



Carleton
UNIVERSITY

Canada's Capital University

Data – what's it all about?

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MacOdrum Library

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Outline

- **What is research data**
- **What is a data lifecycle**
- **What is metadata**
- **How do I find some data**



- **Exercise #1**
 - | Get together in groups of 4
 - | Come up with a definition for Research data
 - | 2 minutes!
 - | GO!

- ***“Research data can be defined as “a collection of facts, measurements, or observations used to make inferences about the world we live in” (Eisner and Vasgird, n.d.). In practice, research data can be a great many things, from DNA samples to interview transcripts to photographs.”***

Source: <https://bit.ly/2AQb4JG>

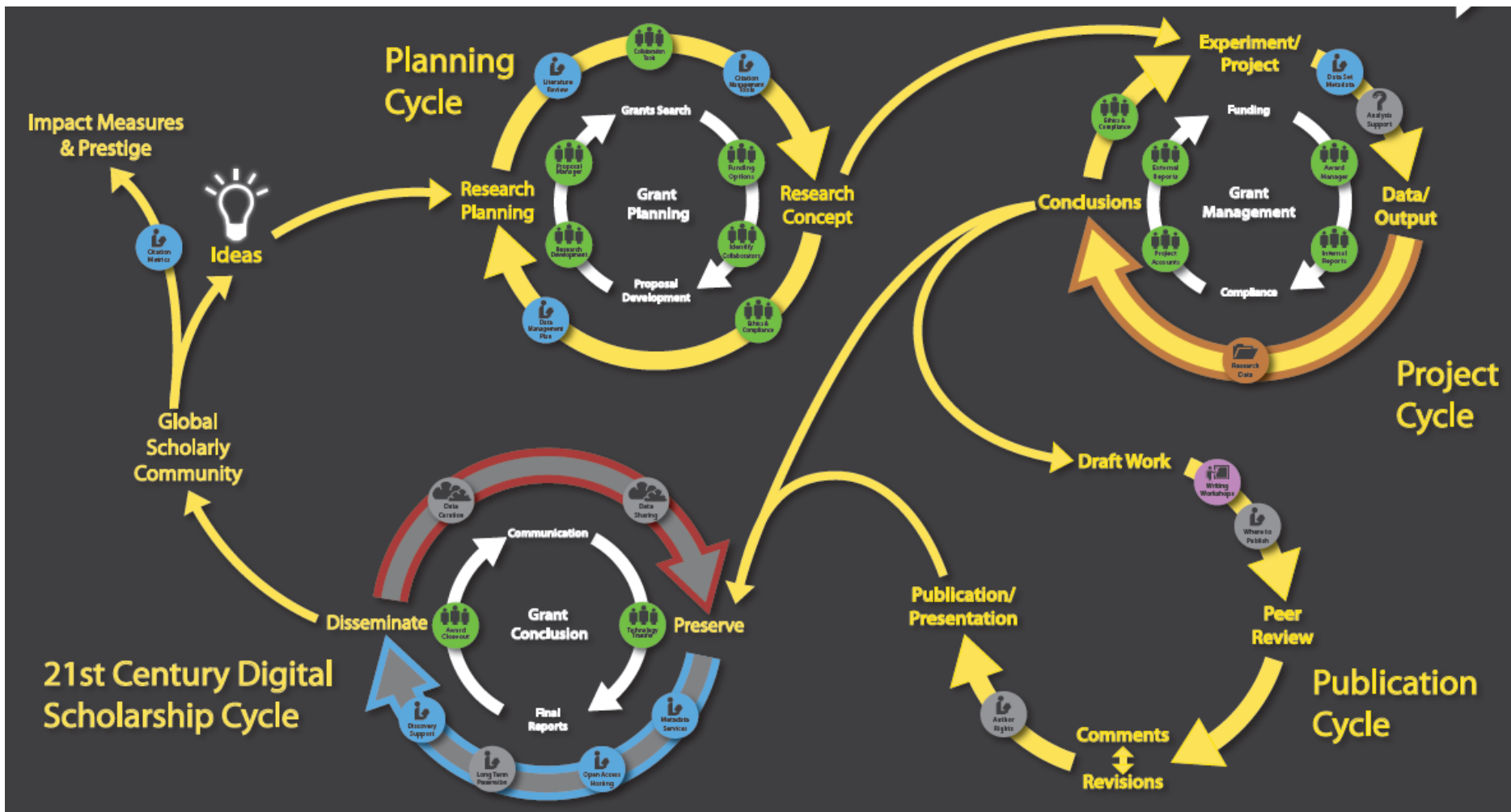


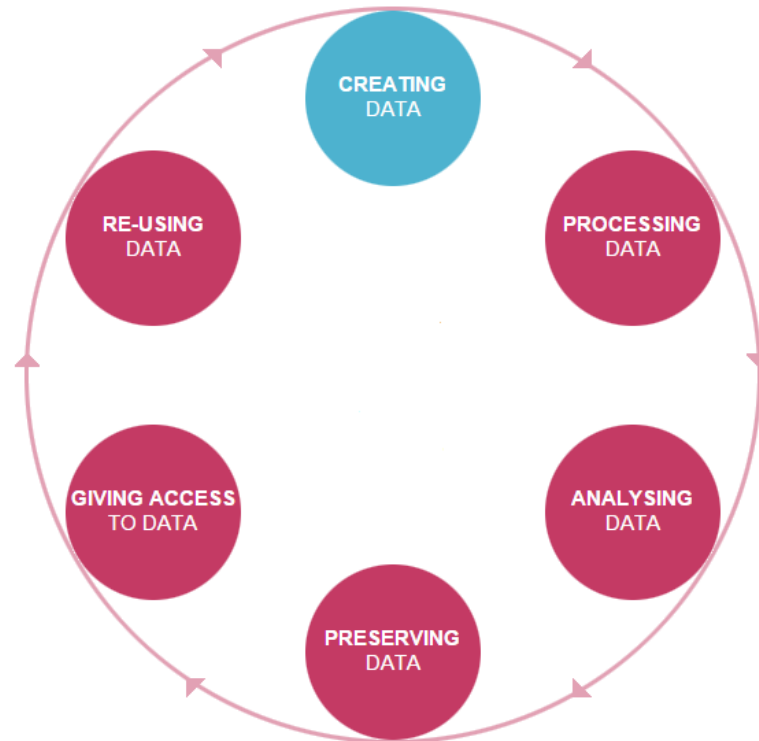
“Research data are the original sources or material that you have created or collated to conduct your research project. They can be digital or non-digital. The response to your research question is based on the analysis of these research data.”



■ Exercise

- | What is a Research data lifecycle?
- | Get into groups
- | Define it, draw it, ...
- | 2 minutes
- | Go!





<http://www.data-archive.ac.uk/create-manage/life-cycle>



Creating data

- design research
- plan data management (formats, storage etc)
