May 24, 2023 | 2:30-4pm

Virtual Roundtable

Teaching with Digital Tools and Approaches

u.mcmaster.ca/scds-events

DMDS SCDS Library McMaster University

McMaster University sits on the Territories of the Mississauga and Haudenosaunee Nations, and within the lands protected by the “Dish With One Spoon” wampum agreement.

Session Recording and Privacy

This session is being recorded with the intention of being shared publicly via the web for future audiences.

In respect of your privacy, participant lists will not be shared outside of this session, nor will question or chat transcripts.

We will not share the recording of the Q&A period.

Code of Conduct

The Sherman Centre and the McMaster University Library are committed to fostering a supportive and inclusive environment for its presenters and participants.

As a participant in this session, you agree to support and help cultivate an experience that is collaborative, respectful, and inclusive, as well as free of harassment, discrimination, and oppression. We reserve the right to remove participants who exhibit harassing, malicious, or persistently disruptive behaviour.

Please refer to our code of conduct webpage for more information:

scds.ca/events/code-of-conduct/

Certificate Program

The Sherman Centre offers a Certificate of Completion that rewards synchronous participation at 7 workshops. We also offer concentrations in Data Analysis and Visualization, Digital Scholarship, and Research Data Management.

Learn more about the Certificate Program: https://scds.ca/certificate-program

If you would like to be considered for the certificate, verify your participation in this form: https://u.mcmaster.ca/verification

At an unspecified point during the workshop, a code will be read aloud. This is the answer to the third question of the form.

May 24, 2023 | 2:30-4pm

Virtual Roundtable

Teaching with Digital Tools and Approaches

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DMDS SCDS Library McMaster University

Agenda

2:30-3:20 Prefatory Material + Meet a New Digital Tool

- **Subhanya Sivajothy (Data Analysis and Visualization Librarian)**
  on how Gephi and Data Visualizations support Active Learning
- **Jay Brodeur (Associate Director of Digital Scholarship Services)**
  on bringing Interactive Coding and Analysis to Class with Jupyter Notebooks
- **Veronica Litt (Digital Scholarship Coordinator)**
  on Creative Assignments with Twine Games and Podcasts
- **Danica Evering (Research Data Management Specialist)**
  on Teaching Research Data Management Best Practices with **DMP Assistant**

Agenda

3:20-3:40 Case Studies
How Can Digital Tools Can Support Specific Learning Outcomes?

- Gephi reveals gaps in knowledge
- Jupyter Notebooks develop students' confidence in coding
- Podcasts teach students to make scholarship clear and engaging
- DMP Assistant makes research best practices visible.

3:40-4:00 Discussion and Q&A

Learning About You

Which digital tools have you integrated into your teaching?

What went well?

What were the challenges?

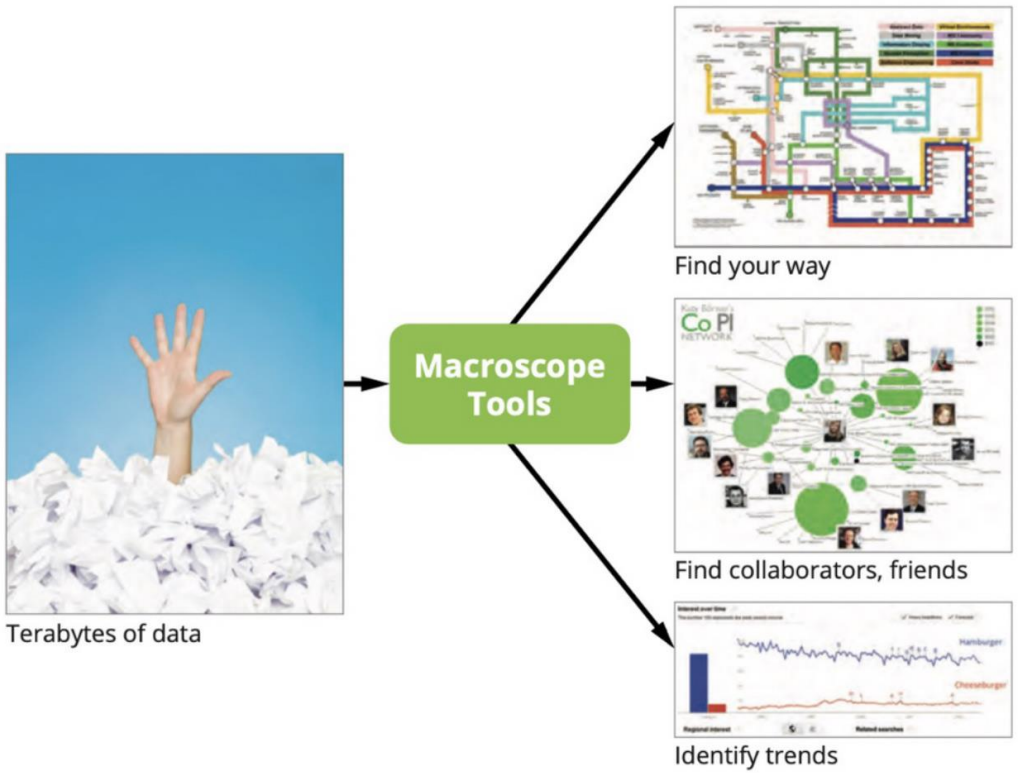
Presentations: Meet a New Digital Tool

“Using Data Visualizations for Active Learning”

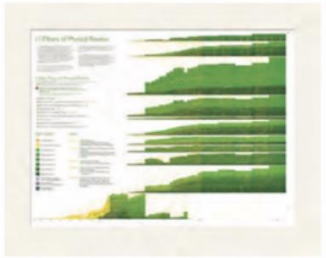
Subhanya Sivajothy (she/her)

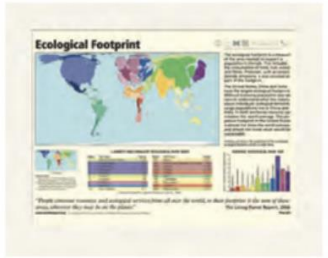
Data Analysis and Visualization Librarian
sivajos@mcmaster.ca

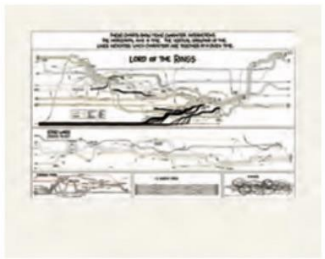
What is Data Visualization?

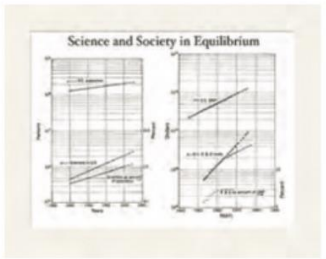


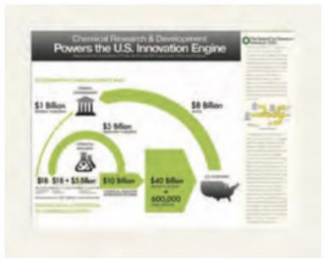
Why Use Data Visualizations?











It's all about you!

Anscombe's Quartet

Anscombe's Data										
Observation	x1	y1		x2	y2		x3	y3		x4	y4
1	10	8.04		10	9.14		10	7.46		8	6.58
2	8	6.95		8	8.14		8	6.77		8	5.76
3	13	7.58		13	8.74		13	12.74		8	7.71
4	9	8.81		9	8.77		9	7.11		8	8.84
5	11	8.33		11	9.26		11	7.81		8	8.47
6	14	9.96		14	8.1		14	8.84		8	7.04
7	6	7.24		6	6.13		6	6.08		8	5.25
8	4	4.26		4	3.1		4	5.39		19	12.5
9	12	10.84		12	9.13		12	8.15		8	5.56
10	7	4.82		7	7.26		7	6.42		8	7.91
11	5	5.68		5	4.74		5	5.73		8	6.89
				Summary Statistics							
N	11	11		11	11		11	11		11	11
mean	9.00	7.50		9.00	7.500909		9.00	7.50		9.00	7.50
SD	3.16	1.94		3.16	1.94		3.16	1.94		3.16	1.94
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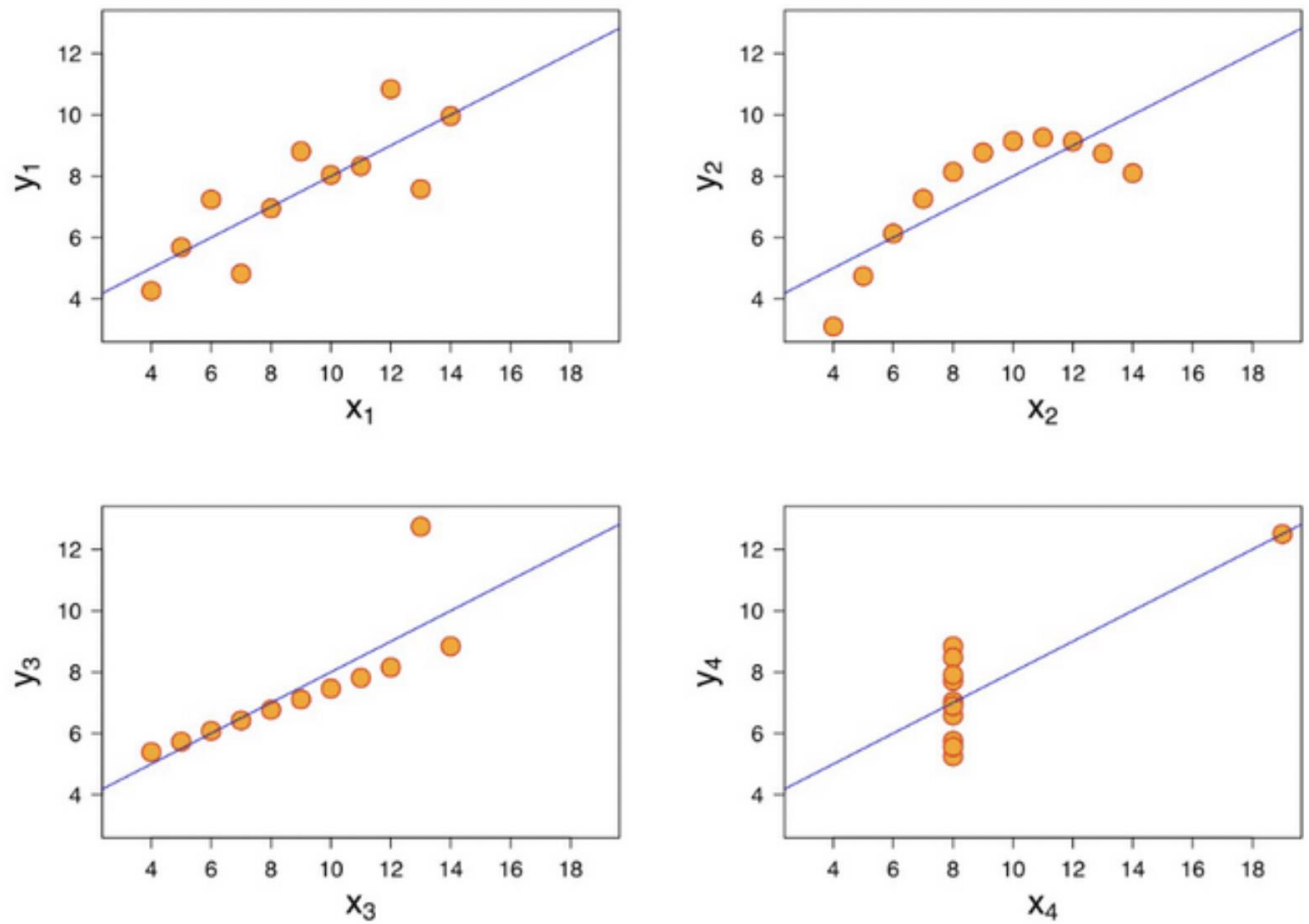
y1
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y2
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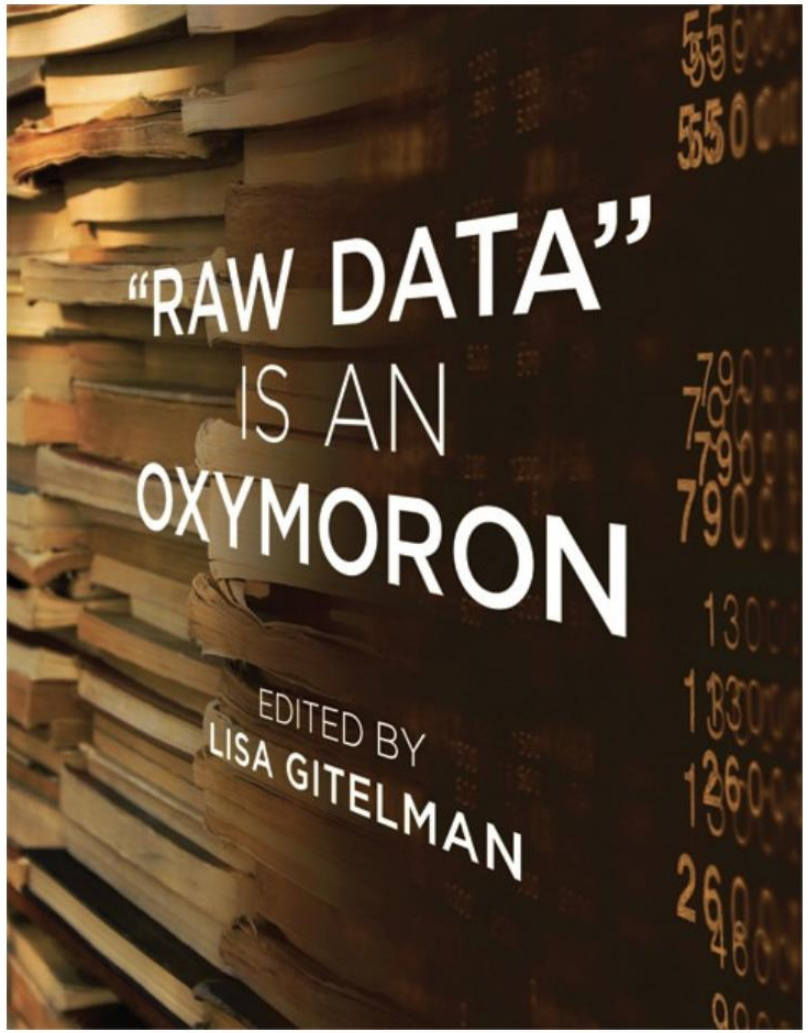
"The world does not spontaneously quantify, curate, or data-mine itself. Rather, the process of observing the world and quantifying it is a political act, and deserves ethical consideration"

- Michael Correll



Michael Correll. 2018. "Ethical Dimensions of Visualization Research." https://arxiv.org/pdf/1811.07271.pdf

Make the Invisible Visible

Visualize Hidden Labour

Visualize Hidden Uncertainty

Visualize Hidden Impacts

… Managing Complexity?

