

Who Wants a Training Camp?

A Case Study in Building a Research Data Management Curriculum for Graduate Students

Rationale and Outreach Strategies



Context

- Libraries at York are equipped to support researchers' RDM needs in various ways but largely focus on data management planning and data deposit
- We saw the potential for increased support of data management at the individual researcher level
- We saw the potential to build better partnerships
- Wanted to draw a more direct link between data management techniques and the verification of results

Environmental Scan

York University Libraries' Research Data Management Working Group tasked with:

- Considering current user needs in RDM
- Running an environmental scan on existing learning objects, lesson plans, and other course materials on the research data lifecycle and other related topics (ie. Dartmouth, UofT, UMass, UWA, Leeds)

Environmental Scan

Individual members created modules on areas such as:

- data storage and backup
- file organization and metadata
- data repositories, sharing
- data management plans & funding agency requirements

What's in a bootcamp?

- A potential contribution to York's growing sponsored co-curricular programming
- Focus on activity-based
- Influenced by the structure of Software/Library/ Carpentry
- Feedback: bootcamp vs. training camp

Filling out the training camp activities

While the RDM modules were the core activity of the training camp sessions, there were a variety of complementary workshops offered:

- *Data Cleaning with Open Refine*
- *Data Cleaning and Data Visualization with R*
- *Citation Management with Zotero and Mendeley*
- *Version Control with Git and Github*

Promotion and partnerships

Socializing the idea of a training camp with:

- Associate Deans of Research
- Open Access Open Data Committee
- Faculty of Graduate Studies

Partnership with FGS critical to reach and recruit students successfully

Curriculum Building & Lessons Learned



Spring workshop preparation

Instruction design supported by YUL's SLAS Department

- Rehearsed multiples times with
 - Librarians from RDM working group
 - Librarians experienced in instructional design and teaching
- Improved the original presentation through
 - Using lesson plan to time the workshop delivery
 - Using hands-on activities to better engage students

[Lesson plan](#) and [slides](#) used for the Spring 2019 Workshop

Feedback received from Spring workshop - 1

Evidence of improved RDM understanding and ability

Most useful things learned from the RDM workshop

- RDM process, especially after the project: sharing & preserving
- Data organization, storage, and data dictionary

Feedback received from Spring workshop - 2

Students would like the RDM workshop

- To be more in-depth, detailed, concrete, and contextual
- Include (disciplinary) background of tools
- To have more tailored content

Fall workshop

From one generic RDM Workshop
to
two customized disciplinary RDM workshops on
health sciences and social sciences

*Environmental scan of [disciplinary RDM training material](#)

Workshop preparation

RDM pre-workshop survey questions:

- Name of academic department
- Name of degree program
- Are you working on a research project/data at the moment? If so, please provide a brief description of your project/data and the stage you are at in your research.
- Do you expect to need to complete a research ethics protocol for your research?
- What are you hoping to learn during the Research Data Management workshop?

Workshop preparation

RDM post-workshop survey questions (for each disciplinary group):

- How useful was this workshop?
- What was the most useful item you learned today?
- What would you have liked to learn more about?
- How would you rate your understanding of research data management prior to this workshop?
- How would you rate your understanding of research data management after this workshop?
- How would you rate your ability to manage your research data before attending this workshop?
- How would you rate your ability to manage your research data after attending this workshop?

Fall workshop delivery: health sciences

Registration:

mostly master degree students in Kinesiology Program

Design:

use Portage DMP Assistant + HS hypothetical example project

Delivery:

York U DMP Template: section by section

Local resources: IP, IT, Ontario health data policies

Useful tools/guides: RedCap, data security, de-identification

Fall workshop feedback: health sciences

- Students want to see a completed DMP example from a real research project

Fall workshop delivery: social sciences

Registration:

Both Doctorate and Master's students
Humanities graduate students

Design:

lecture + hands-on activities

Delivery:

Focus on the active project stages
Tools/Examples for both quantitative and qualitative
data/methods

Fall workshop feedback: social sciences

Students want a longer workshop and want to learn more about qualitative data analysis

Roadmap and Larger Lessons



Lessons we learned: curriculum

Content:

Teach theory and concepts:

- Help students understand and frame their RDM needs

Concrete tools and examples based on disciplines:

- Improve students' ability to manage their research data

Delivery:

- Lesson plan and rehearsals

- Engaging students with activities

- Feedbacks: pre and post workshop surveys

Lessons learned: outreach and next steps

- Partnerships with various stakeholder groups are crucial to ensure success
- Build capacity internally first
- Build a multipronged curriculum based on discrete user needs

Next step:

Possible integration with broader library-based co-curricular programming

Questions? Contact us

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