



## Red Deer Polytechnic Research Data Management Strategy

### Background and Context

In March of 2021 the Tri-Agency (which consists of Canada’s three main federal research funding agencies) released their [Research Data Management Policy](#). One of the requirements of this policy is that each institution administering Tri-Agency funds “create an institutional RDM strategy” and make that strategy publicly available on the institution’s website. This document is intended to fulfill that requirement.

In order to develop an institutional strategy, a Research Data Management working group was formed in September 2019 with representatives from the Office of Research and Scholarship, the Research Common, Information Technology Services, the Library, the Research Ethics Board, the Privacy Office, Institutional Governance, Business Intelligence Research, and Applied Research. Using the Portage Network’s [Institutional Research Data Management Strategy Template](#), the working group worked through the steps to assess Red Deer Polytechnic’s current and ideal states of institutional readiness to support research data management and define a roadmap for the development of future services and support. A key step in this process was conducting interviews with and a survey of Red Deer Polytechnic’s researchers in order to learn about the campus research community’s current data management practices and needs.

Draft versions of this document were presented to Indigenous Student Services, Deans’ Council, and Service Council for feedback and approval.

### Accountability and Implementation

Individual areas are encouraged to include development of the resources identified in their annual operational plans. The Office of Research and Scholarship will oversee the implementation of this plan, including regularly monitoring progress toward the goals. The working group involved in the creation of the plan will meet periodically throughout the implementation period to assess progress and review deliverables. The roadmap will be assessed and updated annually.

### Values

Red Deer Polytechnic is committed to supporting its researchers in adopting responsible research data management practices and respects Indigenous data sovereignty. The Polytechnic is guided in its research data management work by the [FAIR Principles](#), the [First Nations Principles of OCAP®](#), and the [CARE Principles for Indigenous Data Governance](#), as well as the broader principles of the [United Nations Declaration on the Rights of Indigenous Peoples](#).

## Roadmap

Red Deer Polytechnic recognizes data as an important research output. The following roadmap sets out a plan for creating institutional supports that will assist researchers in their efforts to manage their data ethically, legally, and in compliance with any commercial and Tri-Agency requirements, including the [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – 2<sup>nd</sup> Edition](#), the [Tri-Agency Framework: Responsible Conduct of Research](#), and the [Tri-Agency Statement of Principles on Digital Data Management](#).

The activities identified include promoting the importance of data management and guiding researchers in best practices in data management, in creating data management plans, and in depositing their data in appropriate repositories. Education plans and templates will also be created to assist researchers working with Indigenous communities to ensure that the data resulting from that research work is managed in a way that is approved by the specific community and respects its unique rights, interests, and circumstances.

Service	Ideal State*	Current State	Gaps	Plan	Timeline	Person Responsible	Resources Needed	Measures of Success
Data Management Plans	RDP promotes best practice in data management planning and facilitates good research design in relation to data preservation and retention. Guidance and templates are provided.	Research Common website links to externally sourced online support and training materials.	RDP guidance and templates.  Lack of tools and templates to support researchers working with Indigenous communities in creating data management plans.	Develop RDP-specific templates based on established best practices in data management.  Develop an education program around data management planning and best practices.  Work with Indigenous Student Services and the Indigenous Advisory Committee to develop tools and templates for	June 2022	Research Common and Library	Staff time	Researchers express satisfaction with education programs, tools, and templates available.

				working with Indigenous communities.  Ongoing maintenance.				
Institutional Support and Training	RDM service is delivered by dividing responsibilities among existing staff. Externally sourced online support materials are supplemented by some materials that address local RDP needs and services.  A base level of investment in technical infrastructure, with commitment to supporting recurring costs, ensures that researchers can make their data findable and accessible in the long-term.	Research Common website links to externally sourced online support and training materials. Face to face training is available on request.  Base level of investment and commitment to supporting recurring costs exists.	Formal RDP training programs.  Lack of researcher knowledge about IT support and services available to support researchers.  Lack of IT staff knowledge about researcher needs.	Develop RDP-specific training programs around best practices in research data management.  Create greater awareness of available IT support and services.  Investigate IT needs of researchers.	June 2022	Research Common and Library  Information Technology Services	Staff time	Researchers express satisfaction with training available.  Researchers are able to identify RDM support and services available to them through ITS.