Michael Correll. 2018. "Ethical Dimensions of Visualization Research." https://arxiv.org/pdf/1811.07271.pdf

Tools for Data Visualization

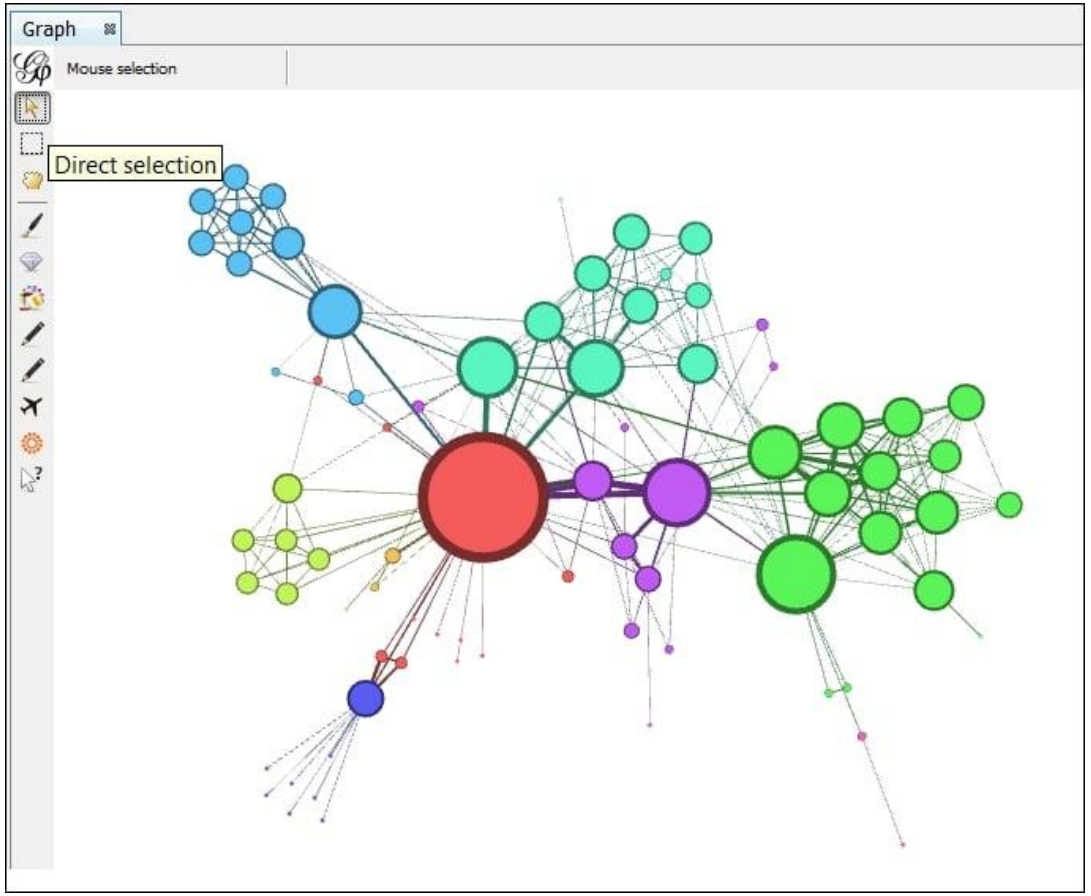
MS Excel

Tableau

Google Charts

D3.js

Network and Text Visualizations:



Gephi

Voyant

TL;DR

Advantages:

- It enhances retention and engagement: it frees our cognition to focus on other things such as outliers or differences in the data.
- Often there is a very easy learning curve, or there are a lot of software where it will just create a basic visualization for you without you having to create it from scratch.
- People often have at least basic data literacy when it comes to understanding visualizations esp. graphs such as bar graphs, pie charts etc.
- Can be interactive and be used for storytelling with the data that you're sharing.

Potential Pain Points:

- Could be easy to overload visualizations with too much information–requires a balance.
- Software can be expensive, especially the ones that have more or better aesthetic features for visualizations.
- With more complicated data and analysis that you want to show the learning curve can get steep.

“Bringing Interactive Coding into the Classroom using **Jupyter Notebooks**”

Jay Brodeur
(he/him)

Associate Director of Digital Scholarship Infrastructure & Services

brodeujj@mcmaster.ca

May 24, 2022

Teaching programming in an interactive environment has value for learners.

Instructor to learner and peer-to-peer interactions allow for:

- Timely and targeted feedback.
- Additional context, explanation, and rationale.
- Support and encouragement.
- Collaborative knowledge-building.

But doing it effectively can be challenging.

Synchronous, hands-on coding instruction should aspire to:

- Provide a barrier-free entry to the uninitiated or hesitant.
- Accommodate learners' differing baseline knowledge and proficiencies.
- Maximize time on task by mitigating hardware, OS, software discrepancies and issues.

Interactive computing & Jupyter Notebooks

Interactive computing applications contain both computer code and rich text elements like formatted text, images, figures, equations, hyperlinks, etc.

- **Human-readable** *and* **executable**: Users can develop and run code, comment their work, describe methodology, communicate results.
- Article + Code + Processing environment

Jupyter Notebook is a widely-used, open-source, interactive coding app

- Web-based, and can be run locally or on cloud services.
- Core languages = **Ju**lia + **pyt**hon + **R**, but supports kernels for dozens of language (C, NodeJs, SQL, Stata, Rust, Octave, etc.).
- Notebook files are created in an open JSON format and can be executed via the application and shared with others.

Image credit: Cameron Oelsen, BSD <http://opensource.org/licenses/bsd-license.php>, via Wikimedia Commons

How it works

An illustrative example:

https://u.mcmaster.ca/jupyter-example

Setting up Jupyter Notebooks for instruction

1. Identify where you and your students will work on their notebooks:
    - Installed on local machines (requires Python): https://jupyter.org/install
    - Using a cloud-based hosted service
        a. Jupyterlite: https://jupyter.org/try
        b. Google Colab: https://research.google.com/colaboratory
        c. Syzygy (Compute-Canada platform available to researchers across Canada): https://syzygy.ca/
        d. Constellate (Available to McMaster users on-campus or connected to the VPN): https://constellate.org/
        e. GitHub and Binder: https://mybinder.org/

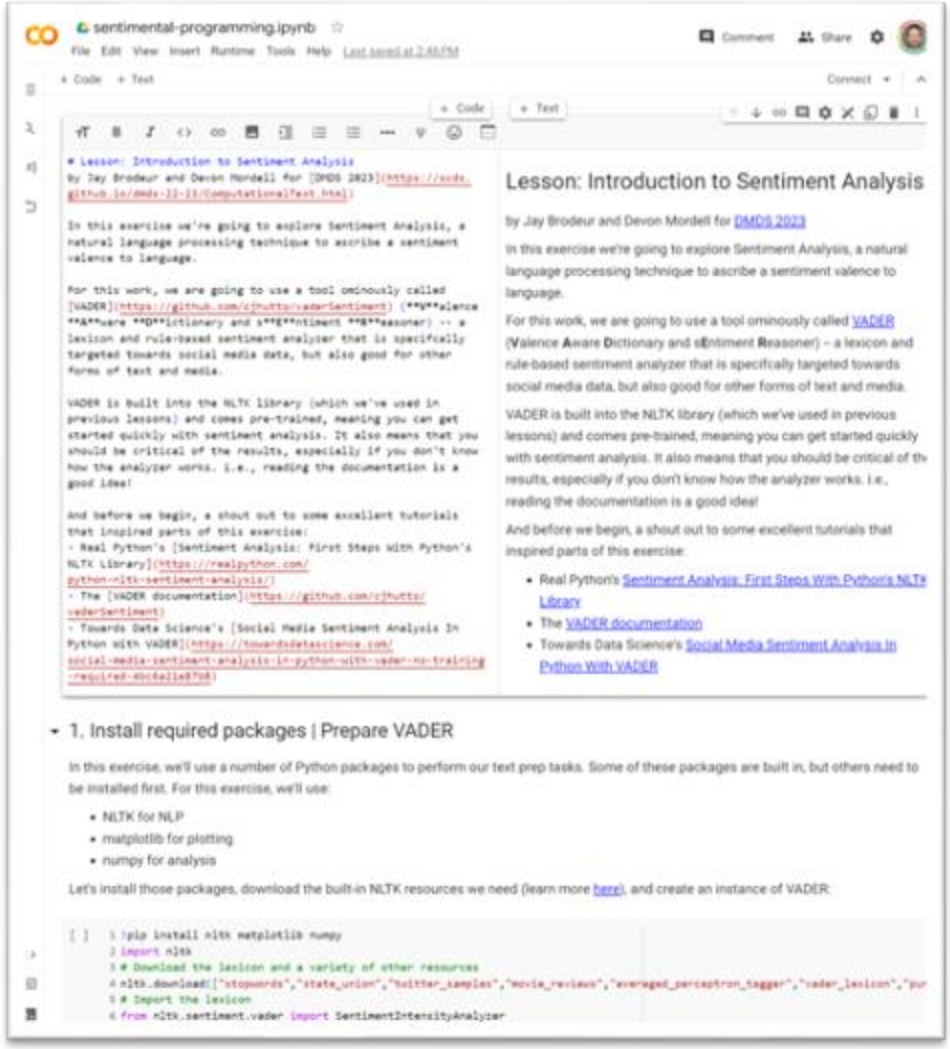
Setting up Jupyter Notebooks for instruction

2. Create the starter notebook
   - Integrate rich text introductory elements
     - Exercise description
     - Learning objectives
     - Background information (with hyperlinks)
     - Embedded media
   - Develop code blocks with explanation and comments.
     - Completed or incomplete with instructions.

3. Share the notebook file with your students.

4. Develop / execute it together in class.

5. Invite students to share their notebooks with others, where applicable.



“Computers for Creativity! Making Podcasts and Video Games in HUM2DH3”

Veronica Litt
(she/her)

Digital Scholarship Coordinator
littvs@mcmaster.ca

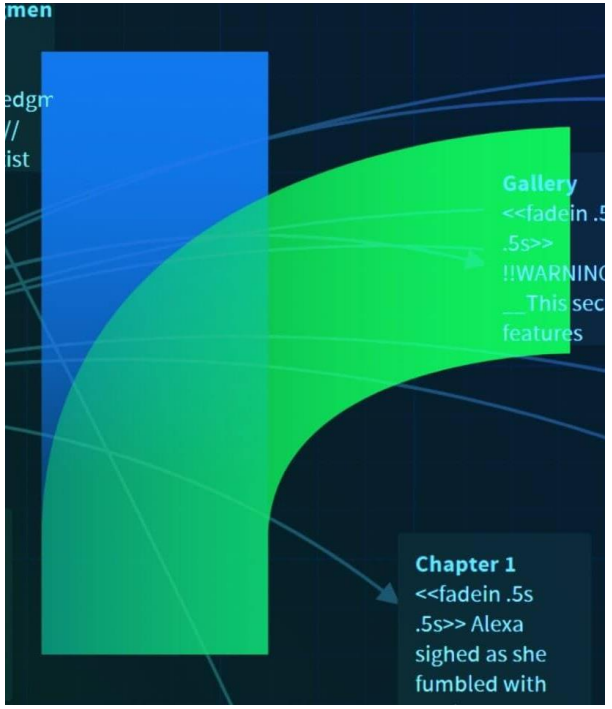
May 24, 2022

HUM2DH3
Undergraduate Course

Creative, Collaborative, Critical: Introduction to Digital Scholarship

Winter 2023

SCDS Library McMaster University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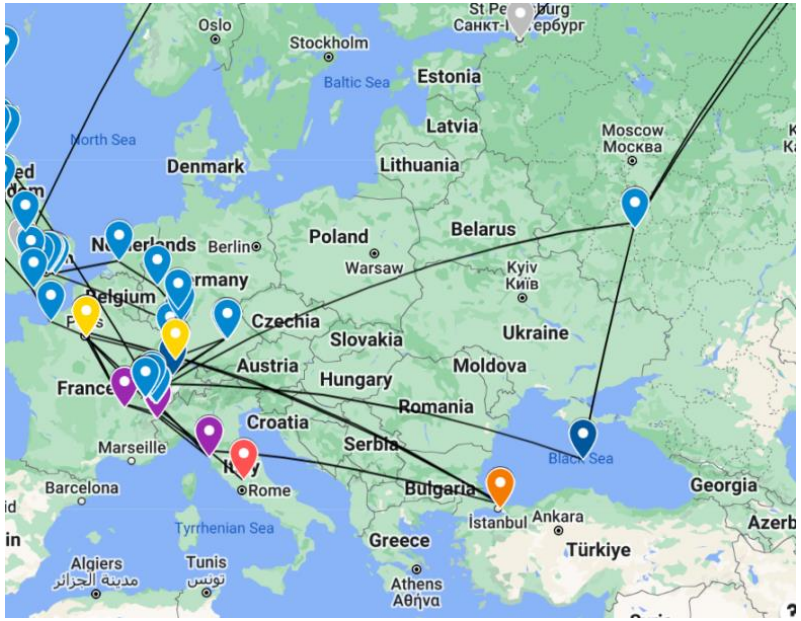
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Київ
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Slovakia
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Romania
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Serbia
Marseille
Rome
Barcelona
Bulgaria
Istanbul
Ankara
Türkiye
Georgia
Black Sea
Tyrrhenian Sea
Greece
Athens
Αθήνα
Algiers
Tunis

Victor:


