University libraries and research data management: developing knowledge, skills and careers
Council of Australian University Librarians, 15 April 2011

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Monash Library RDM activities

**Governance, policy & strategy**
- Governance structures
- Policy framework, incl. implementation strategies
- Environmental scanning
- Strategic & operational planning
- Infrastructure plans (contribute)

**Information & advice**
- RDM website
- Advice
- Referrals
- Information sessions

**Knowledge & skills**
- Programs for researchers
- Professional development of Monash Library staff
- Input to library profession & research sector initiatives

**Collaboration & leadership**
- Australian National Data Service (ANDS) community
- Other research organisations
- Special interest groups

**Discovery & dissemination**
- Disseminate metadata (from Monash & other sources) about research data
- Selectively acquire & publish data
- Authority control / identifiers
- Promote availability of external sources of research data

**Improving RDM in practice**
- Promote uptake of solutions for storage & management
- Joint RDM improvement projects with researchers
- Data planning interviews / consultations
- Research data planning toolkit
“CAUL is mindful of the fact that research infrastructure is as much about people and change management as technology or facilities.”

Data Sharing Verbs for Discovery and Reuse

Plan

Create → Store → Describe → Identify

Register → Discover → Access → Exploit

Preserve

ands.org.au
But these verbs need subjects that are ...
Programs for researchers – current

- Developed & delivered by staff with research data responsibilities but not necessarily experience in developing courses & teaching

- Content is generic or only minimally customised for different audiences (levels, disciplines)

- Face-to-face delivery to small numbers of participants

- Evaluation of participant satisfaction on the day may be positive, but longer-term impact?
Programs for researchers – future

- Data planning, data handling and data publishing as key information literacy / research skills
- Informed by best practice in learning & teaching e.g. knowledge & skills mapped to national & international frameworks for graduate attributes, qualifications & researcher development
- Courses developed in a coordinated way, shared across institutions (Aus and int’l) and evaluated consistently
Interviewing researchers about their research data has given us a much better appreciation of the data management issues our researchers are facing.

Returning to the liaison role with more skills and knowledge to offer both researchers and colleagues will help me redefine what is essential in subject librarian work.

- Jackie Waylen, Research Data Librarian, seconded from her role as Subject Librarian for Music, Film & TV, Performing Arts
## Librarian knowledge & skills (1)

<table>
<thead>
<tr>
<th>Current strengths</th>
<th>Useful for data management</th>
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</thead>
<tbody>
<tr>
<td>Metadata standards, esp. bibliographic standards</td>
<td>Multiple data and metadata standards, including discipline-specific and type-specific</td>
</tr>
<tr>
<td>Cataloguing and indexing to high standards</td>
<td>Exchanging and transforming metadata across standards - mapping, crosswalks, XML/XSLT</td>
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<tr>
<td>Item-level description</td>
<td>Collection-level description</td>
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<tr>
<td>Understanding of publishing &amp; scholarly comms</td>
<td>Understanding emerging models for publishing &amp; comms, incl. non-traditional outputs</td>
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Librarian knowledge & skills (2)

<table>
<thead>
<tr>
<th>Current strengths</th>
<th>Useful for data management</th>
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</thead>
<tbody>
<tr>
<td>Copyright</td>
<td>IP, contracts, licensing, usage agreements</td>
</tr>
<tr>
<td>Academic integrity (e.g. citing &amp; referencing)</td>
<td>Research integrity (e.g. ethics, data quality)</td>
</tr>
<tr>
<td>Marketing services</td>
<td>Advocacy and outreach</td>
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<tr>
<td>Project management</td>
<td>Change management</td>
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<tr>
<td>Design &amp; implementation of business processes, &amp; systems that support them (e.g. IRs &amp; ERA)</td>
<td>Processes for loosely coupling distributed systems to support workflows, not monolithic one-size-fits-all solutions</td>
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### Librarian knowledge & skills (3)

<table>
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<th>Current strengths</th>
<th>Useful for data management</th>
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</thead>
<tbody>
<tr>
<td>Reference interviews</td>
<td>Data consultations</td>
</tr>
<tr>
<td>Liaison</td>
<td>Business analysis, requirements gathering</td>
</tr>
<tr>
<td>Developing information literacy &amp; research skills, incl. literature reviews, thesis preparation</td>
<td>Developing research skills incl. data planning, data handling, making data ‘repository-ready’</td>
</tr>
<tr>
<td>Selection</td>
<td>Appraisal</td>
</tr>
<tr>
<td>Deselection</td>
<td>Disposal &amp; destruction</td>
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Library-based activities - future

- ANDS funding is kickstarting activities but it’s unclear how this will be sustained
- We could share strategies for and collaborate on on-the-job development
  - In-house programs
  - Projects & working groups (funded, internal)
  - Placements / internships
Broader profession / sector - current

- Aus libraries well-placed but less engaged overall with other info professions than in other places?
- Little Aus input into international curriculum initiatives?
- Recruitment: consensus about lack of people with the right mix of skills, knowledge, qualities - but not about how to solve this
- Retention: not yet well-defined career path for data specialists – most roles still project-based
Broader profession / sector - future

- Advocacy & joint work with
  - professional associations
  - course providers (institutions, ANDS)
  - related communities of interest (e.g. e-research training Birds-of-a-Feather at eResearch Australasia, Australian University Recordkeepers)
- Participate in international initiatives dedicated to professional issues (e.g. DigCCurr)
More information

- Research data management at Monash University
- Research Data Collections Project
- RDCP Toolkit - resources for interviewing researchers about their data collections