# Toward a Data Curation Network in Canada

Outcomes of the Canadian Data Curation Forum

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### 1. Why a national data curation approach?

Data curation is an iterative research data management (RDM) activity that adds value to scholarship by improving the FAIRness of research data. Data curators require a unique complement of disciplinary knowledge, information management skills, and software expertise. Research institutions and organizations may require significant curation resources and support to meet broad aspirations for data sharing and reuse.

In Canada, emerging national and institutional activities (Fig. 1) provide an opportunity to envision how national services and resources could be developed to support research data curation requirements.

With an aim to develop skills and foster a shared vision for data curation services in Canada, the Canadian Association of Research Libraries' (CARL) Portage Network and McMaster University Library hosted the Canadian Data Curation Forum at McMaster University in October, 2019.

> Pending federal funding agencies' RDM policy

> > platforms

Emerging national data

repositories and discovery

Figure 1: National and institutional drivers of a national approach to data curation.

National **Opportunity** 

#### Community-driven data curation standards and expectations

Pending national digital research infrastructure reorganization

# 2. The Canadian Data Curation Forum (CDCF)

The CDCF brought together library data specialists, research data managers, and discipline and functional experts from 45 institutions and organizations with the goal of fostering a national community of practice for the development and adoption of data curation standards, practices, tools, and skills.



Attendees participated in a Data Curation Training Event focused on knowledge sharing and hands-on skill building, followed by a Community-Building Forum designed to develop a shared understanding of Canada's current curation capacity and challenges. Attendees were active participants in modeling a vision for a national approach to data curation in Canada that would address these challenges.

### 4. Toward a national data curation network

Members of the Portage Curation Expert Group (CEG) are reviewing and synthesizing the CDCF outputs into prospective models for consideration. Results will also consider and incorporate elements of other emerging national curation networks (e.g. Data Curation Network in the US, National Coordination Point Research Data Management in the Netherlands).

CDCF participants and members of the broader community will then be provided an opportunity to share feedback and contribute to the final recommendations.

## Shared Barriers & Challenges

#### Capacity

People, expertise, time Service creation / scaling Funding

#### Culture & Awareness

Communicating value Incentivizing practices Demonstrating impact

### Coordination

Roles & responsibilities Models for cooperation Standards & principles Common vocabularies Shared workflows Governance

### **Guidance & Training**

Training opportunities Communities of practice Resources & tools

### **Equity & Inclusion**

Multilingual support Indigenous data Non-academe data

Figure 3: Participant-identified barriers to addressing data curation needs at local to national scales.

### **Shared Solutions**

Communication

National activities should empower institutions, organizations, researchers by:

Coordinating between national, regional, local services

**Providing training** opportunities and resources

**Building networks; Advocating** to governments and funders

Figure 4: Common themes of envisioned data curation support models.

### Training event

6 workshops | 13 facilitators | 57 attendees **Topics**: data curation + ethics + reproducibility

#### Community-Building Forum

institutions + research orgs + funders + support orgs Goal: Articulate a national data curation approach



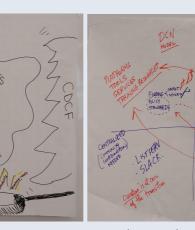


Figure 2: Conceptualized models of a national data curation approach.

In the short term, the Portage CEG will address some immediate recommendations from the CDCF, which includes an extended gap analysis of curation services and resources in Canada, and cultivating a Canadian data curation community of practice.

Recommendation **Document** 

Community Feedback; Revision

# **Next Steps**

**Synthesize CDCF** models Propose national model(s)

Figure 5: Revision and review process for CDCF outcomes.

# 3. Visioning: **Process & Outcomes**

Participants were assigned to groups and worked over three breakout sessions to discuss major barriers and challenges to data curation activities and to reflect on the key elements of a national approach that could help to address them.

Key curation barriers and challenges covered a range of issues at individual, organizational, disciplinary, and national scales (Fig. 3).

In considering national approaches to address these challenges, groups engaged in a model-building exercise to develop, describe, and illustrate a vision for a Canadian data curation network. The drafted models (Fig 2.) presented a variety of centralized and decentralized services and networks ranging from formal to informal approaches.

Among the common elements of all models (Fig 4.) was an assertion that national activity should strengthen local capacity by providing coordination and training opportunities, and building networks to facilitate communication and advocacy.



