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En Français S'il Vous Plaît: Translation and Adaptation of the New England Collaborative Data Management Curriculum's Introductory Module

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Abstract

The New England Collaborative Data Management Curriculum (NECDMC) is "an instructional tool for teaching data management best practices to undergraduates, graduate students, and researchers in the health sciences" (Lamar Soutter Library 2015a). This article reports on the French translation and adaptation of the first module of the NECDMC as part of the design of a short library instruction workshop.

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Introduction

The author's involvement with research data management (RDM) has followed a serendipitous path. A former molecular microbiologist, she reoriented her career as a librarian in 2008 and became a natural liaison to various university health sciences departments involved in fundamental research. At major library and information science conferences including SLA and MLA, the author met librarians who were providing RDM support and training to students and faculty as part of their responsibilities, while others were involved in all stages of the data management cycle (Starr et al. 2012).

After seeing a poster describing a data management curriculum for health sciences (Kafel et al. 2013), the author discovered a comprehensive open-access tool, called the New England Collaborative Data Management Curriculum (NECDMC), that could be adapted easily to the needs of Université de Montréal's health sciences community. The appeal of the NECDMC is that it was designed as an instructional tool for teaching best practices in research data management to students, researchers, and librarians in the science, technology, engineering, and mathematics disciplines (STEM) (Lamar Soutter Library 2015a). "Each of the modules can be taught as a stand-alone class, and instructors are welcome to customize the content of the instructional modules to meet the learning needs of their students and the policies and resources at their institutions" (Lamar Soutter Library 2015a).

Setting

Université de Montréal (UdeM) is the largest French-speaking university in North America. With its two affiliated schools, HEC Montréal and École Polytechnique, it has more than 66,000 registered students (Université de Montréal 2015). The University earmarks more than $528 million for basic and applied research each year, making it Canada's third most active university in the field. There are 21 academic libraries located on the Montréal, Laval, and St-Hyacinthe campuses. Bibliothèque de la santé supports the teaching and research activities of the faculties of Dentistry, Pharmacy, and Medicine. These combined faculties enroll a total of more than 5,700 students.

Major Canadian federal granting agencies have policies related to research data (Government of Canada 2011) such as those in the United States. The Canadian Institutes of Health Research requires the retention of original data sets for a minimum of five years after the end of the grant (Government of Canada 2015). Yet, with the exception of Genome Canada (Genome Canada 2009), no major Canadian funding organization requires the inclusion of a data management plan in grant applications.

To address RDM issues across the country, the Canadian Association of Research Libraries (CARL) is currently working on Portage, a project to provide a national network of library-based research data management services (Canadian Association of Research Libraries 2014). Regional RDM initiatives have also emerged, such as University of Alberta Libraries' DMP Builder, a tool for data management plans adapted from DMPOnline, which is produced by the Digital Curation Centre in the UK (University of Alberta Libraries 2015). This tool will be translated to French in 2015. In addition to participating in CARL initiatives, UdeM Libraries have been discussing with campus partners possible initiatives to support RDM and also published an online guide last fall (Direction des Bibliothèques 2015).

RDM workshop design

In December 2013, a short survey was sent to UdeM's community of health sciences researchers from the faculties of Dentistry, Pharmacy, and Medicine in order to determine their specific library instruction needs. A list of 13 possible subjects was proposed, including NCBI databases, altmetrics, open-access publishing, and PubMed alerts. Six responders out of 22 rated the "Introduction to RDM" option as "A must," while 14 people selected "Interesting," and two "Not very useful." The seven most popular themes were retained and the workshop format was set as a one-hour formal lecture at lunchtime every other Thursday.

The NECDMC Project Coordinators were contacted and agreed to the translation of elements from the first teaching module. This module introduces attendees to types of data, the research data cycle, the advantages of RDM, the data management plan, as well as best practices in the handling, storage, archiving, and sharing of data (Lamar Soutter Library 2015a). The module's original slide presentation was translated to French by the author and no particular hurdles were experienced. The presentation content was adapted in the following manner:

- The Canadian RDM context described above was presented.
- Institution-specific information was included: relevant research and intellectual property policies, records management schedule for data retention, examples of available data services and current UdeM Libraries support.
- Information describing the common myths regarding RDM was cited from a colleague's presentation (Federer 2015).
- The potential of altmetrics in research impact assessment was outlined, as certain altmetrics tools such as ImpactStory record datasets usage.
- Open access RDM images from the Digitalbevering.dk website were added to slides.
- A short video on research data sharing and management was presented (NYU Health Sciences Library 2013).