Active Data Management	ITS provides managed access to virtual research environments that enable researchers to work on data with external collaborators. Tools/ environments that enable researchers to de-identify, encrypt or control access to data as required are provided.	ITS can provide additional storage on request to satisfy exceptional storage capacity, device networking, or performance demands. Authenticated access to storage that is protected from unauthorized data access is available.	Lack of knowledge about IT support and services available to support researchers.  Lack of tools and templates to support researchers working with Indigenous communities in their data storage needs.	Create greater awareness of available IT support and services.  Work with Indigenous Student Services and the Indigenous Advisory Committee to develop tools and templates for working with Indigenous communities.	June 2022	Information Technology Services  Research Common	Staff time  Research project-based infrastructure funding?	Researchers are able to identify RDM support and services available to them through ITS.  Researchers express satisfaction with education programs, tools, and templates available.
Appraisal and Risk Assessment	Criteria for retention of datasets of long-term value to the institution are defined.  Researchers receive tailored guidance on risk assessment, and on solutions that offer an appropriate level of risk control for	Research Common website links to externally sourced online support and training materials.	RDP criteria and guidance.  Lack of tools and templates to support researchers working with Indigenous communities.	RDP criteria and guidance created.  Training programs developed.  Work with Indigenous Student Services and the Indigenous Advisory Committee to develop tools and templates for	June 2022	Research Common  Research Ethics Board  Privacy Office  Information Technology Services	Staff time.	Researchers express satisfaction with education programs, tools, and templates available.

	the data they manage.			working with Indigenous communities.				
Data Repositories and Archiving	Partnership agreements will be in place, where necessary and appropriate, to enable deposit in data repositories. Deposit in discipline-specific repositories is encouraged where possible.	ITS provides default archival services but nothing intentional for RDM. The Research Common provides some directional information regarding data repositories.	No partnership agreements currently in place.  Lack of knowledge about discipline-specific and other available repositories.  Lack of tools and templates to support researchers working with Indigenous communities in their data storage needs.	Explore whether any provincial or national library or IT consortia agreements could include access to data repositories.  Increase knowledge about available data repositories.  Work with Indigenous Student Services and the Indigenous Advisory Committee to develop tools and templates for working with Indigenous communities.	June 2023	Information Technology Services  Library  Research Common	Staff time.	Partnership agreements are in place.  Advice on possible repositories is available on request.  Researchers express satisfaction with education programs, tools, and templates available.
Data Curation	Metadata is routinely recorded on locally produced data, and its links to research activity	Nothing currently exists.	Process for gathering and storing metadata on locally produced data.	Develop and implement process for gathering and storing metadata	June 2023	Office of Research and Scholarship  Library	Staff time  Money for software program or database development?	Metadata is routinely recorded.  Researchers express

	<p>or related outputs, enhancing the quality of the institution's research information.</p> <p>Community best practice standards for data access, citation and metadata exchange are supported.</p>		<p>Lack of knowledge regarding community best practice standards.</p>	<p>on locally produced data.</p> <p>Develop knowledge of community best practice standards.</p>				<p>satisfaction with guidance available on community best practice standards.</p>
Institutional Policies and Procedures	<p>Policies and procedures articulate the value of good RDM practice to the institution.</p>	<p>No policies address RDM in an intentional way.</p>	<p>RDM policy.</p>	<p>Assess the need for a policy or procedure.</p> <p>Create policy or procedure, if necessary.</p>	<p>June 2023</p>	<p>Office of Research and Scholarship</p>	<p>Staff time</p>	<p>Policy or procedure is created, if necessary.</p>

\*Language in this column is taken from Rans, J., & Whyte, A. (2017). [Using RISE: The Research Infrastructure Self-Evaluation Framework](#) pp 9-18. Digital Curation Centre.