- plan consent for sharing
- locate existing data
- collect data (experiment, observe, measure, simulate)
- capture and create metadata

<http://www.data-archive.ac.uk/create-manage/life-cycle>



Processing data

- enter data, digitise, transcribe, translate
- check, validate, clean data
- anonymise data where necessary
- describe data
- manage and store data

<http://www.data-archive.ac.uk/create-manage/life-cycle>



Analysing data

- interpret data
- derive data
- produce research outputs
- author publications
- prepare data for preservation

<http://www.data-archive.ac.uk/create-manage/life-cycle>



Preserving data

- migrate data to best format
- migrate data to suitable medium
- back-up and store data
- create metadata and documentation
- archive data

<http://www.data-archive.ac.uk/create-manage/life-cycle>



Giving access to data

- **distribute data**
- **share data**
- **control access**
- **establish copyright**
- **promote data**

<http://www.data-archive.ac.uk/create-manage/life-cycle>



Re-using data

- follow-up research
- new research
- undertake research reviews
- scrutinise findings
- teach and learn

<http://www.data-archive.ac.uk/create-manage/life-cycle>



- **What is it?**
- **Why is it important?**



■ Exercise #2

- | Groups of 4
- | What have I given you?
- | What can you tell me about it?
- | 2 minutes
- | GO!

