Research Data Management at KPU

Starting a conversation

Presentation by Chris Burns, Data Services Librarian
for the Senate Standing Committee on Research and Graduate Studies
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Defining Research Data

- Primary sources supporting research, scholarship or artistic endeavours
- Can be used as evidence to validate findings and results
- May take the form of experimental data, observational data, operational data, third party data, public sector data, monitoring data, processed data, or repurposed data
- All other digital and non-digital content have the potential to become research data

Source: Portage Training Expert Group, 2019 (CC-BY).
Research Data Management (RDM)

- RDM refers to the processes applied throughout the lifecycle of a research project to guide the collection, documentation, storage, sharing, and preservation of research data.
- RDM practices are integral to conducting responsible research and can help researchers save resources by ensuring their data is complete, understandable, and secure.
- RDM practices also follow institutional and funding agency guidelines that protect their investments.
- The broader research community can derive maximum value from research data that can be accessed, shared, reused and repurposed.

The Research Data Lifecycle

Source: Portage Training Expert Group, 2019 (CC-BY)
Why should I care about RDM?

Data Sharing and Management Snafu in 3 Short Acts
Humorous cartoon about the difficulty of sharing data for re-use/replication without good data management practices. The machine voice is a bit annoying. I recommend watching with the closed captions turned on. (4:40)

How to Avoid a Data Management Nightmare
Humorous cartoon with several scenarios in which poor data management practices result in stalled research and loss of grant funding. Provides some practical tips to avoid these issues. (4:46)
Benefits of RDM for researchers

- Maintains data integrity, security, and reusability
- Supports open science and innovation
- Increases your research efficiency and impact
- Fulfills funding agency and publisher requirements

Source: University of Victoria Libraries, 2019 (CC-BY).
Drivers of change

1. Changing Tri-Agency funding requirements

2. Journal requirements for data deposit

3. Federal government backing of coordinated support system
Funding agency requirements

• Canada’s major granting agencies have been slower than those in the US and Europe to require that applicants provide a data management plan and share research data, but that is certainly the direction they are going.

• The Tri-Agencies have conducted extensive consultations over the past 2 years on a draft data management policy which outlines expectations for both institutions (which must develop a research data management strategy) and individual researchers.

• The Tri-Agency policy was expected to be launched this spring. It has been delayed due to the COVID-19 pandemic. See:
  • Tri-Agency Statement of Principles on Digital Data Management (2016)
Journal requirements

• A growing number of journal publishers are strongly encouraging or requiring that authors make their research data available to others in a publicly-accessible repository to facilitate openness, transparency and reproducibility
  • e.g. Sage’s Research Data Sharing Policies

• A partial list of journal publishers’ data sharing policies is available on MIT Libraries’ website:
  • https://libraries.mit.edu/data-management/share/journal-requirements/

• VIDEO: APA Explains: Data Sharing (3 min)
  • https://youtu.be/D-KIMPG_MhQ
Federal government support

• Currently, there is a complicated hodge-podge of organizations in Canada which provide infrastructure, software and services to support research data management (see image on next slide)

• The federal government, through Innovation, Science and Economic Development Canada (ISED) has funded the restructuring of this landscape to streamline the development and delivery of research infrastructure and services, including research data management

• The functions of several current organizations will be consolidated into a New Digital Research Infrastructure Organization (NDRIO) over the next 3 years, as shown on the next slide.
New Digital Research Infrastructure Organization (yet-to-be-named)

Source: NDRIO, 2019. (Emphasis added)
What’s happening in the ORS at KPU?

• The AVP Research has been engaged in the development of the New Digital Research Infrastructure Organization (NDRIO) of which KPU is a full member.

• He has also been having preliminary discussions with the Library, IT, and the REB about research data management capacity at KPU.

• He will lead the development of KPU’s institutional RDM strategy, which will soon be mandated by the Tri-Agencies’ policy on RDM. This will entail identifying needed policies, infrastructure and services, and determining the cost/funding sources for these.

• An important step will be to reach out to KPU researchers to understand their needs and design the strategy to support them.
What’s happening at KPU Library?

• Infrastructure:
  • We’ve worked with library consortia to extend the Scholar’s Portal Dataverse service at the U of Toronto to include institutions outside of Ontario. This robust data repository service provides the hardware, software, and storage space to upload and maintain data files. (Note: We have not yet subscribed; cost is approx. $5,000/year)

• Training and other services:
  • We’ve developed a guide with best practices and tools for research data management: https://libguides.kpu.ca/rdm
  • We’re participating in the Portage initiative (led by the Canadian Association of Research Libraries) which has developed best practice guides for all aspects of RDM. It will soon become part of the New Digital Research Infrastructure Organization (NDRIO).
What’s next?

• **A conversation**, I hope, with KPU researchers about their research data management needs and wishes. This will inform further actions.

• The Senate Standing Committee on Research and Graduate Studies will likely play a key role in helping the AVP, Research to develop KPU’s Research Data Management Strategy
Questions / Discussion?

If you’d like further information about research data management, please see the KPU Library’s guide at:

https://libguides.kpu.ca/rdm

Or, you can reach me at: chris.burns@kpu.ca
Sources


