

The Data Management Plan: Putting policy into practice

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Monash environment

- **High level interest**
 - DVC (Research, Prof Edwina Cornish)
 - E-Research Centre
- **Need to manage growing data deluge**
 - Synchrotron
 - New Australian Code for the Responsible Conduct for Research
 - Research Governance Steering Committee
- **High levels of collaboration in research**
- **Building Blocks**
 - LaRDS
 - ePress
 - ARROW
 - See next slide

The building blocks

- **Information Management Strategy**
- **ARROW**
- **DART**
- **ARCHER**
- **ANDS**
- **eResearch centre**
- **LaRDS**
- **ePress**

2008 goals at Monash

- **Data Management Coordinator appointed**
- **Work with research managers in all faculties**
- **Train faculty contact librarians to engage researchers in data management**
- **Develop LaRDS and ARROW**
- **Build on work of ARROW, DART, ARCHER and ANDS**

ARROW

- Australian Research Repositories Online to the World
 - <http://arrow.edu.au/>

DART

- DART was a proof-of-concept project funded (2006 – June 2007) by the Department of Education, Science and Training (DEST) to support collaborative research in Australia
 - <http://dart.edu.au/>

ARCHER

- Australian ResearCH Enabling enviRonment
- ARCHER is a DEST funded project for 2007-08 that will take the **proof-of-concept** outcomes of DART, turn them into **production-ready** ARCHER software tools, and package them for deployment

ANDS (Australian National Data Service)

- **Monash lead agency**
- **Part of the 16th NCRIS Capability Area, Platforms for Collaboration**
- **In partnership with ANU and CSIRO**

Monash actions to date

- **Data Management Committee**
 - Sub-committee of the eResearch Steering Committee
- **LaRDS (Large Research Data Store)**
- **Developed the following documents as drafts**
 - Research Data Management Policy & Procedure
 - Research Data Management Guidelines
 - Toolkit
 - Conducting a Data Interview template
- **DARE Project**

The Data Management Committee

- **Comprises**

- Research office
- ITS
- Library
- E-Research Centre
- Records and Archives
- Researchers (through consultative processes)

DARE and daring

- **DARE**

- Digital and Data, ARROW, repositories, ePress

- **Daring**

- “Academic libraries are taking on a range of new roles in the digital age as they become more deeply engaged in the creation and dissemination of knowledge.” (Wendy Pradt Lougee)

DARE project

- **Librarians informing researchers about ePress, ARROW and data management**
- **Need to**
 - Inform and “lightly” train librarians
 - Encourage active engagement in these initiatives
 - Provide support materials

Key functions

- **ePress**
 - Opportunities for researchers to publish their results through value-added services
- **ARROW**
 - Management of any digital asset of the University (includes publishing platform)
- **Data management**
 - Storage and curation of data generated by research

Data Management Policy principles

- **Information Management Strategy principles, plus ...**
- **Centralised data storage (LaRDS)**
- **Security of data**
- **Sharing research data**
- **Preservation when required**
- **Sustainability**
- **Information lifecycle management**
- **Use of Open Standard formats**

Research Data Management Plan: objectives

- **Instrument to manifestly help researchers manage their data**
- **To do so as efficiently as possible**
- **Completed at beginning of research project, updated as necessary**
- **Captures some technical, access and descriptive metadata at the beginning of a research project**

Research Data Management Plan components

- **Description of project**
- **Use of pre-existing data**
- **Types of data to be collected**
- **Creation and ownership of the data**
- **Confidentiality requirements**
- **Metadata schema and standards**
- **Format/s of the data and related software**
- **Volume of data to be managed and storage required**
- **Retention of research data and records**
- **Access rights and restrictions**
- **Non-digital research data**
- **Revisions and alterations**

Retention and disposal guidelines

- **Components**

- Description; specific categories; retention period; storage/custody

- **For example**

- Research data of archival significance / not lodged in national or international repository / should be retained permanently / in central store
- Research data / involving psychological testing or intervention with adults / should be retained for 7 years after publication of results / in secure, accessible form in research location

Research Data Management Toolkit

- **Developed for librarians as a part of DARE**
- **Key Monash resources**
- **Relevant articles about data management and e-research issues in scholarly communication**
- **Relevant articles about new roles that librarians are playing in this new area**

LaRDS

- **Addresses institutional and researcher needs**
- **Formulates a set of principles to guide cost modelling and sustainable funding options**
- **Assumes commitment to storage in perpetuity (“as long as required”)**
- **Adopts a central storage model ...**
 - Centrally funded basic allowance, plus
 - Directly charged excess allowance
- **... in parallel with decentralised storage**
- **1 Petabyte (and scalable)**

What Worked

- **Australian Code for the responsible conduct of Research – good progress towards compliance has raised awareness**
- **Consideration of both technology and traditional formats of data and materials**
- **Some early implementations such as storage and management of crystallography datasets**

What did not work

- **More education required for researchers on statutory requirements for data, IP and the ownership of research data**
- **Semantics need to be investigated, in order to reduce potential question ambiguity (glossary)**
- **The DMP covers electronic data created by researchers effectively, but may not cover other forms of primary data or records**
- **Can the plan be completed at the beginning of the project or integrated into the University research project planning methodology**
- **The form should be made available online which could be pre-populated to reduce input time, improve accuracy etc**
- **The Library's role needs to be determined**

Take home message – Researcher “Buy in”

- **Closer collaboration with Faculty
Research Office staff**
- **Education to demonstrate the value**
- **Researcher training and new researcher
induction**

Take home message - Cultural Change

- **May be difficult to achieve unless projects (like the RQF or ERA, which assess researcher's performance) value the importance of contributing data sets as opposed to publications that draw on data but do not necessarily provide access or details of data**
- **Implementation through Monash's key research committee structure**

Take home message – Information Management

- **A need to achieve greater commonality and interactivity of systems between different parts of the University**
- **Can the plan be completed at the beginning of the project or integrated into the University research project planning methodology, including updates as the project changes**
- **The form should be made available online which could be pre-populated to reduce input time, improve accuracy etc**
- **Minimise time involved in data mgt by integration with research process**

Questions / Discussion

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