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Articulating the Value of Our Daily Work: An Initial Discussion of the Assessment Challenges of Engineering Librarians

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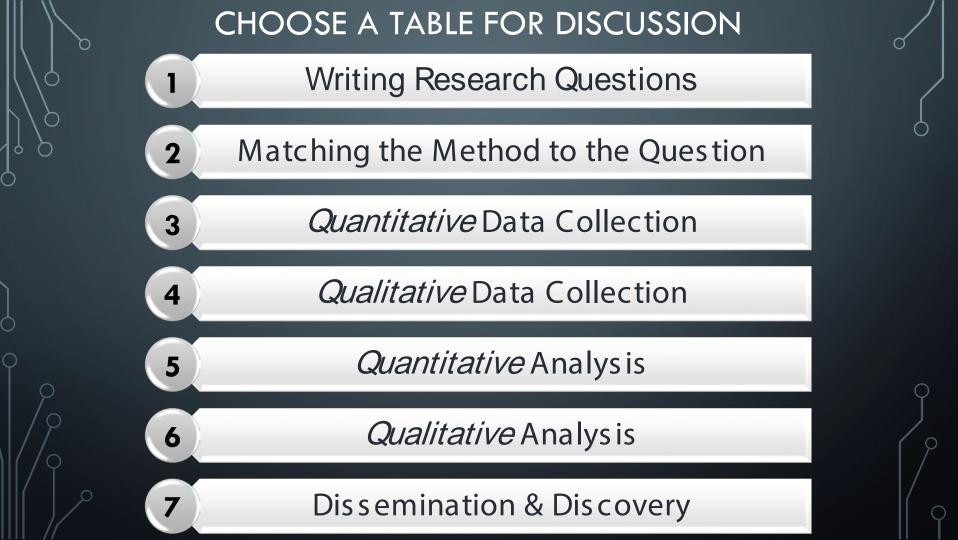Part of the Collection Development and Management Commons, Information Literacy Commons, and the Scholarly Publishing Commons

Articulating the Value of our Daily Work:
An Initial Discussion of the Assessment Challenges of Engineering Librarians

Session ID: M521

CHOOSE A TABLE FOR DISCUSSION

1 Writing Research Questions

2 Matching the Method to the Question

3 *Quantitative* Data Collection

4 *Qualitative* Data Collection

5 *Quantitative* Analysis

6 *Qualitative* Analysis

7 Dissemination & Discovery

WHAT ARE WE DOING IN THIS SESSION?

- Gather your thoughts and ideas for workshop ideas
- Goal: Beneficial to all
  - Gathering data to tell a story to any audience
    - Fellow librarians through publication
    - Annual reports about your unit
    - Describing the success of a project

During the session:

- Use the post-its for any questions that come up
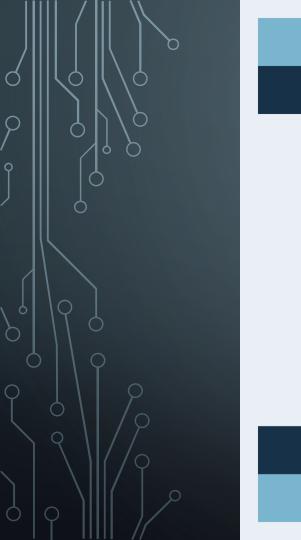- Resources: ELD Author Guidelines; ACRL standards

LET US KNOW YOUR INTERESTS AND NEEDS

Using the Poll Everywhere information below, let us know your current thoughts on concerns/interests/needs around data, assessment, research, statistics...

This is an open text response poll, so send your comments along.

PollEv.com/amyvanepps868

Text amyvanepps868 + your response to 22333

To show this poll

1

Install the app from pollev.com/app
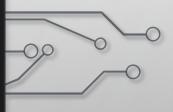
2

Start the presentation

Still not working? Get help at pollev.com/app/help

or

Open poll in your web browser

RESEARCH DESIGN

INTRODUCTION TO RESEARCH DESIGN

- Many library studies include human subjects

- Is what I'm doing research? - FIND OUT IN ADVANCE
  - The researcher doesn't get to decide, that's what IRB is for
  - Use IRB "Drop in" hours / IRB consults
  - Intent to publish is not a deciding factor - school interpret differently

- What are your local limitations
  - Are librarians "allowed" to do research (PI-eligible)
  - Any interactions with people needs to be reviewed

INTRODUCTION TO RESEARCH DESIGN

- Coming up with the research topic
  - Writing a Research Question (Booth, Colomb, & Williams, 2009)
  - 3 step process
    - Step 1: Name your topic / What you are studying
    - Step 2: Add an Indirect Question / What you don't know about it
    - Step 3: Answer *So What?* / Why you want your audience to know and care about it

- Examples:

1. *I am studying* how the spaces in the library are used

2. *because I want to find out* whether a partial renovation will change the use patterns

3. *in order to* help my staff and administration understand the need for quiet study spaces in addition to collaborative spaces on campus.