I am going to create
an Creature that is so toxic,


poor
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elizabeth
cousin
moritz
innocent
sister
said
justine
say
world
shall
little
house
favourite
certainly
hope
victor
friend
heaven
william
believe
dear
death
geneva
years
alas
affection
peace
love
innocence
happy
creature
human
uncle
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health
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misfortune
miserable
mother
lady
girl
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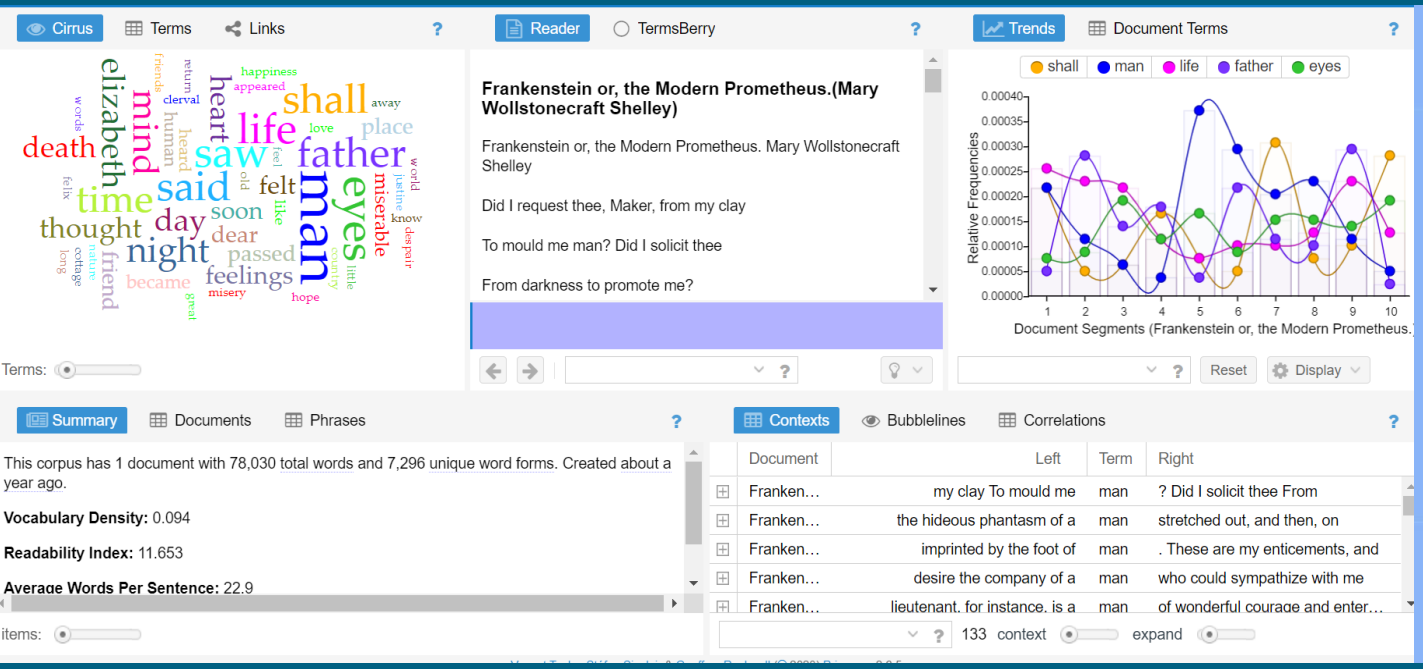
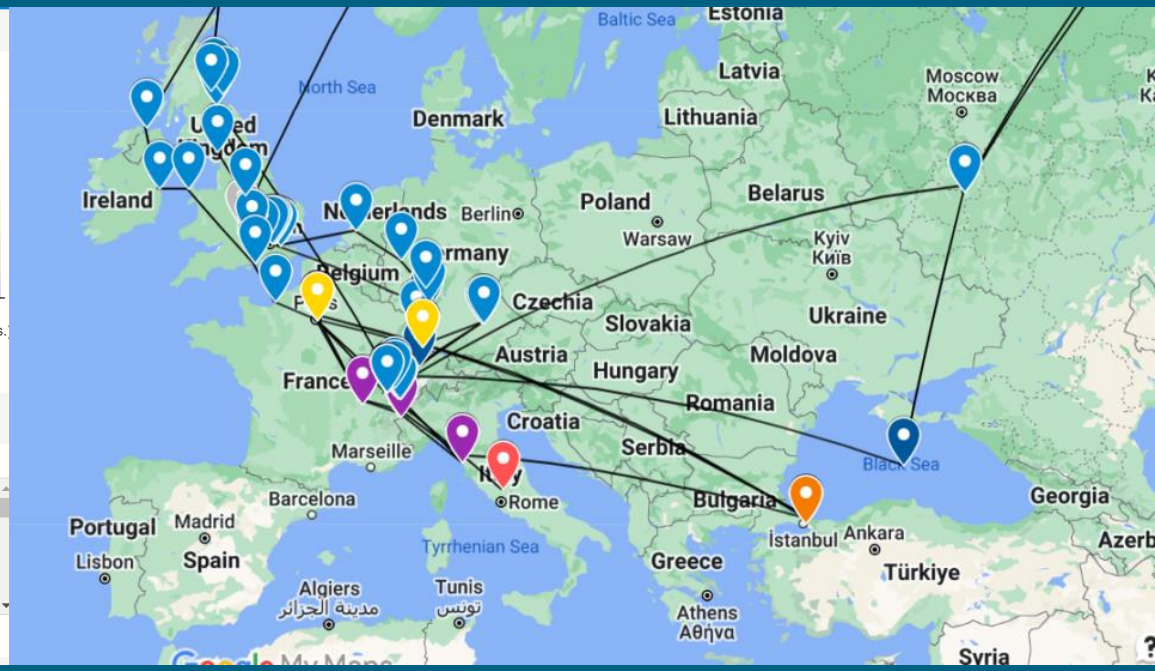
concerning

List of Victors smart decisions:





Left to right: Saman Goudarzi (Cartographic Resources Librarian), Christine Homuth (Spatial Information Specialist), Subhanya Sivajothy (Data Analysis and Visualization Librarian)

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Chapter 1
<<fadein .5s
.5s>> Alexa
sighed as she
fumbled with

OW! Rejected by Dr. Waldman

"I thought our close ties would make us a perfect match, as our love for the sciences and knowledge flood our every thought. We could have been a power couple, but your inability to support yourself no longer makes me consider our potential love."

Willing to seek another love?

Introduction

Or decide to give up...

Final Results!

"Victor's Pursuit"

by Julia Araujo, Khushi Gawri, Inaara Ladha, and Paige Tepsa

“POV: You Are Felix DeLacey”

by Hiru Batepola, Risha Khosla, Camille Kinsella, and Maya Ventresca

After fleeing from France to Germany you, your father, and Agatha have managed to find a small cabin in the woods, in the middle of nowhere. You’re starving, but do not have the means to go into town and buy any food.

What do you do?

Scavenge

"My dear Victor, what, for God's sake, is the matter?" he cried concernedly, "I found you lying on the streets, looking dreadfully ill. How fortunate that I should pass by you on my coach! Whatever would have happened had I not seen you? What is the cause of all of this?"

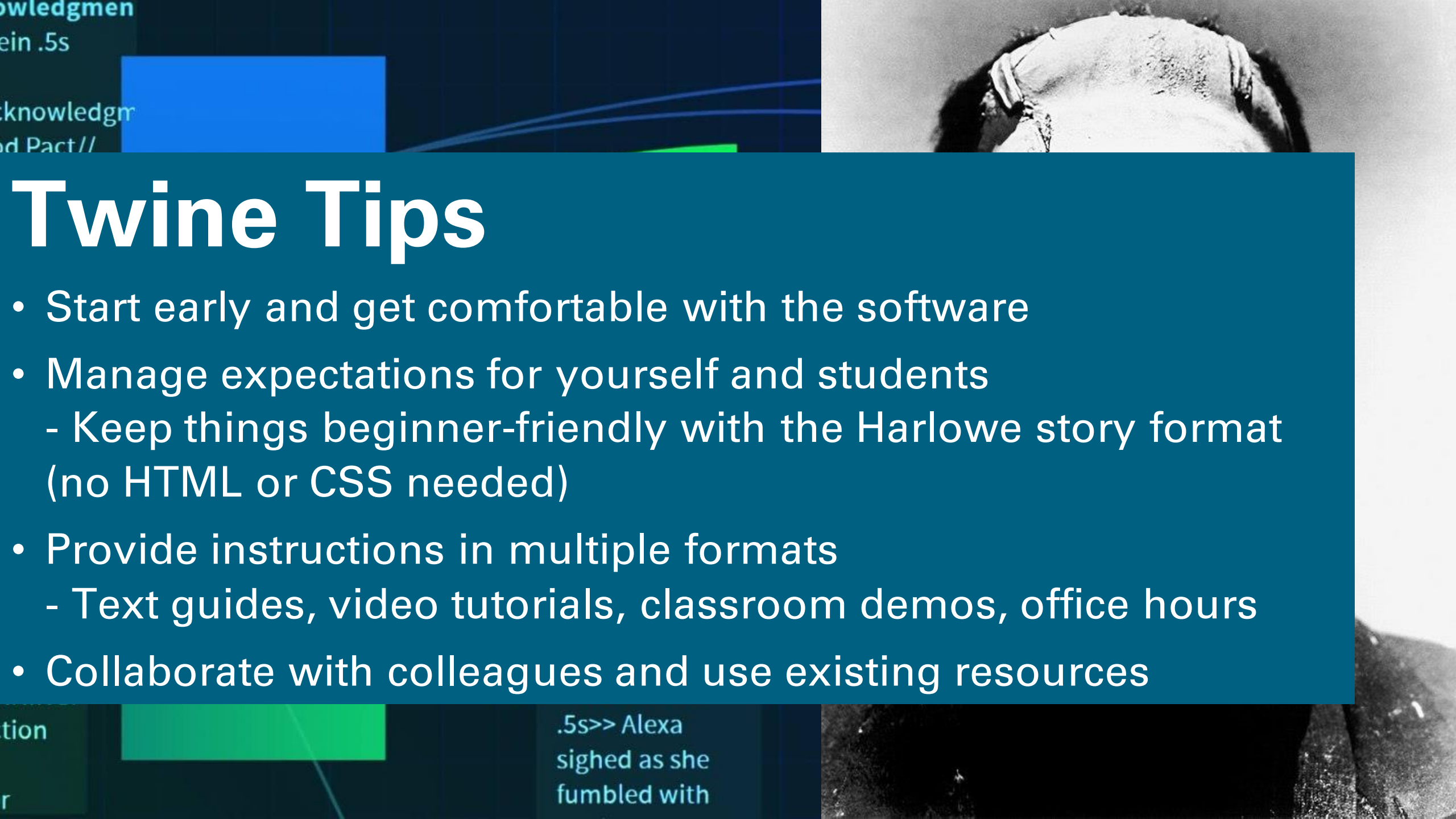
You try your best to imitate their fancy way of speaking and reply to Henry.

You remain silent, thinking that it'd be better not to say anything so that you won't give away that you're not the real Victor.

Wait, hold on a second. Why do I only have these options? Can't I do anything I want?

"Halo x Horn"

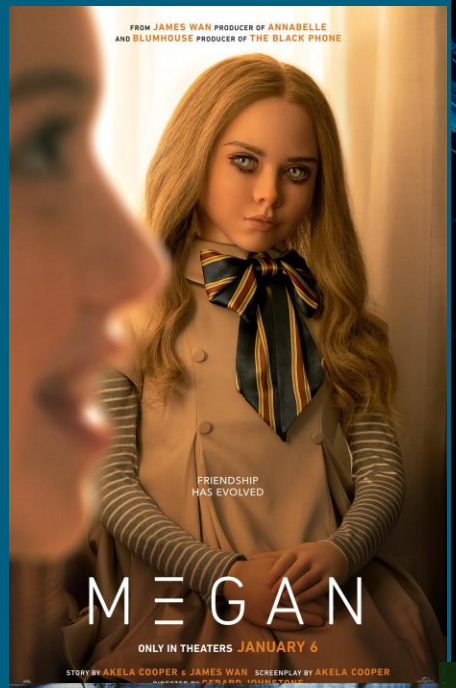
by Jenny Chau and Skade Fernando

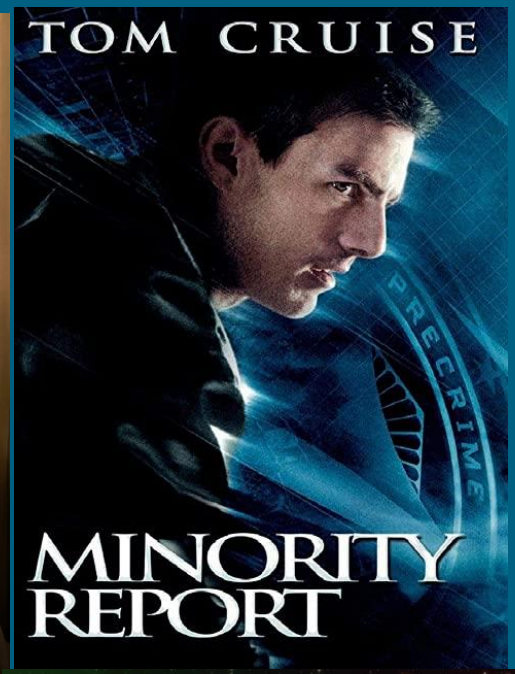


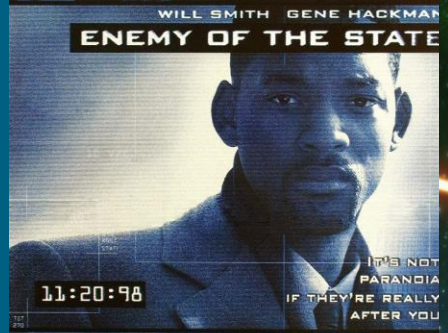
Twine Tips

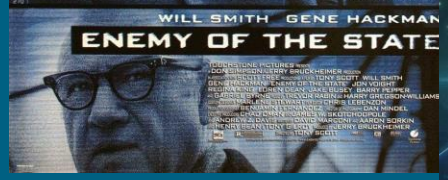
- Start early and get comfortable with the software
- Manage expectations for yourself and students
  - Keep things beginner-friendly with the Harlowe story format (no HTML or CSS needed)
- Provide instructions in multiple formats
  - Text guides, video tutorials, classroom demos, office hours
- Collaborate with colleagues and use existing resources

THE CYBER CINEMA PODCAST









Making “The Cyber Cinema Podcast”

Week One: Planning and Scripting

Class One: Keynote on Podcasting as Public Scholarship

Activity: Comparing Three Scholarly Film Podcasts

Brainstorm: What do we want our show to sound like?

