Data management plans aren't working and here's how to fix them
4 reasons to rethink your institutional approach to DMPs

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DISCLAIMER

These are our personal views, and not necessarily the positions of our respective institutions
For most of the history of DMPs, there were no mandates.
UK funding bodies are recommended to require DMPs (DAC, 2005)

National Science Board recommends NSF requires DMPs (NSB, 2005)

OECD forms data working party (OECD, 2004)

E-Research issues first raised (Lord and MacDonald, 2003)

First major funding bodies require DMP submission (MRC 2009, Wellcome Trust 2008)

Libraries create DMP supporting infrastructure (Delserone, 2008)

Interagency (USA) working group proposed full data lifecycle DMP for funding bodies (IWGDD, 2009)

First publications providing DMP advice to researchers (Donnelly and Jones, 2009)

Further pressure put on UK funding bodies (Lyon, 2007)

Papers urge libraries to improve research data services (Brandt 2007, etc)

OSTP (USA) writes memo to all American funding agencies requiring DMPs (OSTP, 2013)

DMP Tool and DMP Online launched (Sallans and Donnelly, 2012)

NSF (USA) requires DMPs with all proposals (Zacharias, 2010)
Concerns aired about ‘eResearch’ and economics

Governments prompt funding bodies to mandate DMPs

UK funding bodies mandate DMPs

Libraries provide DMP support to researchers

US funding bodies mandate DMPs

Development of DMPs 2.0
<table>
<thead>
<tr>
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<th>Percentage requiring DMPs</th>
<th>Mean year first requiring DMP</th>
<th>Range of years first requiring DMPs</th>
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<tbody>
<tr>
<td>UK research councils</td>
<td>86%</td>
<td>2009</td>
<td>2006 - 2012</td>
</tr>
<tr>
<td>US funding bodies</td>
<td>63%</td>
<td>2014</td>
<td>2011 - 2016</td>
</tr>
<tr>
<td>Australian funding bodies</td>
<td>0%</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Australian institutions</td>
<td>37%</td>
<td>2014</td>
<td>2011 - 2016</td>
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Australian institutions have mandated DMPs in the absence of funder mandates

...but why?
So why do we say that DMPs ‘aren’t working’?

- What’s written in a DMP isn’t translated into practice (Van Tuyl & Whitmire, 2016)
- No significant difference between DMPs of funded vs. unfunded projects (Mischo, Schlembach, & O’Donnell, 2014)
- Researchers describe poor data management practices in their DMPs (Bishoff & Johnston, 2015)

But there is a more fundamental problem...
Catch all approach

Driver: Meet obligations and RoI
Funders and institutions require RDMPs to encourage data sharing

Driver: Educate and effect change
Institutions require RDMPs to effect change in researcher behaviours and practices

Driver: Business intelligence
Institutions require RDMPs to:
- Collect info on what research data assets are being generated
- Inform institutional capacity planning

Driver: Project management
Researchers initiate RDMPs as part of their own routine research design and planning
...and here’s how to “fix” them

What’s the main objective? Concentrate that objective
Avoid the ‘catch all’

Is there an alternative mechanism for achieving the objective?
  E.g. establishing end-to-end managed research workflows

*Listen* to your main stakeholders – *Researchers*
  Engage researchers in RDM tools you adapt or design
...and here’s how to “fix” them

Educative tool - evaluate RDMP design
  Soundness of pedagogical approach

Evaluate RDM training
  Inclusive/exclusive of RDMPs

Compliance vs culture change
  Question the efficacy of RDMP mandates
...and here’s how to “fix” them

What’s in a name?
Align terminology to purpose and research community
  - Research Data Management Plan??
  - Data Sharing Plan??
  - Research Dissemination Plan??
  - Research Outputs Management Plan (Welcome Trust)
  - Research Project Plan??

Change the focus and language from your RDMP to the project’s RDMP + Plan vs Planning
...and here’s how to “fix” them

Keep a watching brief on the development of maDMPs
Contribute via Interest & Working Groups

• Interoperability with other research systems
• Leveraging persistent identifiers (PIDs)
• Evaluation and monitoring
• Disciplinary tailored DMPs and recommender systems
• Publishing/exposing DMPs

Data Management Plans (DMPs) Interest Group

The Data Management Plans (DMPs) Interest Group was formed in February 2017 and meets online on a bimonthly basis. The Group is facilitated by ANDS and open to anybody interested in DMPs, DMP tools and their effectiveness.

The DMP IG seeks to answer questions about Data Management Plans such as:

- Why DMPs? Do they affect change? Are there alternative approaches?
- What DMP tools are others using?
- What might the next generation of DMPs look like?
- What voice should researchers have in their development?
- How do we define best practice?
- What’s happening internationally? Can we share learnings?

The Group provides a forum for discussion about:

- Local DMP tools and approaches - such as the innovative Data Management Record (DMR) approach at The University of Queensland.
- International developments - the Group has forged links with the Research Data Alliance DMP IG and its DMP Common Standards and Exposing DMPs working groups.

Join the discussion!

To be notified of DMP Interest Group events, subscribe to ANDS News. All ANDS' events are also listed on the Events calendar.

The Next DMP Interest Group catch-up will take place online 12.30pm-1.30pm AEDT, 31 October 2017
Register via Eventbrite
References


• Digital Archiving Consultancy, Bioinformatics Research Centre, & National e-Science Centre. (2005). Large-scale data sharing in the life sciences: Data standards, incentives, barriers and funding models.


References 2


• Erway, R. (2013). Starting the Conversation: University-Wide Research Data Management Policy. ERIC.


Discussion points

• Involving researchers in RDM planning design: What are the pros and cons?

• How do institutions avoid the ‘catch all’ planning tool (aka ‘monster DMPs’)?

• Should Funders and Institutions mandate RDMPs without evidence to support their efficacy?

• maDMPs are they the solution everyone is waiting for?