The resulting presentation, *Introduction à la gestion des données de recherche* is freely available on SlideShare (http://www.slideshare.net/nclairoux/gestion-donnes-recherche-plan-de-gestion-des-donnes-archivage-prservation), and is regularly updated (Clairoux 2015). As of July 2015, it has been viewed over 1,900 times, mostly by visitors from France (42%); thereby demonstrating the NECDMC's international outreach potential. Another Canadian adaptation of NECDMC has also been reported recently (Ishida 2014).

The NECDMC's Simplified Data Management Plan was also translated by the author and handed out to attendees along with a copy of the Example Data Management Plan: Biology (2) (Lamar Soutter Library 2015c). Additional elements from the first module (presentation transcript and institutional resources scan activity) were not translated considering the short workshop format chosen.

Evaluation

Seventeen participants attended the first RDM workshop on May 22, 2014. There were no pre- or post-workshop surveys; however, general comments were positive and two attendees later contacted the author to ask for information on available data repositories.

The author agreed to become a NECDMC pilot partner and translated the first module's standard evaluation form, distributing it to workshops attendees during two additional sessions given on November 23, 2014 and April 30, 2015 (Lamar Soutter Library 2015b). There were 11 and 6 participants respectively, and all provided feedback. Table 1 presents a compilation of survey results. A score of one on the evaluation form indicates "not at all well" whereas a score of five indicates "very well." Comments were also collected using open-ended questions, and included "Teach to a wider audience, it is important," and "Teach other modules, introduction is not sufficient."

Most attendees at all three sessions were from health sciences departments.

Table 1: Feedback from attendees to of second and third workshops

Questions (Scale: Not at all well 1 2 3 4 5 Very well)	1	2	3	4	5
1. How well did this session prepare you to define what research data is?	0	0	2	5	9
2. How well did this module prepare you to explain the need for managing/ sharing research data and identify relevant public policies?	0	0	1	6	9
3. How well did this module prepare you to explain the lifecycle continuum to manage and preserve research data?	0	0	0	8	8
4. How well did this module help you to understand that data should be managed differently in different phases of the life cycle?	0	1	2	5	8
5. How well did this module familiarize you with data management plan (DMP) requirements used to characterize and plan for the lifecycle of research data?	0	0	2	6	8
6. How well did this module prepare you to identify the value and relative importance of data management to the success of a research project?	0	0	3	2	11
7. How well did the objectives of this module meet your expectations for what you need to learn regarding data management?	0	1	5	5	5
8. How useful/relevant are the instructional materials to your learning needs?	1	0	1	7	7

Session with UdeM librarians

The same workshop format was used in June 2015 as part of a general RDM training session designed for an audience of 44 UdeM librarians from all disciplines. The three-hour session also included an overview of the DMP Builder tool from University of Alberta Libraries, as well as an introduction to dataset creation, using Dataverse.

Feedback from participants (n=21) was obtained via an online questionnaire. Answers to two questions specific to the NECDMC part of the session are presented in Table 2.

Table 2: Feedback from librarian attendees of an RDM training session

Questions (Scale: Not at all well 1 2 3 4 5 Very well)	1	2	3	4	5
1. How well did the NECDMC presentation prepare you to explain the need for managing/sharing research data and identify relevant public policies?	0	0	3	11	7
2. How well did the NECDMC presentation familiarize you with data management plan (DMP) requirements used to characterize and plan for the lifecycle of research data?	0	0	6	6	9

Attendees appreciated this global overview of RDM and the presentation of practical tools. To the question "To what extent was the content presented interesting for you?," 11 attendees responded "Totally", 8 chose "Mostly," and two answered "A little." As one participant commented, "the three presentations in the training session were complementary and the topic is relevant for all information professionals."

Future plans

Overall, the positive reception of the translated introductory module by a new francophone audience is encouraging. Several attendees commented that the one-hour workshop format was too short to cover all aspects of the content properly. This reaction was expected, as the original presentation was adapted to fit in a lunchtime workshop series.

In addition to teaching modules, NECDMC proposes several case studies with summaries of teaching points that could be easily integrated in an extended format of this introductory workshop. Moving to a longer workshop format involving a case study implies a few hours of additional translation, which the author will be happy to perform if needed. Discussions with the program director for the B. Sc. in Biomedical Sciences degree are under way to integrate RDM instruction in a scientific communications course during the winter 2016 term.

Acknowledgement

Disclosure

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