



Saskatchewan Polytechnic

Research Data Management Institutional Strategy

January, 2023

A. Background and Context

The [Tri-Agency Research Data Management \(RDM\) Policy](#) (the “Tri-Agency RDM Policy”) was released by the Canadian Tri-Agencies (NSERC, SSHRC and CIHR) in 2021. The Tri-Agency RDM Policy was established to support research excellence in Canada by promoting sound data management and data stewardship practices. It is a governing direction for post-secondary institutions and research hospitals which administer Tri-Agency funds. The Tri-Agency RDM Policy is supplemented and expanded by the [Tri-Agency Statement of Principles on Digital Data Management](#).

The Tri-Agency RDM Policy mandates that institutions, including Saskatchewan Polytechnic, will complete development of an Institutional RDM Strategy by March 2023. That RDM Strategy is to be posted on each institution’s website, to make them generally available. The Saskatchewan Polytechnic RDM Strategy provided herein (the Institutional RDM Strategy”) is intended to meet the initial requirements of the Tri-Agency RDM Policy. Subsequent steps are then directed by the Tri-Agencies, including a mandate for researchers to complete data management plans for specific grants, and a requirement that institutions will provide infrastructure for data deposit.

Saskatchewan Polytechnic has established a Research Data Management Advisory Committee (RDM Advisory Committee) to provide direction on steps to meet Tri-Agency expectations concerning Research Data Management. The RDM Advisory Committee is focused primarily on gathering information to inform the development of the Institutional RDM Strategy. This Committee is made up of key stakeholder functions at Saskatchewan Polytechnic:

- Office of Applied Research and Innovation (Chair)
- Library and Testing Services
- Indigenous Strategy
- Strategy Office, including Governance, Privacy and Corporate Agreements Unit
- Research Ethics
- IT Services

Faculty researchers have representation through members of the RDM Advisory Committee, and that role will be expanded as the Institutional RDM Strategy evolves and is implemented. The RDM Advisory Committee is also divided into five subgroups based on main areas of effort and focus for building RDM capacity at Saskatchewan Polytechnic. RDM Advisory Committee members serve as subgroup leads while engaging with broader staff and faculty representatives to inform the work of each of the subgroups:

- Communications, Education and Training
- Research Data and Ethics, with an emphasis on Indigenous data ownership and relationships
- Policy and Legal

- IT
- Institutional Data and Metadata Management Plans, beyond the focus on research data

Saskatchewan Polytechnic recognizes that the development and implementation of the Institutional RDM Strategy will continue over the next five years as it builds capacity and implements a full approach to Research Data Management within its Data Management policy or as a separate policy, while putting in place supporting infrastructure and required resources. Areas of focus to achieve long-term goals will continue to be developed and refined, using this Institutional RDM Strategy as a base to operate from. Currently the focus is on the next two years, with updates being done on a regular basis as work is undertaken to reach the desired end state.

B. Scope

This Institutional RDM Strategy applies to all Saskatchewan Polytechnic researchers, including dedicated research staff, students, faculty and administrators from across all campuses, Schools, units and Centres. From the outset it has been assumed that it is necessary to provide awareness concerning RDM best practices. Applied research at Saskatchewan Polytechnic is focused within a number of localized areas, and involves an innovation ecosystem that extends beyond only Tri-Agency-funded research activities. Our initial focus is to ensure that our Tri-Agency-funded researchers have the tools, technologies and service supports in place to aid their work and demonstrate strong data management practices as leaders in this transition in RDM best practices.

C. Oversight

Progress in relation to this Institutional RDM Strategy will be monitored regularly by the RDM Advisory Committee, and the Strategy will be updated on an annual basis. An annual reporting on progress will be provided to the Provost and VP Academic and the Senior Academic Leadership Team.

D. Institutional Approach to Implementation

To support the adoption of the Institutional RDM Strategy and the implementation of RDM practices amongst its researchers (of all types), Saskatchewan Polytechnic will continue to build on the work already completed or in process as we move to achieving our desired RDM state. Over the next two years (until March 2024) the Polytechnic has committed to focus on the following strategic priorities and activities:

1. Improving Awareness of RDM across Saskatchewan Polytechnic

- Implement communications plan, and development and dissemination of RDM education materials to Saskatchewan Polytechnic community
- Update and promote Library RDM capacity to the community
- Build communities of practice to support the diverse research communities in their efforts to understand and implement RDM processes
- Develop a targeted researcher, faculty and student engagement strategy

2. Enhance RDM Training and Capacity-building for Researchers, Faculty and Staff

- Establish and disseminate RDM guidelines and best-practice materials
- Provide internal training and education:
 - Workshops, Webinars, Lunch and Learns and other training for researchers, faculty, students and staff on multiple aspects of RDM (training, data sharing deposit, data preservation, Indigenous considerations, etc.)
 - Partner with ILDC to offer RDM related training to new faculty members.
- Provide access to external Professional Development:
 - Specifically implement and build capacity of librarians to be able to support faculty and staff in good data management practices, discoverability, and access.
 - OCAP training to enhance understanding and competency for participation in research and data collection with Indigenous peoples.
- Build access to tools and supports to enhance strong data management practices.

3. Establish RDM Governance:

- Evolve current RDM Advisory Committee to formalize implementation of the Institutional RDM Strategy.
- Finalize and implement institutional standards related to the management of research data.
- Update other policies to reflect RDM practices.
- Establish RDM communications and processes with external research partners.
- Working with the Privacy Manager to consider staff capacity to support RDM in accordance with data privacy legislation.