- Collaboratively Decide on title, tone, sign-off, theme music, whether we want to include clips, etc

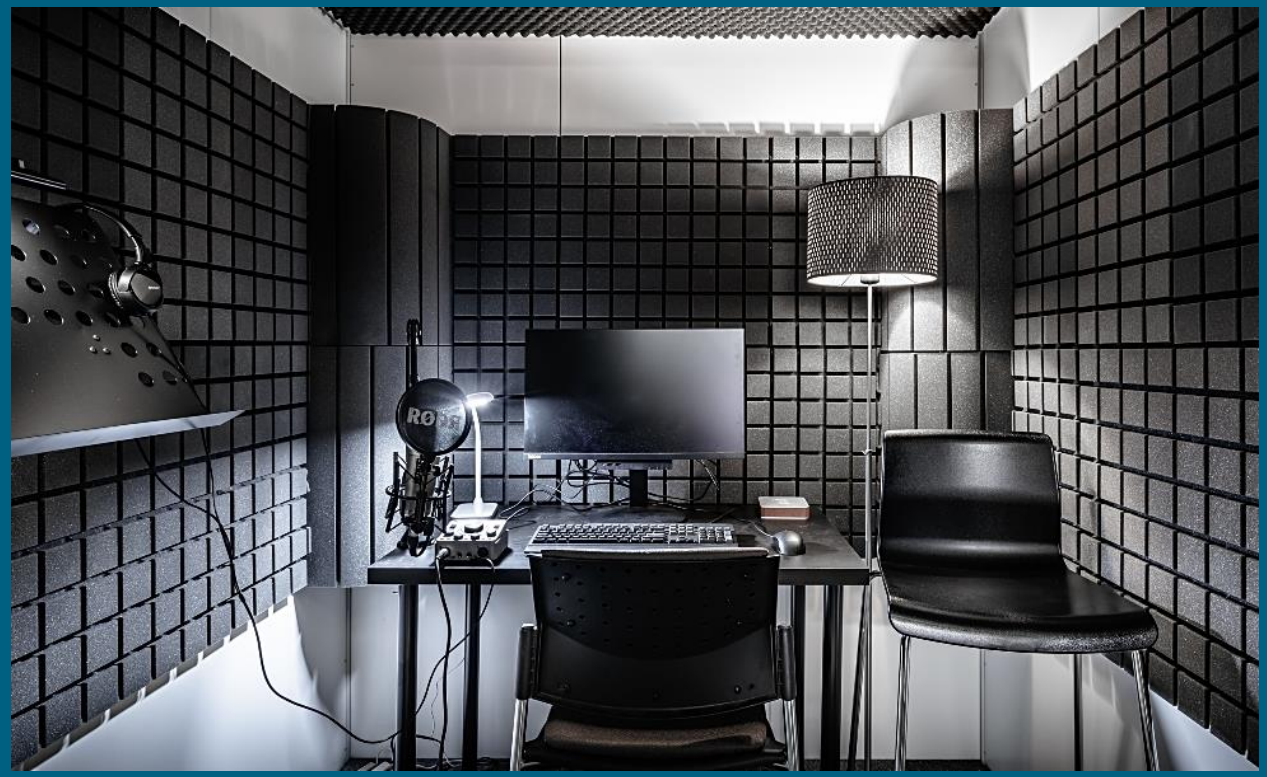
Class Two: Lesson on Scripting and Work Period

Making “The Cyber Cinema Podcast”

Week Two: Recording Audio

Class One: Demo and Practice Time: How to Record Audio

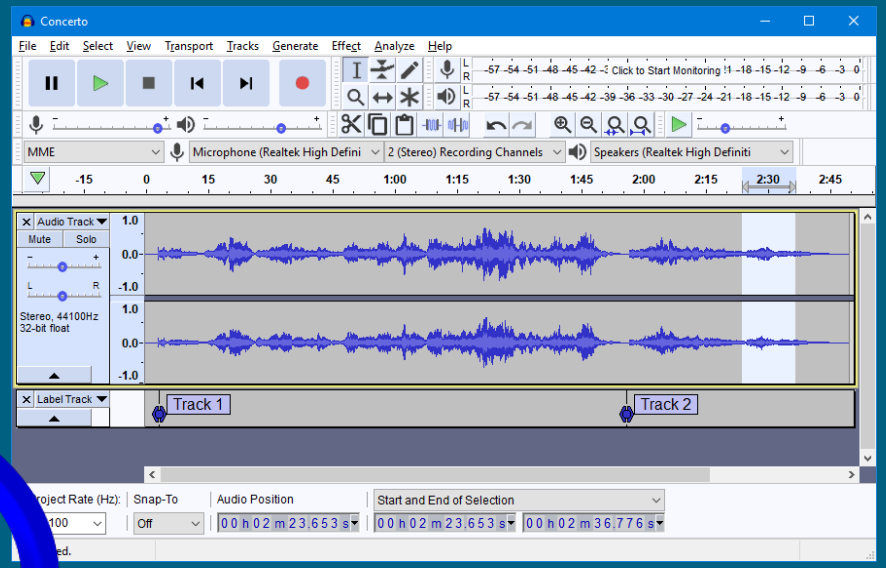
Class Two: Asynchronous Work Period at Lyons New Media Centre

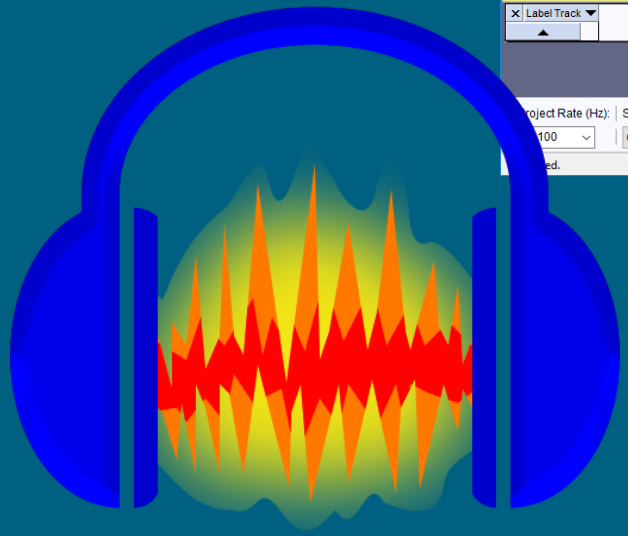


Making “The Cyber Cinema Podcast”

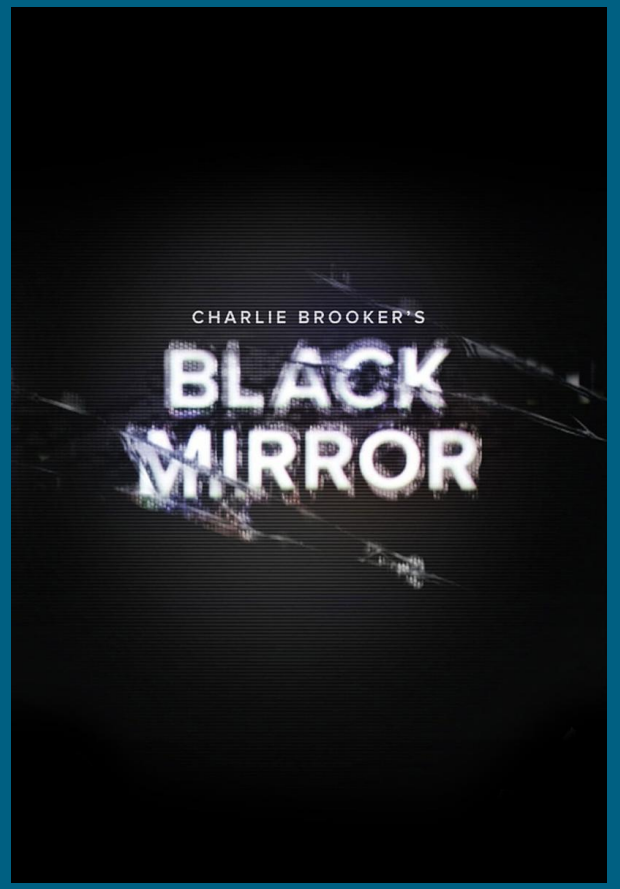
Week Three: Editing Audio

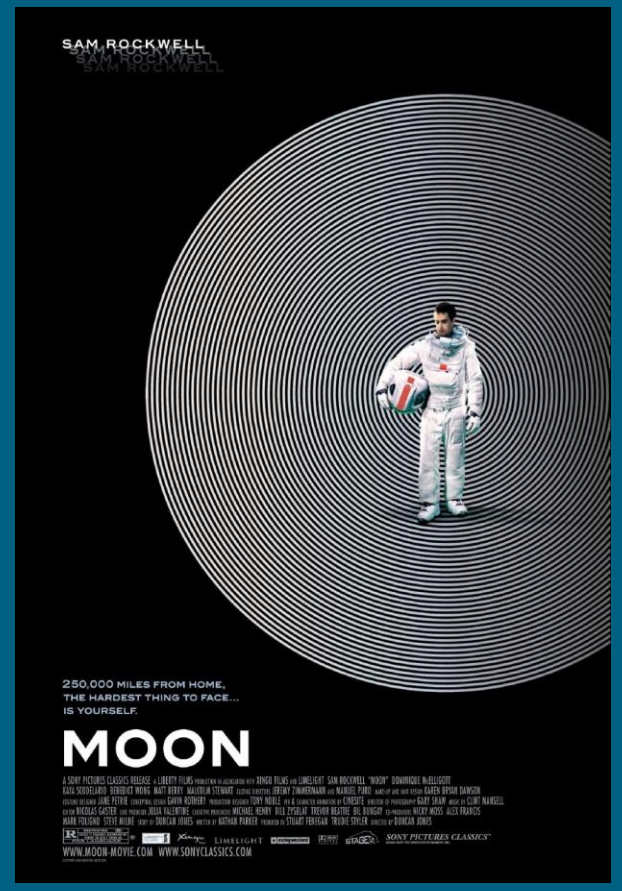
Class One: Demo and Practice
Time: How to Edit Audio
Class Two: Work Period





THE CYBER CINEMA PODCAST





Podcasting Tips

- Go in knowing that podcasting is a *process* and that each step hones different skills. You may not need to go through the whole workflow to achieve your ends
- Know that this is not a single-class activity
- Use resources on campus like the Lyons New Media Centre
- Request a guest lecture from moi

TL;DR

Potential Pain Points

- **Time:** Multi-modal tutorials are time intensive
- **Collaboration:** Some software is not easily collaborative
- **$$$:** Proprietary software can be expensive
- **Error Code:** McMaster computers may not allow users to download some software
- **Fit:** Audio mediums can struggle with overly visual topics

TL;DR

Advantages

- Clear and Engaging Communication Skills
- Students as Meaningful and Insightful Public Scholars
- Collaboration Skills
- Expansive Thinking; focus on ambiguity and multiplicity
- Software literacy is valuable for life beyond university
- Digital projects can be shared online & contribute to students' portfolios
- Great opportunity to network and collaborate with McMaster folks

Shameless plug: If you would like to chat about integrating these kinds of digital tools into your classroom, email scds@mcmaster.ca ☺

Certificate Program

The code for today's session is **"Click."**

Enter the code at https://u.mcmaster.ca/verification

“Teaching Research Data Management Best Practices with **DMP Assistant**”

Danica Evering
(they/them)

Research Data Management Specialist
everingd@mcmaster.ca

May 24, 2022

RDM Services - Teaching Support

Consultations: Available for students, postdocs, faculty, and staff with any RDM-related questions

Class Visits + Course Modules: For graduate and undergraduate levels.

Training: Introductory and focused training workshops. Current events series for 2022-23 and previous recordings available for asynchronous learning.

Website: Overview and resources through the research cycle: Secure, Plan, Find, Organize, Store, Publish, and Archive data.

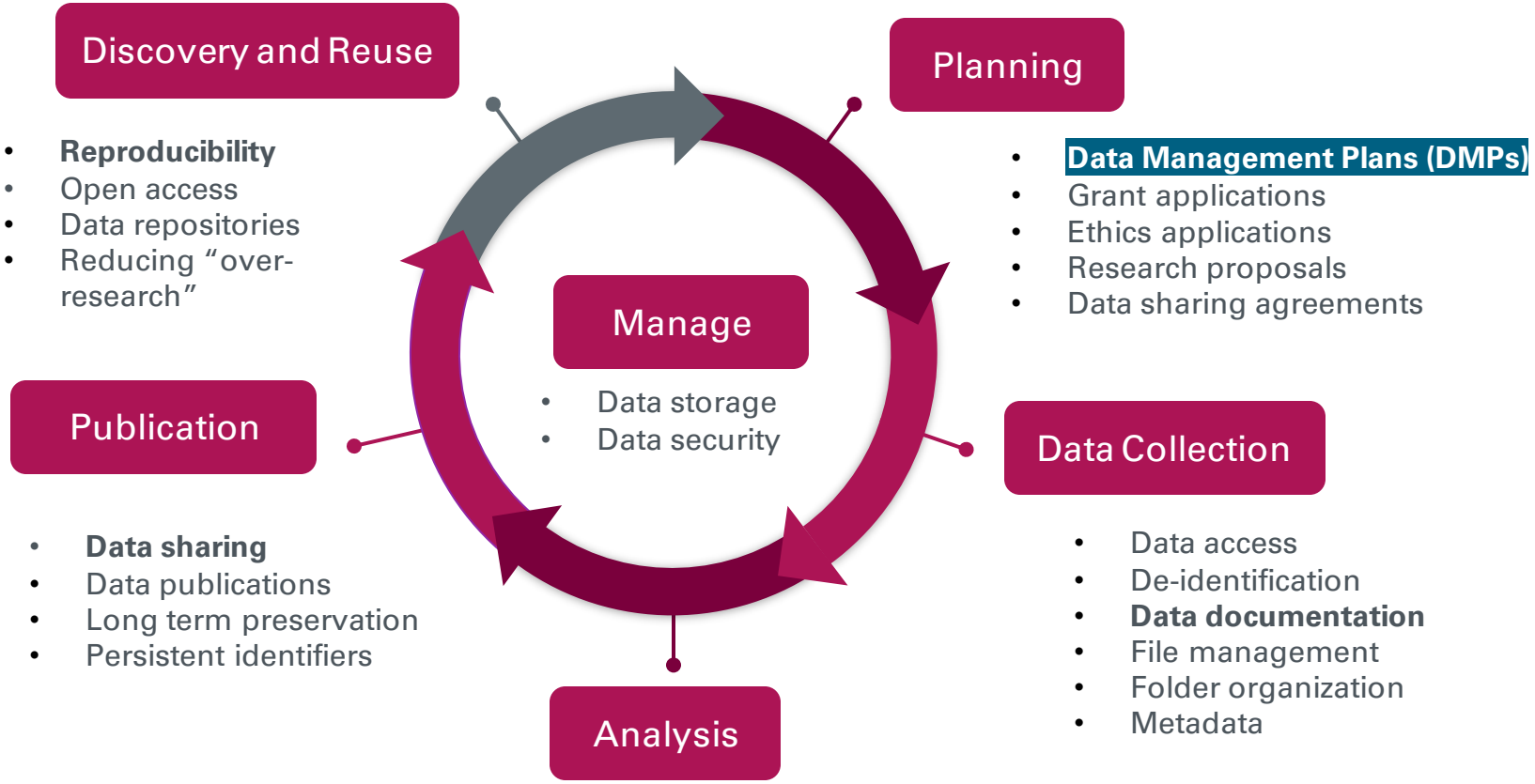
Data Storage Finder: McMaster-specific interactive tool - find a vetted storage provider based on risk, volume, and more.

