New Collaborative Relationships: The Role of Academic Libraries in the Digital Data Universe

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We feel that there is a role for CISTI in promoting the use and stewardship of Canadian research data, in order to maintain the position of Canadian science. As well, we foresee a potential role in coordinating open data activities, similar to the UK Digital Curation Centre (DCC) model. We would like to explore new partnerships in this area. We feel that there are many possibilities for enhanced use of and access to data, such as wider and richer linking of data to publications.

The Internet is enabling much greater openness in several areas:

- **Open access** is partly about publication funding models (which will not be discussed herein) but also importantly about providing free, public access to information
- **Open data** is generally less contentious that open access, as the funding model aspect is less important. There is general agreement even amongst publishers that scientific data should be open to all (with appropriate privacy and other constraints)
- **Open discourse** is about broadening the scientific discussion beyond the confines of traditional venues. Without the constraints of a printed page or a conference session, rich discussion is possible both amongst scientists and between scientists and the general public.

Libraries are well positioned for these trends, which could be considered part of the development of **Open Science**. Research libraries can play a role in the promotion and understanding of all of these areas, as well as potentially providing infrastructure or coordination.

In terms of the infrastructure aspects, to some extent these are already being addressed by existing e-Science or cyberinfrastructure programs, although they have a focus more on computing and storage resources for researchers.

The Canada Institute for Scientific and Technical Information (CISTI) has a long history of participation in the realms of scientific computation and scientific data. In particular, we have a longstanding role in cataloguing data and promoting its use. CISTI hosts the Canadian secretariat of CODATA, participates in ICSTI, and was involved with the production of a report on Canadian access to scientific research data (the NCASRD report). We provide a Depository of Unpublished Data and our Research Press journals support the concept of supplementary data.

There are a number of issues that need to be discussed: Can the concept of trusted digital repository be extended to data repositories? What additional management elements and criteria will be needed? How can we deal with existing scientific data, which may be well-managed but not necessarily compliant with any repository or access standards? How shall data be catalogued and identified, particularly across scientific fields? How should data sets be cited, how can versions be handled as data sets grow and are updated?

We look forward to discussing these and other issues as we explore the digital data universe together.

References

Digital Curation Centre
http://www.dcc.ac.uk/

Canadian National Committee for CODATA
http://www.codata.org/canada/tofr.shtml

Report on Data Activities in Canada
http://dac.cisti.nrc.ca/datact_e.cfm

Canadian National Consultation on Access to Scientific Research Data (NCASRD)
http://ncasrd-cnadrs.scitech.gc.ca/

Depository of Unpublished Data
http://cisti-icist.nrc-cnrc.gc.ca/irm/unpub_e.html

Research Press – Supplementary Data
http://pubs.nrc-cnrc.gc.ca/rp/rptemp/rp2_news2_e.html

Networks: recipe for success in the knowledge age
http://cisti-icist.nrc-cnrc.gc.ca/media/news/cn20n3_e.html#a0

open discourse + access + data equals open science?
http://scilib.typepad.com/science_library_pad/2006/09/open_discourse_.html