RESEARCH DESIGN

- Think about it in advance
  - This is what gets discussed in a methods section. Clarity is key.

- Match them method to the question
  - The question you are asking should drive the research method and type of data needed
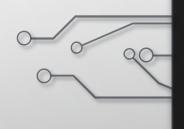 - What does your question say about the method?
  - What data do you need?

How / Why → Will generally lead to qualitative research methods
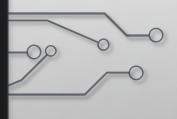
What / How many / How often → Generally quantitative methods

Why and how often → Mixed methods

GUIDING QUESTIONS FOR RESEARCH DESIGN

1. What challenges do you have in writing research questions or matching your question with a research method?

2. What questions do you have about appropriate data to address your research/investigation need?

3. What are your concerns about working with the Institutional Review Board?

4. What do you most often want to assess/measure?
   Thoughts on how? Best practices?

DATA COLLECTION & ANALYSIS

INTRODUCTION TO DATA COLLECTION & ANALYSIS

- Quantitative
  - Data - consists of numbers (e.g., how many?, how much?, how often?)
    - Examples: counts of students in a library space at a particular time, # of downloads
  - Research objectives - aim is often to achieve generalizable results on a statistical level (i.e., results from a sample are generalizable to a particular population)

- Qualitative
  - Data - consists of words or text (but may be represented by numbers or symbols) (e.g., What? Which? Why?)
    - Examples: student opinions about library space, faculty perceptions of student information literacy abilities
  - Research objectives - aim is typically to investigate smaller, local patterns (not generalizable to a wider population)

DATA COLLECTION METHODS - COMMONLY USED IN LIS

- Surveys (using existing validated instruments, developing custom tools, etc.)
- Focus Groups
- Interviews
- Observation
- Document / artifact gathering
- Secondary data (e.g., usage statistics, gate counts, existing datasets)

DATA ANALYSIS METHODS - COMMONLY USED IN LIS

- Quantitative
  - Descriptive statistics - focus on describing the features of the data in a sample (e.g., mean, median, mode, frequency, percentage, range)
  - Inferential statistics (e.g., tests of significance: t-test, chi-squared)
- Quantitative and/or Qualitative
  - Content analysis
- Qualitative
  - Thematic analysis

HELPFUL SOURCES

Drisko, James W., and Tina Maschi. (2015). *Content Analysis.* Pocket Guides to Social Work Research Methods. Oxford University Press. DOI:10.1093/acprof:oso/9780190215491.001.0001

Mayring, P. (2014). *Qualitative content analysis: theoretical foundation, basic procedures and software solution.* Klagenfurt. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-395173

Neuendorf, K. A. (2019). Content analysis and thematic analysis. In P. Brough (Ed.), *Advanced research methods for applied psychology: Design, analysis and reporting* (pp. 211-223). New York: Routledge.

GUIDING QUESTIONS FOR DATA COLLECTION

1. What are the most common data collection challenges or problems that you encounter?

2. Share experience you have with using, creating, testing, and/or validating data collection instruments (e.g., surveys, interview protocols, rubrics).

3. What tools do you use (or are you interested in learning about) for data collection?

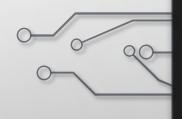4. What resources (e.g., books, websites, tutorials, campus services) are helpful to you for data collection?

GUIDING QUESTIONS FOR QUANTITATIVE DATA ANALYSIS

1. What are the most common data analysis problems that you encounter (e.g, performing statistical analysis)?

2. What tools do you use (or are you interested in) for data analysis?

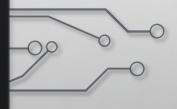3. What resources (e.g., books, websites, tutorials, services) are helpful to you for data analysis?

GUIDING QUESTIONS FOR QUALITATIVE DATA ANALYSIS

1. What are the most common data analysis problems that you encounter?

2. What tools do you use (or are you interested in) for data analysis?

3. What resources (e.g., books, websites, tutorials, services) are helpful to you for data analysis?

RESEARCH DISSEMINATION & DISCOVERY

INTRODUCTION TO DISSEMINATION & DISCOVERY

- Reaching our intended audience

- Scholarly Products

  - External and Internal

  - Traditional and Non-traditional

- Data sharing

- Communicating/Visualizing results

- Increasing Discoverability

  - Search engine optimization

  - Database indexing

  - Leveraging social media
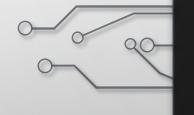
  - Open repositories

GUIDING QUESTIONS FOR DISSEMINATION & DISCOVERY

1. What do you think you do really well with respect to dissemination and discovery of your own work?

2. What do you feel are your challenges to dissemination and discovery of your own work?

3. What challenges do you face when trying to discover the work of your colleagues?

THANK YOU & WRAP UP