DMP Assistant: interactive tool for data management plan creation - templates and exportable plans to fulfill grant requirements.

McMaster Dataverse: Institutional data repository for sharing research data. Part of the Canada-wide Borealis Repository.

What is Research Data Management (RDM)?

Research Data Management is the active organization & maintenance of data throughout the research data lifecycle to ensure its **security**, **accessibility**, **usability**, and **integrity**.



- **Reproducibility**
- Open access
- Data repositories
- Reducing "over-research"

- **Data Management Plans (DMPs)**
- Grant applications
- Ethics applications
- Research proposals
- Data sharing agreements

- **Data sharing**
- Data publications
- Long term preservation
- Persistent identifiers

- Data access
- De-identification
- **Data documentation**
- File management
- Folder organization
- Metadata

For a fuller introduction to RDM see our other webinars including "Best Practices for Managing Data in your Research" - https://scds.github.io/intro-rdm/intro.html

Data Management Plans: An open hand of cards.

- A Data Management Plan (DMP) describes **practices and processes** for collecting, storing, organizing, documenting, securing, preserving, and sharing research data for a project or program.
- DMP tools **ask pointed questions** of researchers to help them articulate their plans for managing data; *they do not compel researchers to manage data differently.*
- DMPs outline how you will manage data both **during** the active phases of your research and **after** the completion of the research project.

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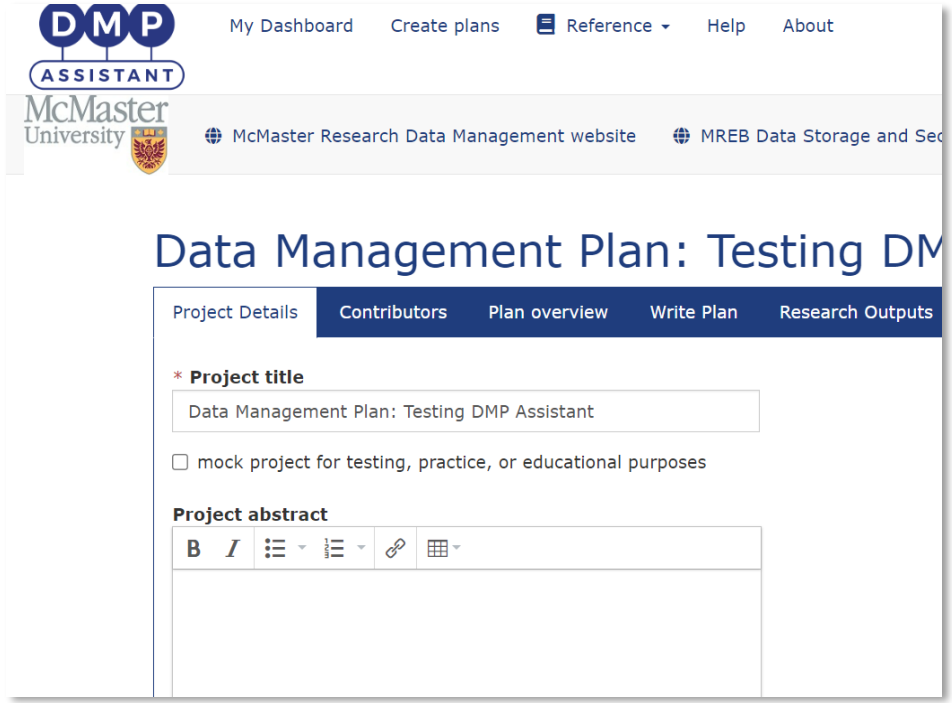
DMP Assistant

- A web-based, bilingual data management planning tool.
- Available to all researchers in Canada.
- Templates and exportable plans – format used by SSHRC, CIHR, and NSERC.
- McMaster-specific guidance and instructions.
- Send to RDM Services for review!
- Access at **rdm.mcmaster.ca/plan**



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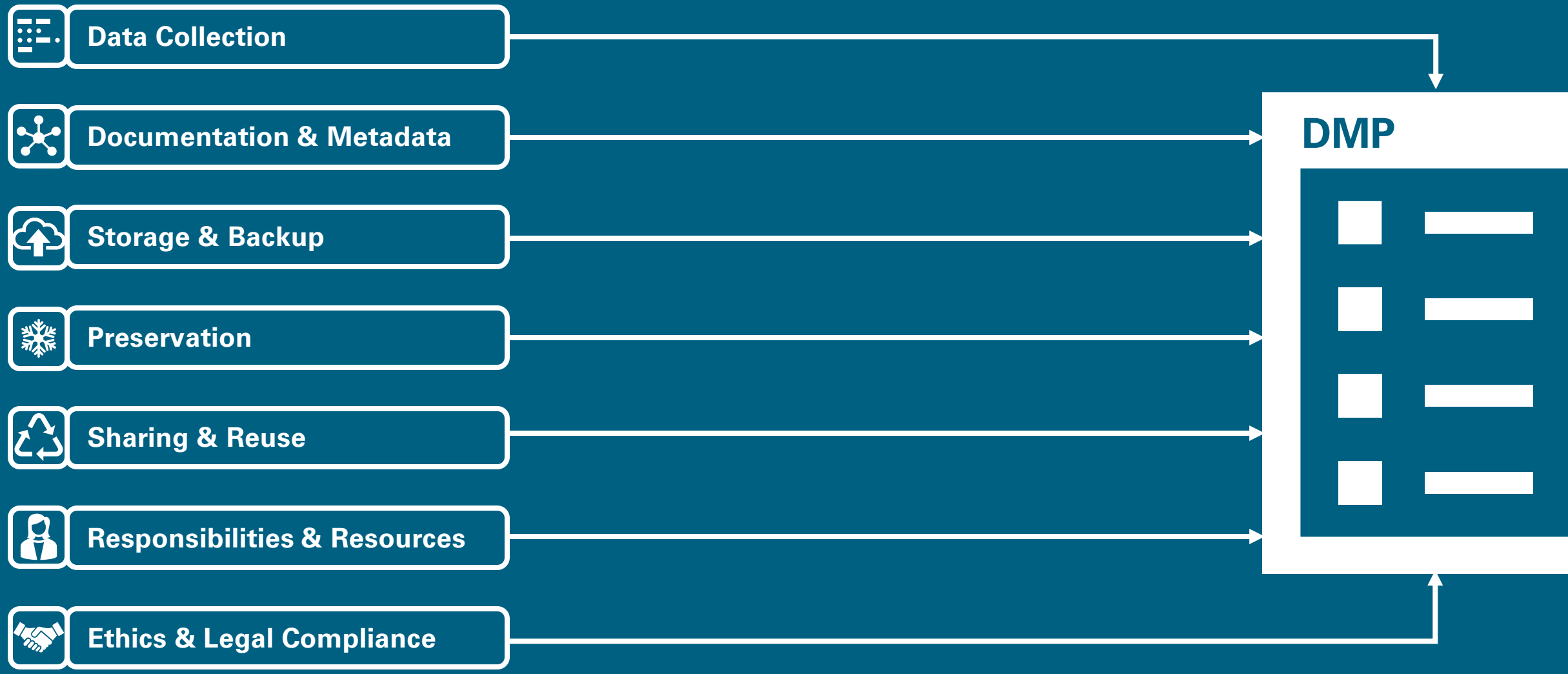
What goes in a Data Management Plan?



Why should students create a DMP?

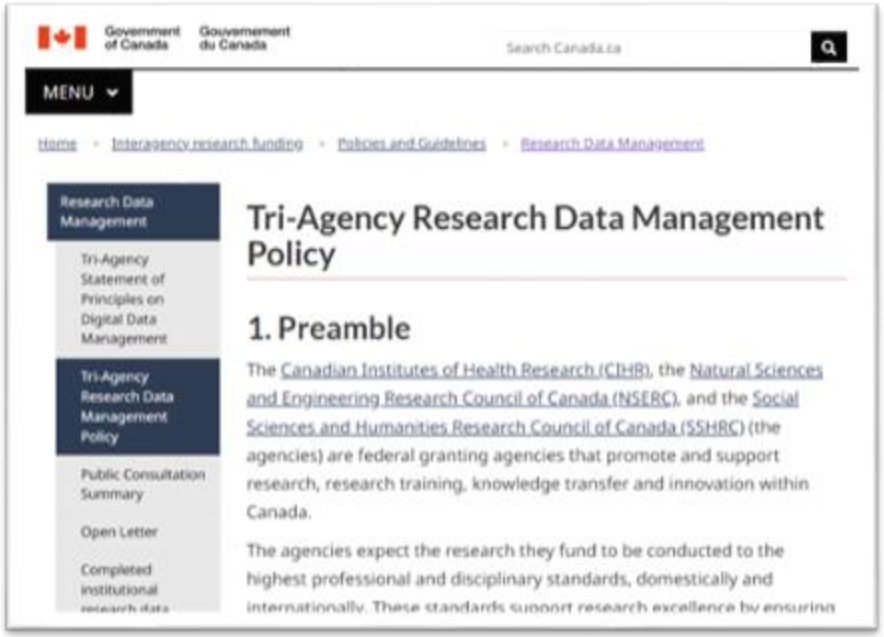
Set out consistent strategies **prior to starting your research** for how data will be managed, shared, and archived.

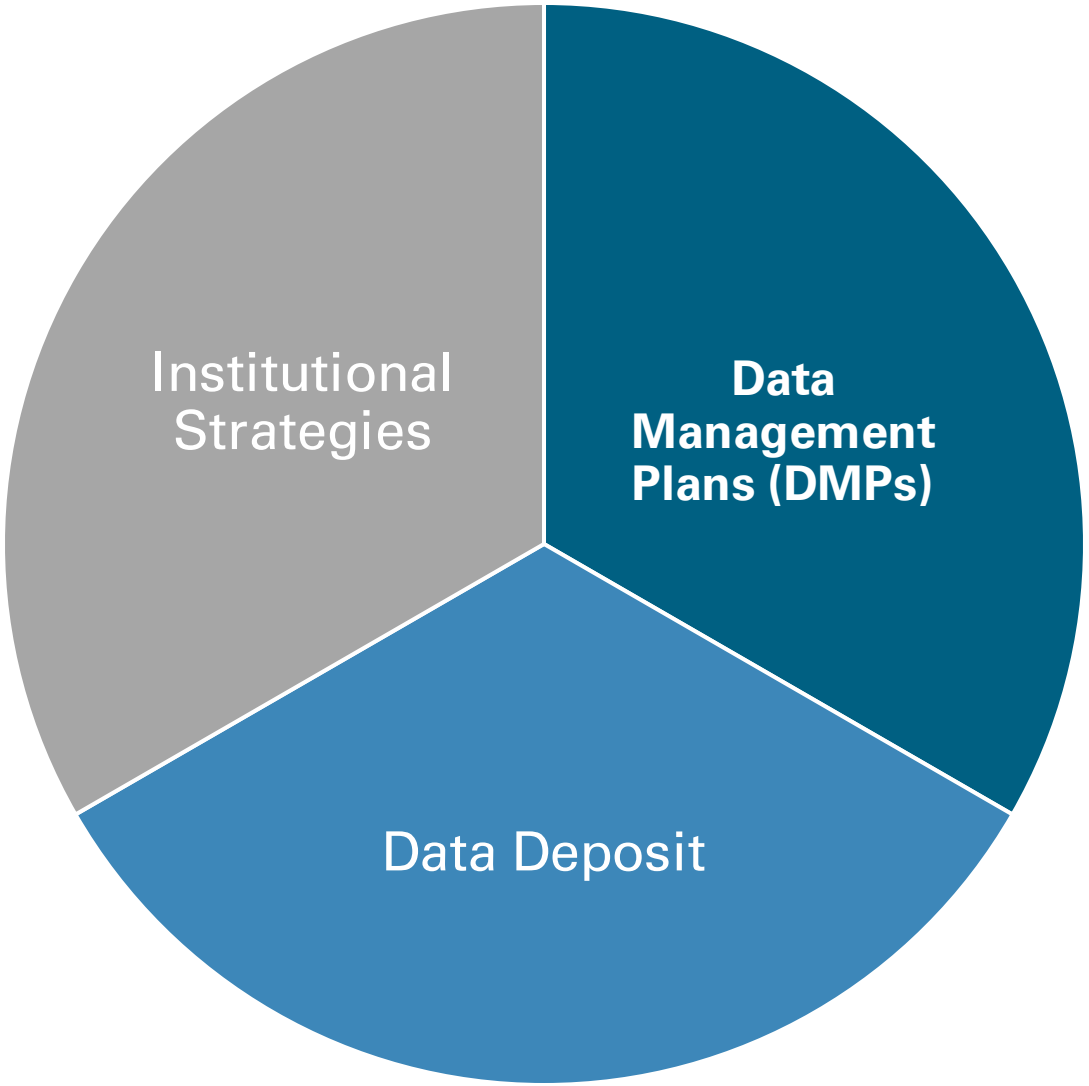
Identify the **strengths & weaknesses** in your current practices.

Ensure **quality assurance** and decide how to integrate effective data management practices into your research.

Make sure your data stay safe and align with **ethical responsibilities**.

Tri-Agency RDM Policy 2021





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Data Management Plans are **“living documents”**

- A **living document** is edited and updated on an ongoing basis.
- **Not just a grant or ethics requirement** – a DMP can describe positionality, workflows, and other important research considerations.
- Emphasize **change and iteration** in research practices.
- DMPs are not submitted once, they’re a useful, ongoing **research tool**.

