Research Data Management (RDM) Survey Summary of Findings:
Navigating the RDM landscape at Queen’s University and beyond

Data Day 2018
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Alexandra Cooper, Data Services Coordinator
Survey goals

- explore how researchers manage and share data
- differences in RDM practices and needs across disciplines
- the help that researchers want to support this process

RDM consortium
This survey is a collaborative project between members of the Canadian RDM Survey Consortium (https://portagenetwork.ca/about/network-of-expertise/rdm-survey-consortium/), which at the moment of writing includes the following institutions: Dalhousie University, McGill University, McMaster University, Queen’s University, Ryerson University, University of Alberta (U of A), University of British Columbia (UBC), University of Ottawa, University of Toronto (U of T), University of Waterloo, University of Windsor, and Western University. The survey research team from the library consisted of Francine Berish, Alexandra Cooper, Suzanne Maranda, Jeremy Heil, Jeff Moon and Tatiana Zaraiskaya (PI).
Reports

Summary of Findings
http://dx.doi.org/10.5683/SP/E6L5VQ

Faculty of Health Sciences
http://dx.doi.org/10.5683/SP/D89USP

Engineering and Science Departments
http://hdl.handle.net/10864/11651

Humanities, Social Sciences, Business, Law, Education, and Policy Studies Departments
http://dx.doi.org/10.5683/SP/EDF7SY
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Open Access Policy on Publications</td>
</tr>
<tr>
<td>2016</td>
<td>Principles on Digital Data Management</td>
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<tr>
<td>2015-2017</td>
<td>Surveys</td>
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<tr>
<td>2015</td>
<td>Portage</td>
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<tr>
<td>2015</td>
<td>Tri-Agency Draft</td>
</tr>
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</table>
### Response rate by rank

<table>
<thead>
<tr>
<th>Rank</th>
<th>Distributed surveys (#)</th>
<th>Responses (#)</th>
<th>Response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Student* and Medical Resident</td>
<td>2156</td>
<td>391</td>
<td>18.1</td>
</tr>
<tr>
<td>Faculty and Postdoctoral Fellow</td>
<td>2206</td>
<td>351</td>
<td>15.9</td>
</tr>
<tr>
<td>Other**</td>
<td>37</td>
<td>12</td>
<td>32.4</td>
</tr>
<tr>
<td>Not declared</td>
<td></td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4399</td>
<td>1004</td>
<td>22.8</td>
</tr>
</tbody>
</table>

* Rank ‘Graduate Student’ includes both Master and PhD Candidates
** Rank ‘Other’ includes staff, research associate/assistant, director, Canada Research Chair, non-disclosed, visiting researcher.
Which of the following best describes the type of research data you generate or use in a typical research project? Select all that apply: (SSHBELPS and HS – Q9; ES - Q3)
How much data storage do you estimate you use in an average research project?
Select one: (SSHBELPS and HS – Q8; ES - Q2)
Sharing data

- I am willing to share: 18.2%
- Incomplete/still working with data/not enough time: 58.5%
- Privacy/legal/do not hold rights: 27.9%
- Lack of standards/funding/knowledge/requirement: 24.4%
- Data should not be shared/not useful to others: 10.8%
- No place to put data: 4.8%
- Lack of acknowledgement/citation: 14.6%
Interest in Data Services that Queen's already offers

- 75.4% assistance preparing a data management plan or data management policies
- 69.3% Personalized consultation on data management practices
- 68.1% Assistance in finding and accessing data sources
- 77.5% Communication and information about funding requirements and journal requirements

**portage**

**DMP Assistant** is a bilingual tool for preparing data management plans (DMPs). The tool follows best practices in data stewardship and walks researchers step-by-step through key questions about data management.
Interest in Data Services that Queen's offers

57.8% Assignment of permanent digital object identifiers (DOIs) for datasets

60.9% Assistance with depositing research data in repositories

60.8% Assistance with documenting and describing data
Institutional repository for long-term access and preservation of research data

You could mention Dataverse is used with institutional branding and a mediated deposit workflow here at Queen’s. Another piece you could mention is QUL’s Digital Asset Management project. I believe that SP has been looking into repositories as a service, but there is no capacity at present, and nothing to report on publicly.

Assistance with issues associated with data preservation and/or sharing

Yes, Project Permafrost is offered by SP as a preservation service ([https://spotdocs.scholarsportal.info/display/PER/Permafrost+Home](https://spotdocs.scholarsportal.info/display/PER/Permafrost+Home)), which we are considering participating in as part of the DAM project work. The OLRC ([https://cloud.scholarsportal.info/](https://cloud.scholarsportal.info/)) offers cloud storage infrastructure for long term preservation over a high-speed network. Queen’s hosts one of the 5 nodes and we are starting to develop preservation policies for utilizing it!

Data storage and backup during active research projects

-There is a possibility of integrating ownCloud (open-source desktop client, like dropbox) with the OLRC here at the library, which could be set up to facilitate various types of workflows, and perhaps active storage for research teams. You could mention that we are looking into ownCloud/OLRC as one of the possibilities here.
Digital Scholarly Record & Queen’s Library

65.7% Workshops on best practices in data management for graduate students

56.2% Workshops on best practices in data management for faculty
Competing Services

Research Data
PRACTICAL CHALLENGES FOR RESEARCHERS IN DATA SHARING
White paper

https://doi.org/10.6084/m9.figshare.5971387

https://www.nature.com/articles/d41586-018-03065-z

Elsevier launches Mendeley Data to manage entire lifecycle of research data

Francine
Recommendations

Results from the surveys will inform further development of RDM services at Queen’s and our collaborative provincial and national efforts. In particular, it is recommended that we:

- Engage in RDM and infrastructure initiatives
- Expand Queen’s nationally-recognized strengths in research data provide workshops on best practices and training materials
- Assist with selecting appropriate platforms
- Support researchers in licensing research data
- Improve communication channels

- Continue to engage in provincial, national, and international RDM and infrastructure initiatives with the goal of expanding RDM capacity, expertise, and collaboration.
- Expand Queen’s nationally-recognized strengths in research data and prepare for increased demand for data management support.
- Provide researcher workshops and modules on best-practices and training materials, leveraging Portage’s DMP Assistant and training materials, and tailoring for specific disciplines at Queen’s.
- Assist researchers with selecting appropriate platforms (local, regional, national, domain-specific, etc.) for research dissemination and preservation that reduce cost barriers and are guided by the FAIR data principles – that data must be Findable, Accessible, Interoperable and Reusable.
- Support researchers in intentionally licensing their research data alongside publications and other research results so that they retain their ownership while promoting data stewardship and openness.
- Improve communication channels and website presences to share information about services offered, and funding and journal requirements.
The DVNWG has made recommendations that will support equitable access to Dataverse infrastructure and training for all Canadian universities. We are also trying to establish standard metadata models for Dataverse collections.
Resources

- [http://guides.library.queensu.ca/rdm](http://guides.library.queensu.ca/rdm)
- [https://portagenetwork.ca](https://portagenetwork.ca)