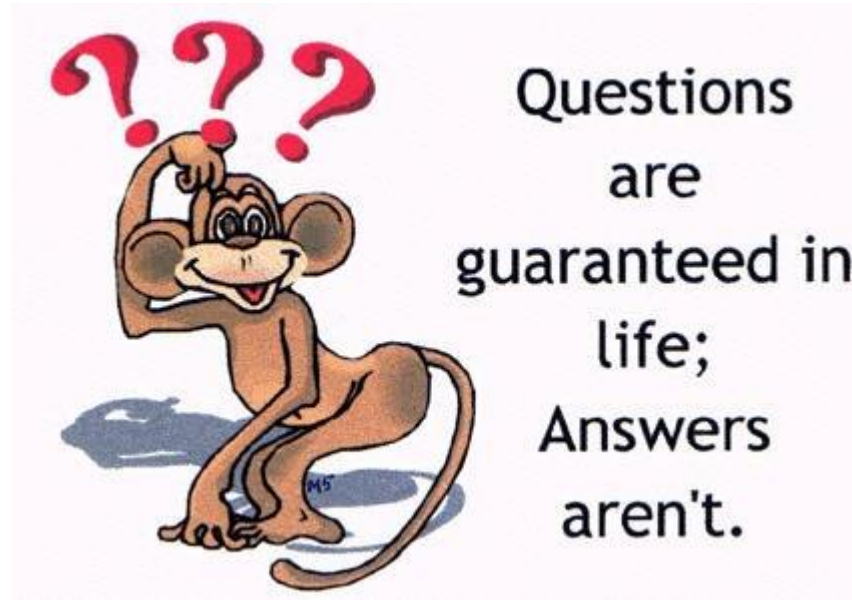


- **Survey metadata**
 - | Questionnaire
 - | Data collection
 - | Interviewer instructions
 - | ???



The importance of metadata

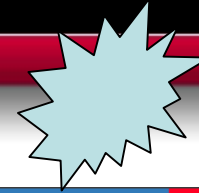
<http://www.youtube.com/watch?v=N2zK3sAtr-4#t=17>



<http://taitegallery.net/wp-content/uploads/2012/02/unanswered-questions.jpg>



- **So you have a research question**
- **Now what?**



<odesi>
Browse
Contact

Find data:

+

Date:

Collections:

All of <odesi>

- Statistics Canada (Microdata)
- Statistics Canada (Aggregate data)
- Public Opinion Polls
- Other Data

Additional Collections:

- Statistics Canada (Master File)
- CORA
- ICPSR
- Canadian Dataverses

Learning Tools

- [Video Tutorials](#)
- [User Guide](#)
- [FAQ](#)

About

- [About <odesi>](#)
- [Who can Access it](#)
- [Terms of Use](#)

<odesi> contains over 3,500 social sciences, with more additional dataset description searching.

- **ODESI (odesi.ca)**
 - | Click on the blue *Browse* button
 - | Click the 'plus' sign beside *Public Opinion Polls*
 - | Click the 'plus' sign beside *Canada*
 - | Click the 'plus' sign beside *Angus Reid Institute*
 - | Select a survey
 - | Read the abstract and other metadata
 - | Can do frequencies and crosstabs in *odesi*
 - | Can also download the data in your stats package of choice

- [-] Angus Reid Institute (ARI)
 - [+] Assisted Suicide, 2014 [Canada]
 - [+] Baggage Fees, 2014 [Canada]
 - [+] Canadian Football League (CFL), 2014
 - [+] Canadian Perceptions of India and Trade 2015
 - [+] Concussion and Youth Sports [Canada], 2015
 - [+] Disability and Accessibility, 2015 [Canada]
 - [+] Disability in Canada, 2016 [General Population Sample]
 - [+] Disability in Canada, 2016 [Disabled Sample]
 - [+] Disasters, 2015 [Canada]
 - [+] Election 2015 [Canada]
 - [+] Election 2015: The Politics of Health Care [Canada]
 - [+] Energy Industry, 2014 [Canada]
 - [+] Gender, Sports, and the Women's World Cup, 2015 [Canada]
 - [+] Global Threats, 2014 [Canada]
 - [+] Hockey Night in Canada Year in Review, 2015
 - [+] Hockey Night in Canada, 2014
 - [+] Prayer in Canadian Public Life, 2015 [Canada]
 - [+] Religion and Faith in Canada Today, 2015 [Canada]
 - [+] Sexual Harassment in the Workplace, 2014 [Canada]
 - [+] Truth and Reconciliation Commission, 2015 [Canada]
- [+] Canadian Attitudes towards the Federation



■ Tips

- | Choose an interesting survey

- | Only look in *Public Opinions Polls* category!
 - *You don't have access to most of the other datasets*

- | Go here for tips on how to use odesi
 - *Short videos*
 - <https://library.carleton.ca/help/odesi-how-to-use-odesi>

■ Statistics Canada - an example

- | <https://www.statcan.gc.ca/eng/start>
- | Click on 'Data' in the blue ribbon at the top
- | On the left, under 'Subjects'
 - *click on 'Crime and Justice'*
 - *Click on 'Homicides'*
- | Choose #2 table on the right
- | Can download the table under 'Download options'
- | Copy and paste the citation (at the bottom)
- | Under 'Related information'
 - *More information about the survey (the metadata)*



■ World Bank

| <http://www.worldbank.org/>

| International data

| Have to search around a bit to find the data

| Can download some data

■ OECD

| <https://data.oecd.org/canada.htm>

| International data

| Easier to find data to download



- **Very Important!!**
- **Remember to do it!**
- **Why Should I Cite data?**
 - | Short video



Questions



Thank you!

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