Waves breaking at the Fox Island boat launch with Shaws Cove in the background, animated. By Thorsten Lindner on Wikimedia Commons

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TL;DR

Advantages:

- DMPs make students' invisible research choices, practices, and processes visible.
- Because they are increasingly a requirement for grants and ethics, teaching DMPs helps students prepare for work in the field.
- Hands-on tool for teaching – "prismatic" connections to best research practices, care in research, open research, and the value of data as a research output.

Potential Pain Points:

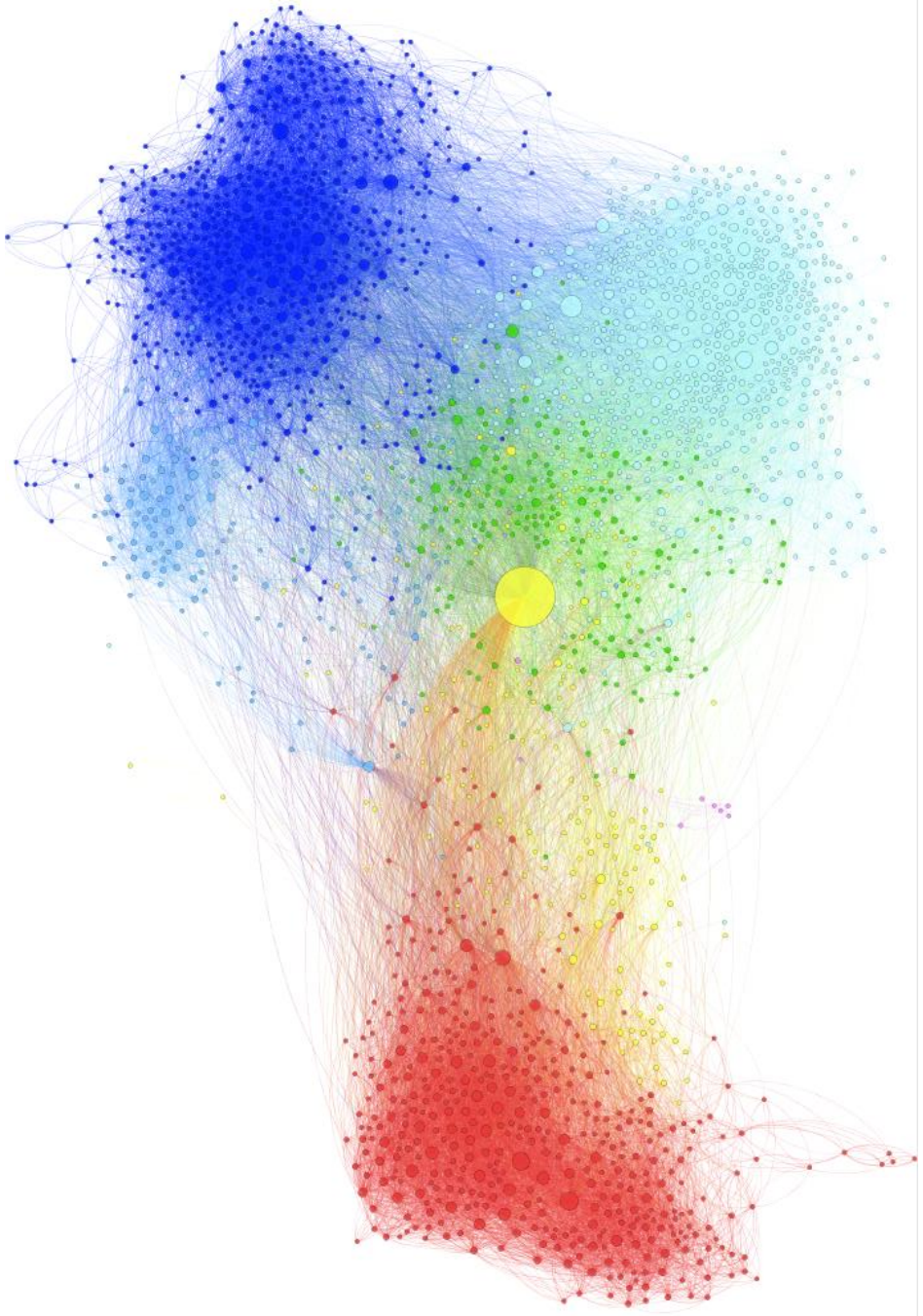
- Require some groundwork and time to teach other aspects of Research Data Management – data storage, security, sharing, archiving.
- Could be overwhelming to introduce students to the intricate web of research requirements and support all at once: *i.e. research offices, ethics boards, libraries, departmental resources, Indigenous research support, IT security units, high-performance computing, research software, grants across levels of government/industry/non-profits, etc.*

Case Studies:

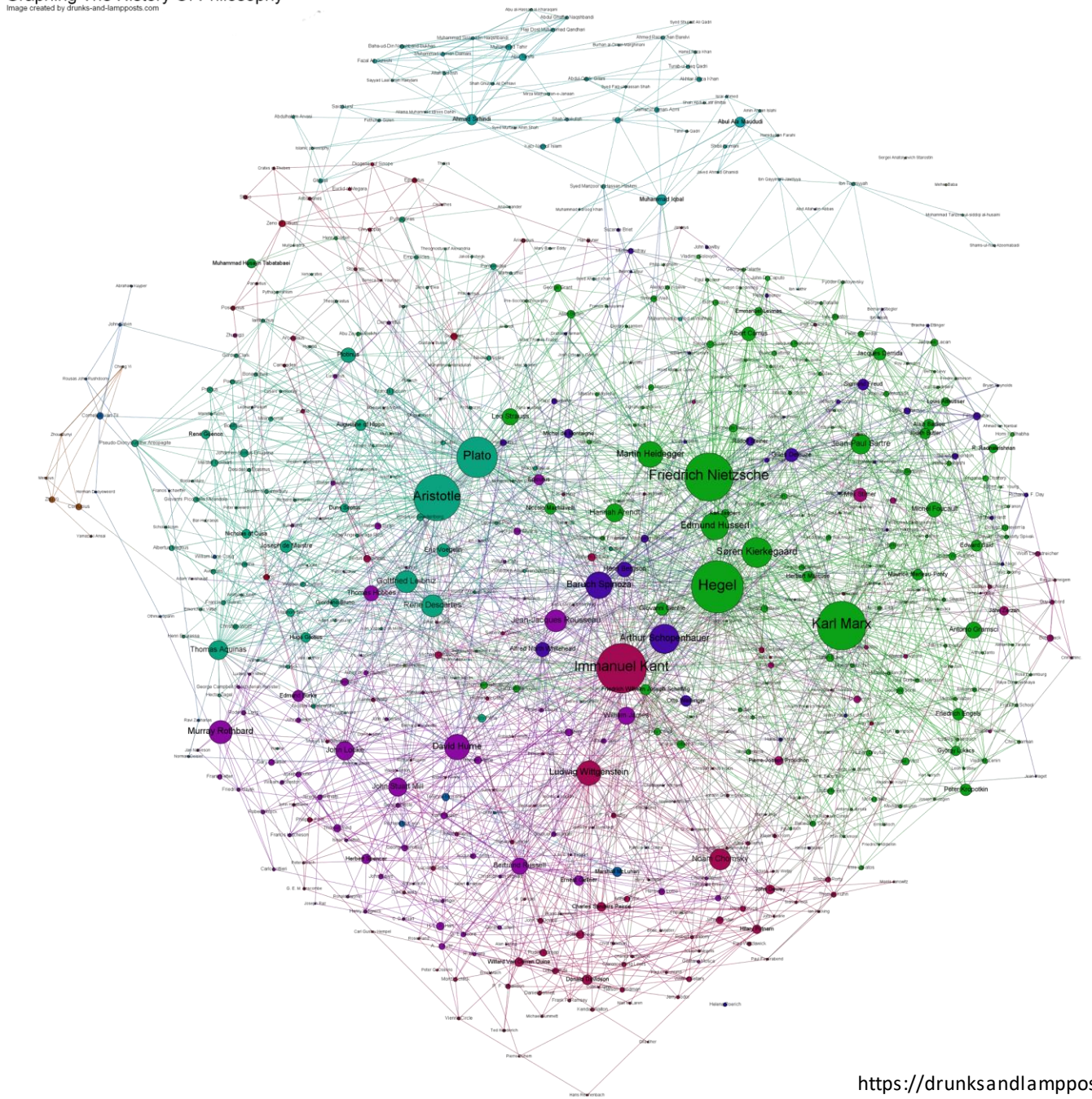
How can digital tools support specific learning outcomes?

Gephi

Subhanya Sivajothy,
Data Analysis and
Visualization Librarian
sivajos@mcmaster.ca



May 24, 2022



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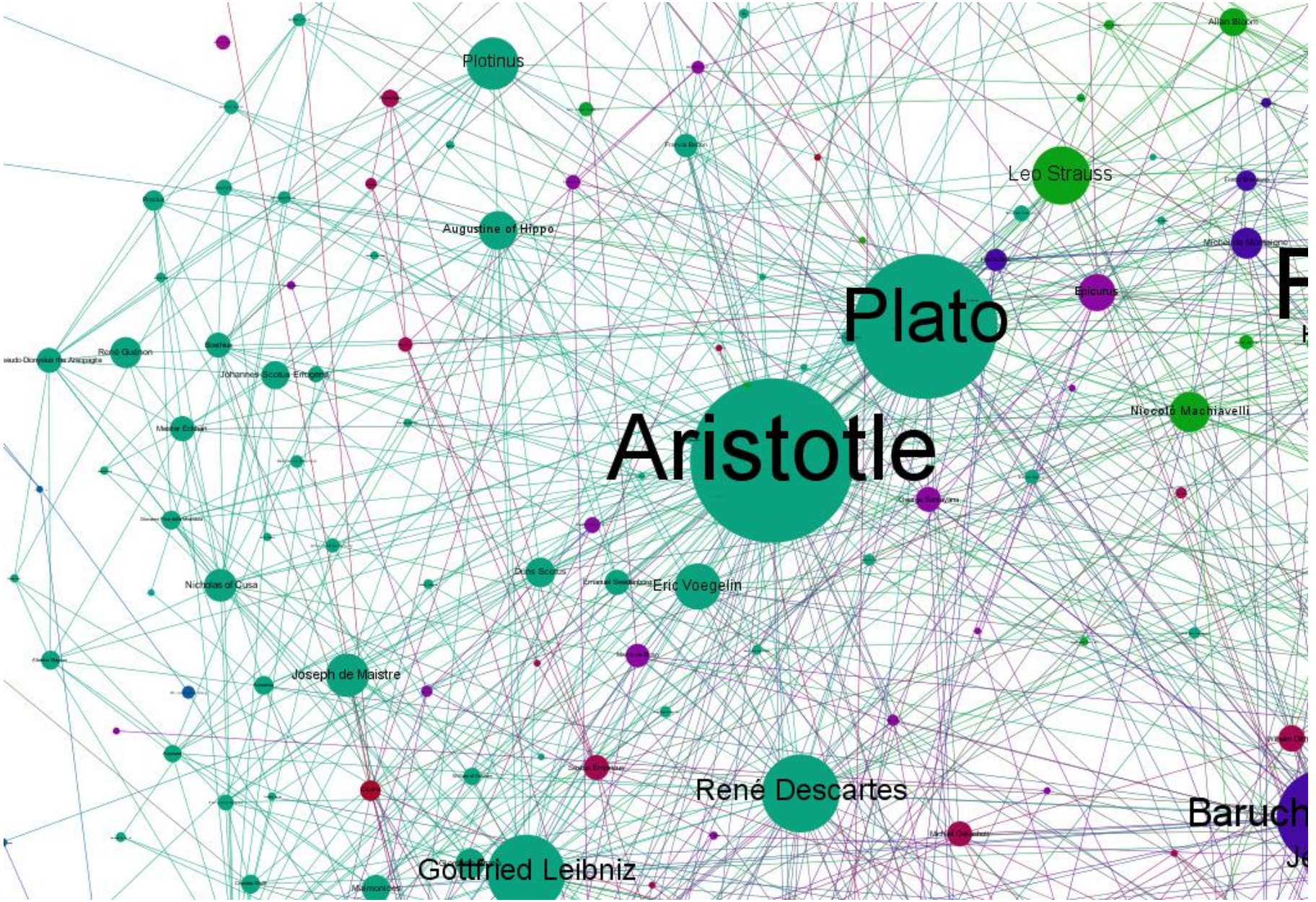
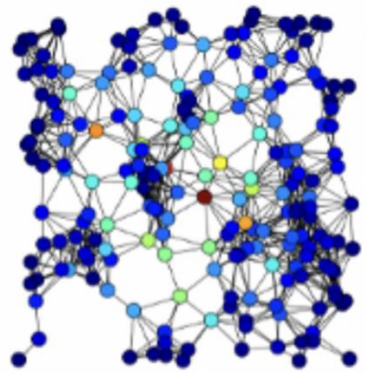
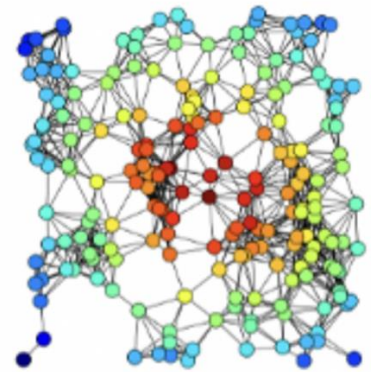

Plotinus
Leo Strauss
Augustine of Hippo
Plato
Epicurus
Aristotle
Niccolò Machiavelli
Nicholas of Cusa
Eric Voegelin
Joseph de Maistre
René Descartes
Gottfried Leibniz