4. RDM Resources, and Infrastructure:

- Work with Library to identify repository storage option for Saskatchewan Polytechnic faculty, researchers, students and staff for data deposit use.
- Establish data management planning, discovery and access tools, including offering training (potentially based on training within Digital Research Alliance of Canada).
- Investigate best industry resources available for data deposit, discovery and access.
- Work with Saskatchewan Polytechnic's Research Ethics Board to in order to ensure capture of RDM practice details.

E. Stakeholders

There are multiple stakeholders who are key to the success of the Institutional RDM Strategy. Most are represented on the RDM Advisory Committee (membership noted above). Other areas of the Polytechnic that will also be important to engage include:

- Saskatchewan Polytechnic's Data Governance Steering Committee
- Saskatchewan Polytechnic's Research Advisory Committee – a committee comprised of faculty members representing all Schools to provide advice to the Associate Vice-President, Applied Research and Innovation on matters related to research and innovation
- Research Ethics Board – Services currently provided by the REBs of the University of Saskatchewan, under agreement
- Indigenous Strategy Office
- Learning and Teaching Division
- Institutional Research
- Saskatchewan Polytechnic students
- External research partners, including industry, community organizations and non-Tri-Agency funding agencies

Saskatchewan Polytechnic is committed to development of an engagement strategy to ensure stakeholders are aware of and contributing to the efforts to build a strong RDM environment.

F. Ethics, Indigenous Data Considerations and Values

Research projects involving human participants are reviewed by the Research Ethics Board which also includes ethical review of RDM strategies as part of the REB submission. In addition, the Tri-Agency's [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans](#) (TCPS2) is a resource for researchers to consider ethical conduct in research involving human participants. [Chapter 9](#) of the TCPS2 details considerations in research with Indigenous Peoples. A distinctions-based approach is needed to ensure that the unique rights, interests and circumstances of the First Nations, Métis and Inuit must be acknowledged, affirmed, and implemented.

Saskatchewan Polytechnic is committed to supporting its researchers in the RDM process, with an emphasis on respect for Indigenous data sovereignty. Guidance in that work is provided by existing policies of Saskatchewan Polytechnic, together with the [Fair Principles](#), the [OCAP Principles](#), and the [CARE Principles](#), and the [UN Declaration on the Rights of Indigenous Peoples](#). The Office of Applied Research and Innovation (OARI) supports researchers working with Indigenous peoples and organizations and, in consultation with Indigenous Services (IS), provides advice in relation to funding and ethics applications that focus on Indigenous-related research.

The purpose of the Institutional RDM Strategy is to foster a culture and develop capacity that supports researchers in adopting responsible RDM practices, aligned with the requirements of the Tri-Agency RDM Policy, which include the needs of many groups beyond the applied research community within Saskatchewan Polytechnic. While working to ensure that the needs of all participants are addressed, the Polytechnic also confirms the importance of supporting its researchers' ability to securely preserve and use their research data throughout their research projects, reuse their data over the course of their careers, and when appropriate, share their data. The Office of Applied Research and Innovation supports researchers with advice and resources for safeguarding research including, data sharing, non-disclosure and other research agreements. Strong RDM practices will support Saskatchewan Polytechnic researchers throughout their work and will further their efforts to collaborate in their fields and create opportunities to build greater impact for applied research across the Polytechnic.

G. Other Strategies and Policies

As part of the regular, scheduled policy review process at Saskatchewan Polytechnic, policies will be considered for updating to ensure consistency with RDM expectations. Specific policies which will be noted for RDM consideration are provided below. The policies listed below can be found on the Saskatchewan Polytechnic website:

- [Code of Conduct Policy](#)
- [Appropriate Use of Information Technology Resources Policy](#)
- [Data Management Policy](#)
- [Ethics of Research Involving Human Participants Policy](#)
- [Inventions and Technology Transfer Policy](#)
- [Applied Research Integrity Policy](#)
- [Applied Research Administration Policy](#)

External Policies

- [Tri-Agency Research Data Management Policy](#)
- [Tri-Agency Framework on the Responsible Conduct of Research](#)
- [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans](#)

Timelines

The Strategy will be socialized and implemented over the next two years, after which it will be updated with new priority focus areas for continually moving towards our ideal end state.

It is anticipated that it will take several years to establish full awareness, systems and researcher understanding and capability to fully address RDM at Saskatchewan Polytechnic. The process involves development of a culture that focuses on the issues involved. This Institutional Strategy is focused on the next two years and will continue to evolve as the needs of Saskatchewan Polytechnic change, and the policies of the Tri-Agencies continue to emerge.

References

Digital Research Alliance of Canada (previously known as Portage Network) – New Research Data Management Resources:

<https://alliancecan.ca/en/latest/news/new-research-data-management-resources-institutional-rdm-strategies-and-data-management-plans>

Red Deer Polytechnic Research Data Management Strategy:

<https://rdpolytech.ca/sites/default/files/uploads/documents/Research%20Data%20Management%20Strategy%20FINAL.pdf>

Sheridan College Research Data Management Strategy:

<https://sheridancollege.libguides.com/c.php?g=720640&p=5261074>

Tri-Agency Research Data Management Policy: <https://science.gc.ca/site/science/en/interagency-research-funding/policies-and-guidelines/research-data-management/tri-agency-research-data-management-policy>