tr>
<tr>
<td>Describe data; MANAGED</td>
<td>Share / recycle data: FINDABLE</td>
</tr>
<tr>
<td>metadata adds context to data</td>
<td>Publicise / publish your data</td>
</tr>
<tr>
<td></td>
<td>Get data</td>
</tr>
</tbody>
</table>

=> Add value to data: REUSEABLE
DISCUSSION POINT

What are your data-sharing pain points?

CDU ANDS Library contact: Neil Godfrey
Welcome to 21st century research challenges...

Richard.Ferrers@ands.org.au

ANDS – Charles Darwin University Outreach Officer

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NCRIS
National Research Infrastructure for Australia
An Australian Government Initiative

ANDS is supported by the Australian Government through the National Collaborative Research Infrastructure Strategy (NCRIS).