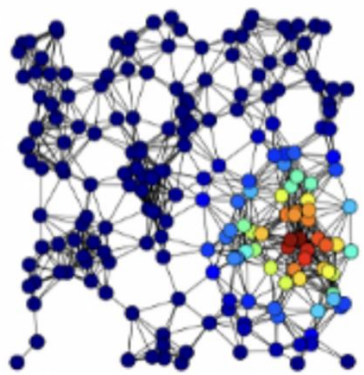
A. Betweenness

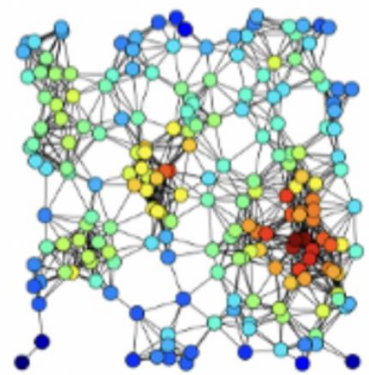




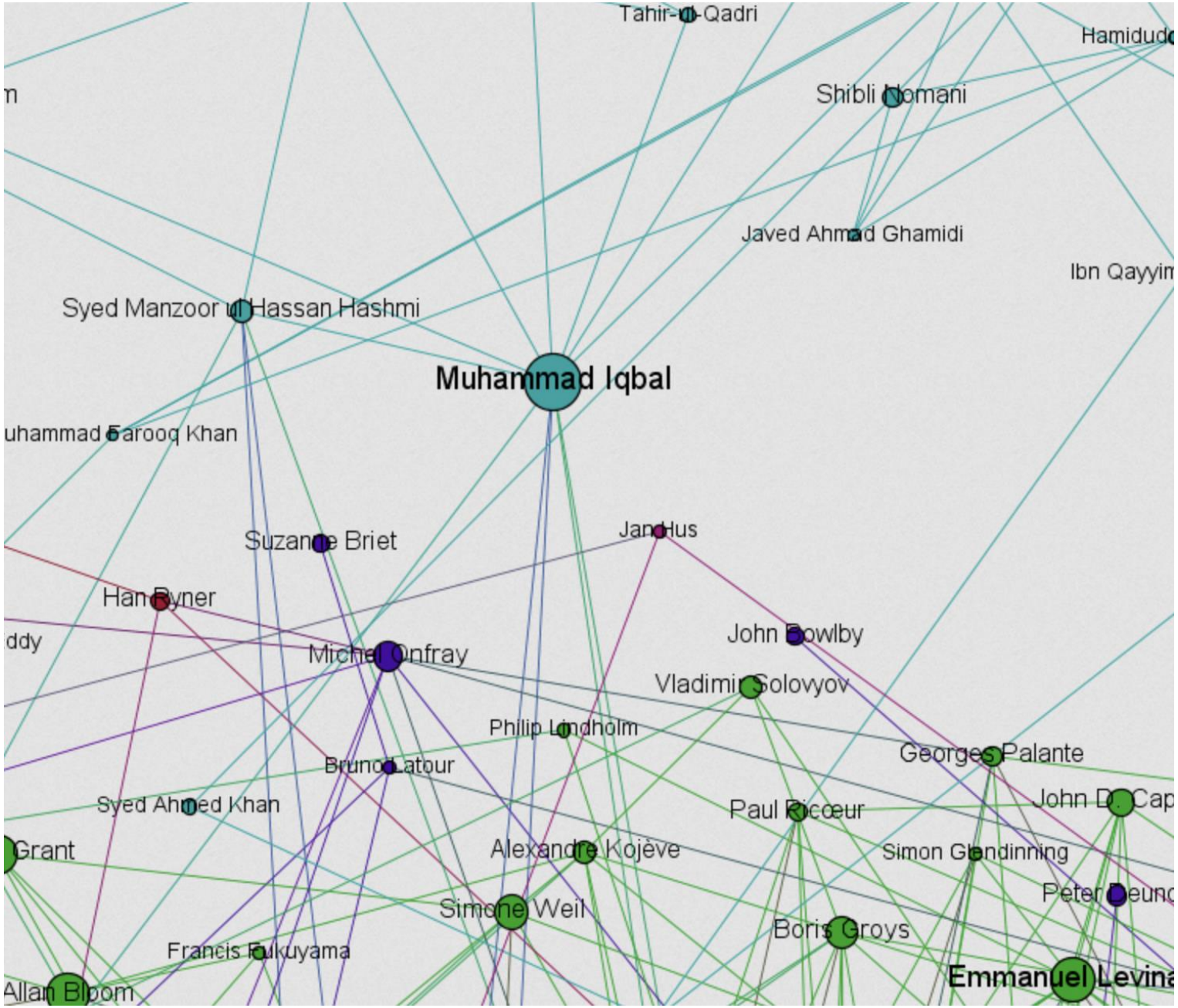
B. Closeness

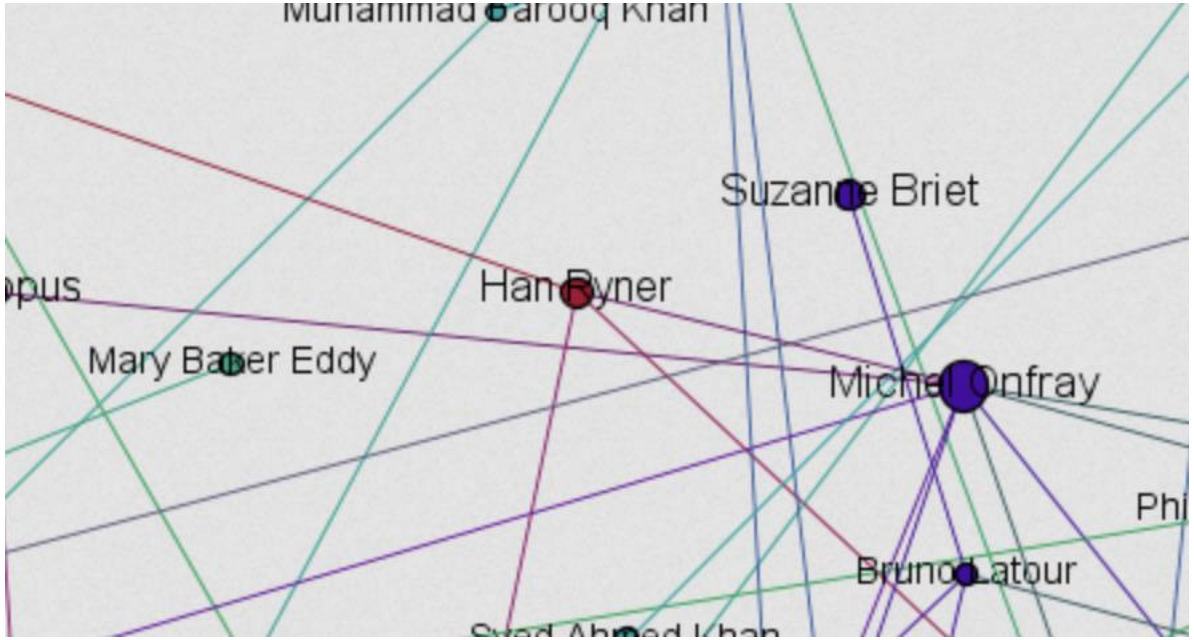
C. Eigenvector

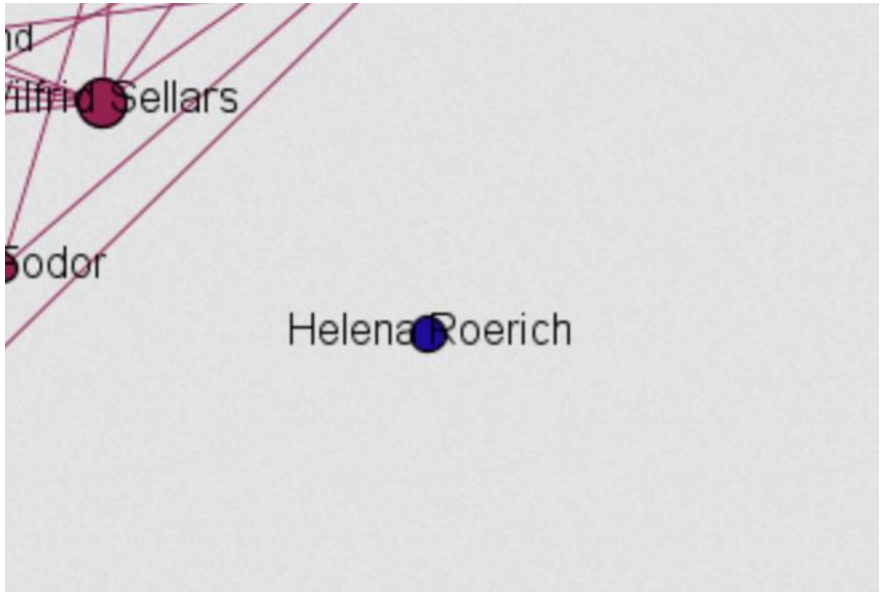




D. Degree


Tahir-ul-Qadri
Shibli Nomani
Javed Ahmad Ghamidi
Syed Manzoor ul Hassan Hashmi
Muhammad Iqbal
Suzanne Briet
Jan Hus
Michel Onfray
John Bowlby
Vladimir Solovyov
Philip Lindholm
Bruno Latour
Georges Palante
Syed Ahmed Khan
Paul Ricœur
Alexandre Kojève
Simon Glendinning
Simone Weil
Boris Groys
Francis Fukuyama
Emmanuel Levina
Allan Bloom


Suzanne Briet
Han Ryner
Mary Baker Eddy
Michel Onfray
Bruno Latour


Sellars
Helena Roerich

Jupyter Notebooks

Jay Brodeur,

Associate Director of Digital Scholarship Infrastructure & Services

brodeujj@mcmaster.ca

May 24, 2022

Image credit: Cameron Oelsen, BSD <http://opensource.org/licenses/bsd-license.php>, via Wikimedia Commons

Using Jupyter Notebooks to support learning

1. Breaking down barriers to synchronous instruction with programmatic approaches:

- Standardized and streamlined setup.
- Open and extensible technology.
- Embedded background information, examples, and explanation.

2. Introducing young scholars to emerging best practices

- **Sharing, Reuse, Reproducibility**: Jupyter Notebooks as open, sharable, reusable products.
- **Research Transparency**: Integrating elements of a research paper (context, methodology, results) with the underlying analysis and data.

Learn more in Barba, Barker, et al. 2019. "Teaching and Learning with Jupyter". Available at: https://jupyter4edu.github.io/jupyter-edu-book/

Podcasting

Veronica Litt,
Digital Scholarship Coordinator
littvs@mcmaster.ca

May 24, 2022

Podcasting: A Trio of Options

Sample Class: Undergraduate Social Work Course

Podcast Directive: Students pair up and have a conversation about anti-oppressive social work practices

Learning Outcomes

- Hone collaboration skills
- Cultivate students' scholarly voice
- Select episodes can act as a resource for future iterations of the class

Podcasting: A Trio of Options

Sample Class: Graduate English Course

Podcast Directive: Students script and record an episode that contrasts a canonical interpretation of a novel with their interpretation (can be done in pairs or solo)

Learning Outcomes

- Practice communicating literary analysis to a public audience
- Can work adjacently to an annotated bibliography in training students to conduct secondary source research in a fresh way

Podcasting: A Trio of Options

Sample Class: Continuing Education Course on Data Analytics

Podcast Directive: Students interview a person in the field about their career path

Learning Outcomes

- Networking opportunity
- Hones communication skills
- Select episodes can act as a resource for future iterations of the class

DMP Assistant makes best practices visible.

Case Study: Graduate Research Methods

Danica Evering, Research Data Management Specialist
everingd@mcmaster.ca

May 24, 2022

Goal Learning Outcomes:

- **Organize thesis research** with a tool students will use in their career.
- Learn to **practice care** in research by beginning with the end in mind.
- Understand **open research** and the value of datasets.

DMP Assistant – **Course Integration Components**

Early Semester:

- **Presentation**: Intro to Research Data Management
  - *Provides understanding of open research, the value of data, and overview of best practices for storage, security, sharing, and more.*
- **Demo**: DMP Assistant, DMP Examples Database, Course DMP Rubric
  - *Introduce students to tool and share examples of DMPs in your field.*
- **Assignment:** First Draft of Data Management Plan
  - *Complete a DMP for your thesis research using DMP Assistant, looking at other DMP examples for guidance.*

Section 1: Types of data produced

Types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project

		Performance Level			
	Performance Criteria	Complete/detailed	Addressed issue, but incomplete	Did not address	Directorates w/this req.
General assessment criteria	1.1 *Describes what types of data will be captured, created, or collected*	Clearly defines data type(s). *E.g. text, spreadsheets, images, 3D models, software, audio files, video files, reports, surveys, patient records, samples, final or intermediate numerical results from theoretical calculations, etc. Also defines data as: observational, experimental, simulation, model output or assimilation* *"This project will produce: observational data in binary format, which is then converted by proprietary instrumentation software into ASCII text; Matlab mat-files for working data during the analysis phase; CSV and/or HDF5 files for data sharing and preservation."*	Some details about data types are included, but DMP is missing details or wouldn't be well understood by someone outside of the project *"We will collect zooplankton data from net tows. We will also collect elemental ratio data from preserved samples."*	No information about data types is included; fails to adequately describe data types.	All
Directorate- or division-specific	1.2 *Describes how data will be collected, captured, or created (whether new observations, results from models, reuse of other data, etc.)*	Clearly defines how data will be collected, captured or created, including methods, instruments, software, or infrastructure where relevant. *"Ride data will be collected via the smartphone apps, including both user entered information, such as observed road conditions or photos, as well as information captured automatically by the phone itself, such as GPS location."*	Missing some details regarding how some of the data will be produced, makes assumptions about reviewer knowledge of methods or practices. *"Data will be captured by sensors in the field"*	Does not include information regarding how the data will be collected, captured or created.	GEO AGS, GEO EAR SGP, MPS AST
				ot	GEO EAR SGP, GEO AGS

Data Management Plans As a Research Tool (DART) – **Course DMP Rubric**

https://osf.io/jj7dm

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Data Collection

What types of data will you collect, create, acquire and/or record?

We will be collecting surveys which will then be exported into tabular format.

We will also be conducting both semi-structured interviews and focus groups that will produce both digital audio and text (transcriptions) based data.

What file formats will your data be collected in? Will these formats allow for data re-use, sharing and long-term access to the data?

Our file formats will exist both in non-proprietary and proprietary formats. The non- proprietary formats will ensure that these data are able to be used by anyone wishing to do so once they are deposited and made openly available.

Surveys will exist in .csv (non-proprietary), MS Excel, & SPSS (both proprietary) formats. For more information regarding SPSS see: SPSS Wikipedia https://en.wikipedia.org/wiki/SPSS

Interviews & focus groups data will exist in .mp3 (non-proprietary), MS Word & NVivo (both proprietary) formats. For more information regarding NVivo see: NVivo Wikipedia https://en.wikipedia.org/wiki/NVivo

Any survey data deposited for sharing and long-term access will be in .csv format so that anyone can use them without requiring proprietary software.

The final de-identified versions of the interviews and focus groups transcripts will be exported into a basic non-proprietary text format for deposit, long-term preservation and access.

DMP Example: **Mixed Methods**

https://alliancecan.ca/en/services/research-data-management/learning-and-training/training-resources

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Potential Reading Assignments:

- Cynthia Hudson-Vitale and Heather Moulaison-Sandy, "Data Management Plans: A Review," DESIDOC Journal of Library and Information Technology 39, no. 6 (December 18, 2019): 322–28, https://doi.org/10.14429/djlit.39.6.15086.

- "DataWorks! Data Management Plan (DMP) Challenge Evaluation Rubric," Federation of American Societies for Experimental Biology (FASEB), 2023, https://www.faseb.org/getmedia/cb681545-2ed5-4970-b167-e1b47b1f225e/Rubric-for-DataWorks-DMP-Challenge-12-14-21.pdf

- Maria Praetzellis, "DMP Competition Winners: DMPs so good they go to 11," Qualitative Data Repository, DMP Tool, Princeton Research Data Service, May 19, 2021, https://blog.dmptool.org/2021/05/19/dmp-competition-winners-dmps-so-good-they-go-to-11/

Data Management Plan: Testing DMP Assistant

Project Details | Contributors | Plan overview | Write Plan | Research Outputs | Share | Request feedback | Download

Set plan visibility

Public or organizational visibility is intended for finished plans. You must answer at least 0% of the questions to enable these options. Note: test plans are set to private visibility by default.

- (•) Private: visible to me, specified collaborators and administrators at my organization
- ( ) Organization: anyone at my organization can view
- ( ) Public: anyone can view or download from the Public DMPs page

Manage collaborators

Invite specific people to read, edit, or administer your plan. Invitees will receive an email notification that they have access to this plan.

Email address	Permissions	
everingd@mcmaster.ca	Owner	

Invite collaborators

* **Email**

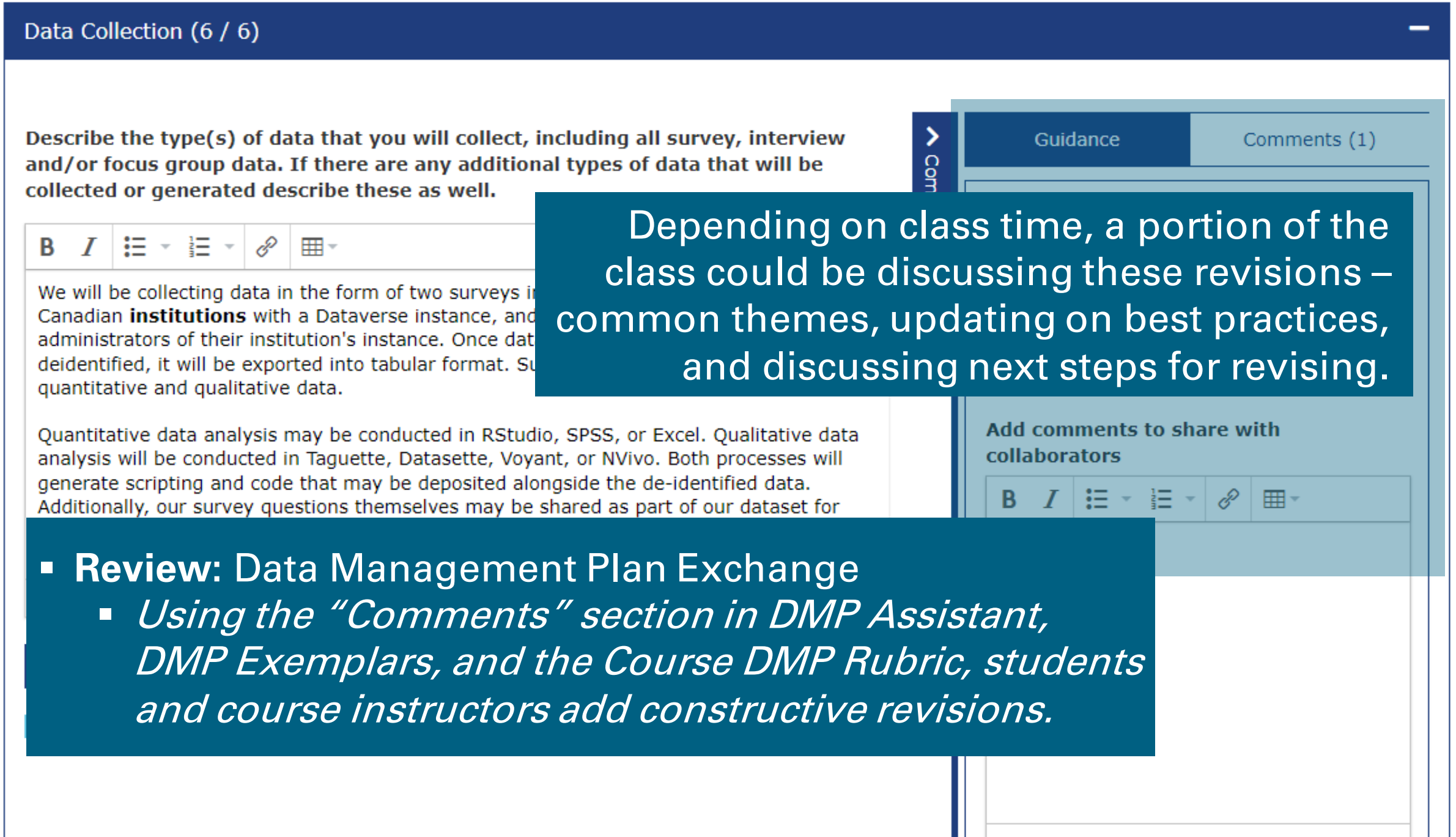
* **Permissions**

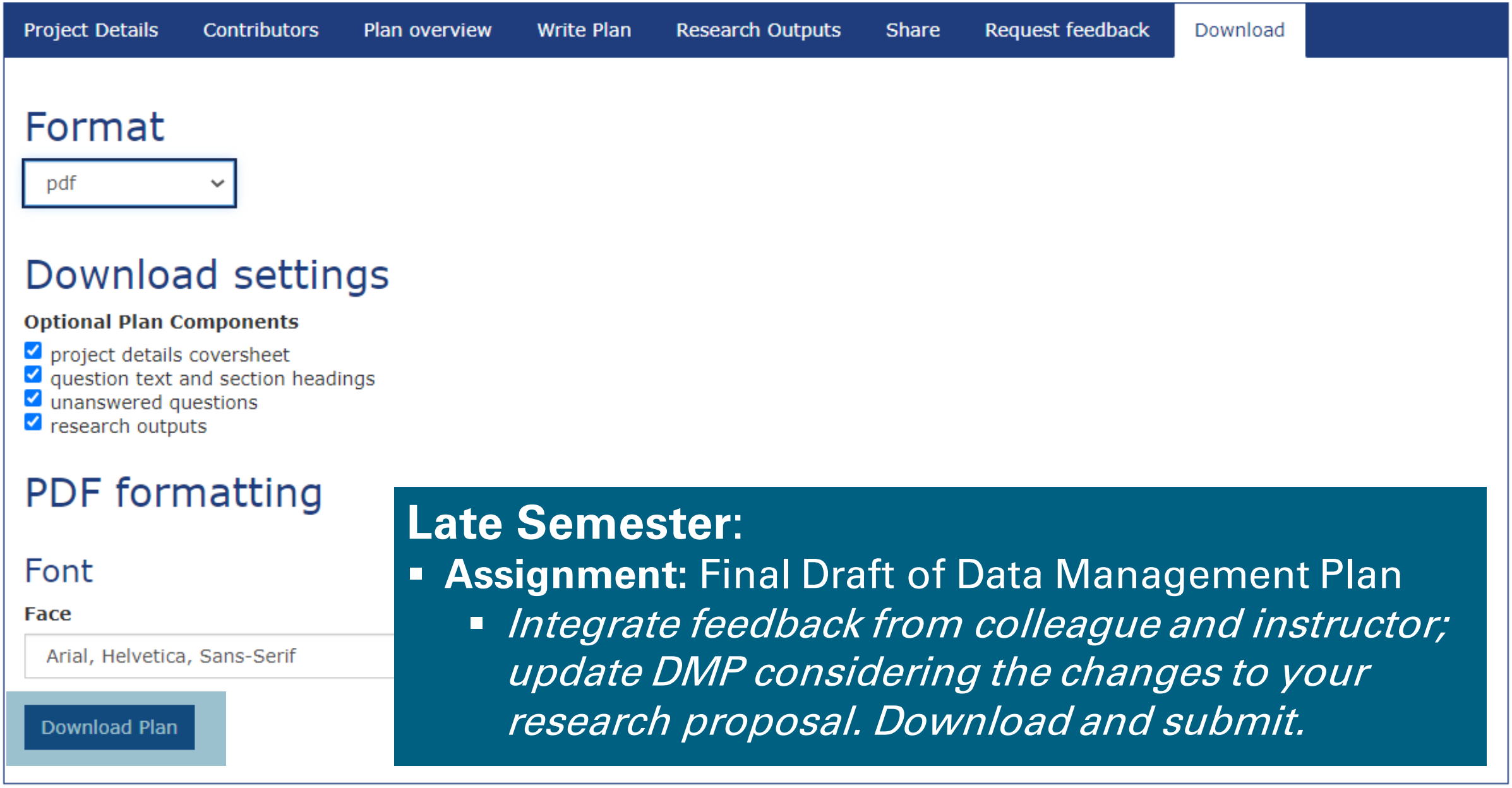
- ( ) Co-owner
- ( ) Editor
- ( ) Read only

Submit

Mid-Semester:

- **Review:** Data Management Plan Exchange
  - *Add the course instructor and an assigned colleague as collaborators in DMP Assistant.*


Data Collection (6 / 6)
Describe the type(s) of data that you will collect, including all survey, interview and/or focus group data. If there are any additional types of data that will be collected or generated describe these as well.
We will be collecting data in the form of two surveys i
Canadian institutions with a Dataverse instance, and
administrators of their institution's instance. Once dat
deidentified, it will be exported into tabular format. Su
quantitative and qualitative data.
Quantitative data analysis may be conducted in RStudio, SPSS, or Excel. Qualitative data analysis will be conducted in Taguette, Datasette, Voyant, or NVivo. Both processes will generate scripting and code that may be deposited alongside the de-identified data. Additionally, our survey questions themselves may be shared as part of our dataset for
Guidance
Comments (1)
Add comments to share with collaborators
Depending on class time, a portion of the class could be discussing these revisions – common themes, updating on best practices, and discussing next steps for revising.
Review: Data Management Plan Exchange
Using the "Comments" section in DMP Assistant, DMP Exemplars, and the Course DMP Rubric, students and course instructors add constructive revisions.



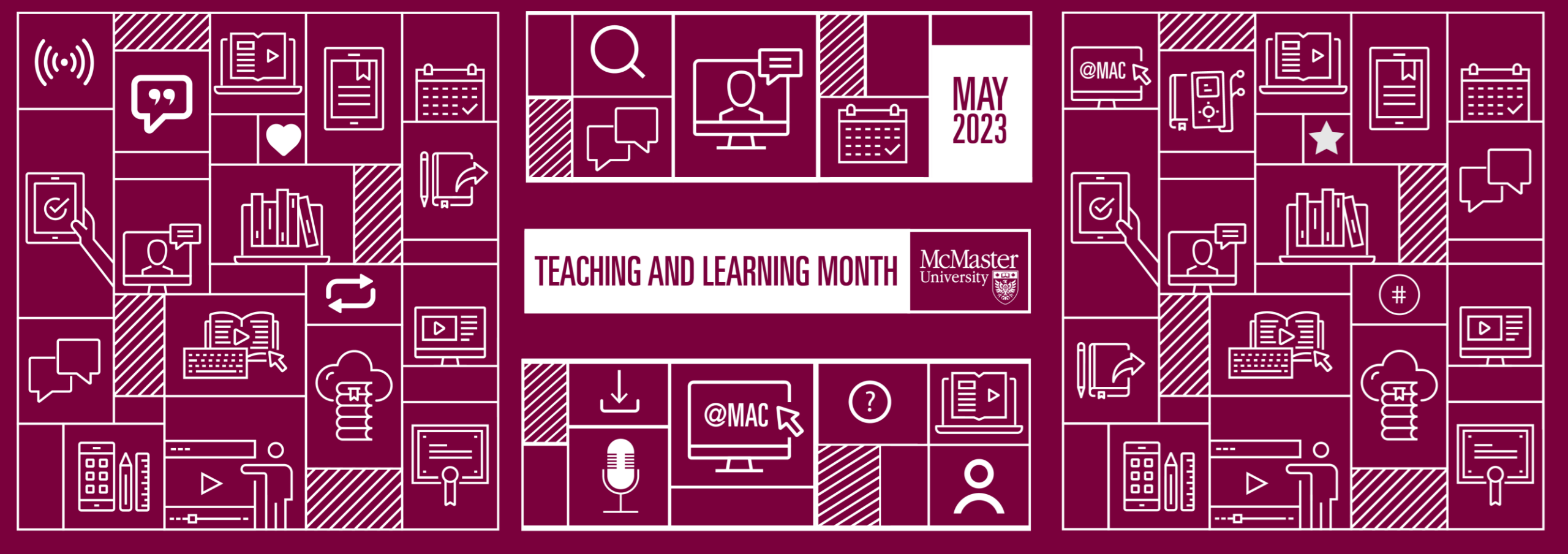
Late Semester:

- **Assignment:** Final Draft of Data Management Plan
  - *Integrate feedback from colleague and instructor; update DMP considering the changes to your research proposal. Download and submit.*

Other potential Methods-related tie-ins:

- **Indigenous Data Sovereignty**
  - *Ownership, Control, Access, Possession (OCAP) course from the First Nations Information Governance Centre (FNIGC) or module on Indigenous research and data sovereignty.*
- **Research Ethics**
  - *Data Management Plan can accompany drafting an ethics application.*
- **Information Security for Research**
  - *Data Governance is often a component of learning about how to secure and safely store your research.*
- **Open Research, Open Access, and Open Data**
  - *DMPs can accompany a larger conversation about open research.*

Q&A



May is **Teaching and Learning Month** at McMaster! Visit the MacPherson Institute website at mi.mcmaster.ca/teaching-and-learning-month/ to learn more!

Session topics include teaching tools and platforms, virtual resources, accessibility, generative artificial intelligence, developing engaging course content, applying universal design principles, experiential learning and more.

Stay in Touch

The Sherman Centre can visit your classroom, host discussions, provide resources, and generally collaborate on instructional sessions. If you'd like to learn more or discuss a potential collaboration, contact us at scds@mcmaster.ca.