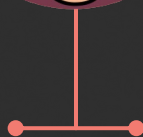


Data Literacy Competencies: A Scoping Review

Meryl Brodsky, Communication &
Information Liaison Librarian
Hannah Chapman Tripp, Biosciences
Liaison Librarian
University of Texas - Austin
IASSIST 2022





Hannah



Part 1



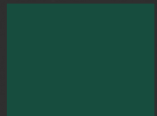
Meryl



Part 2

What we'll cover today

- Why we embarked upon this project
- What a scoping review is
- The process for conducting a scoping review
- What we've found so far
 - Skills & Competencies
 - Job ad requirements
- Where we are in the review





01

A scoping review



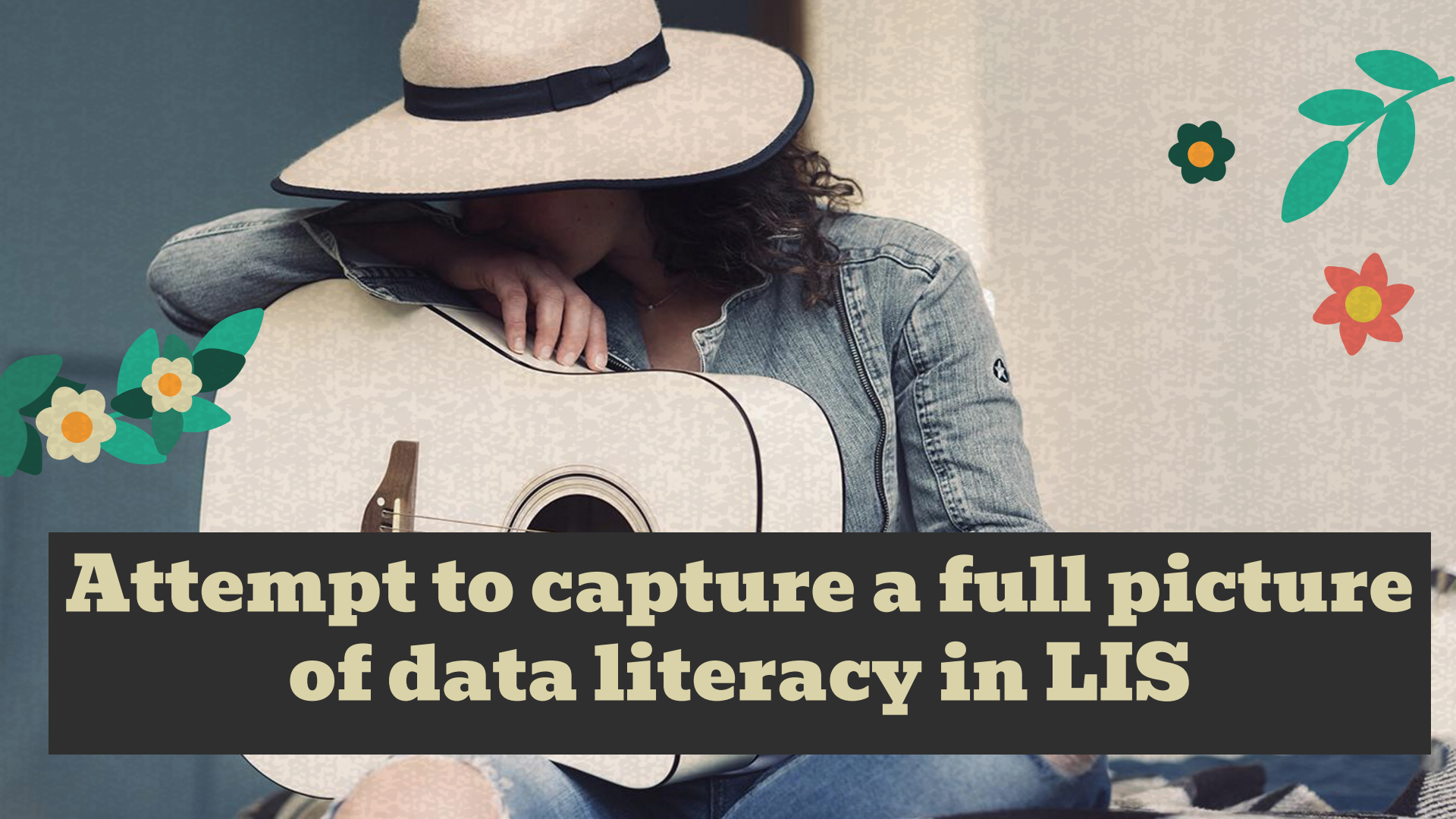


What is a scoping review?



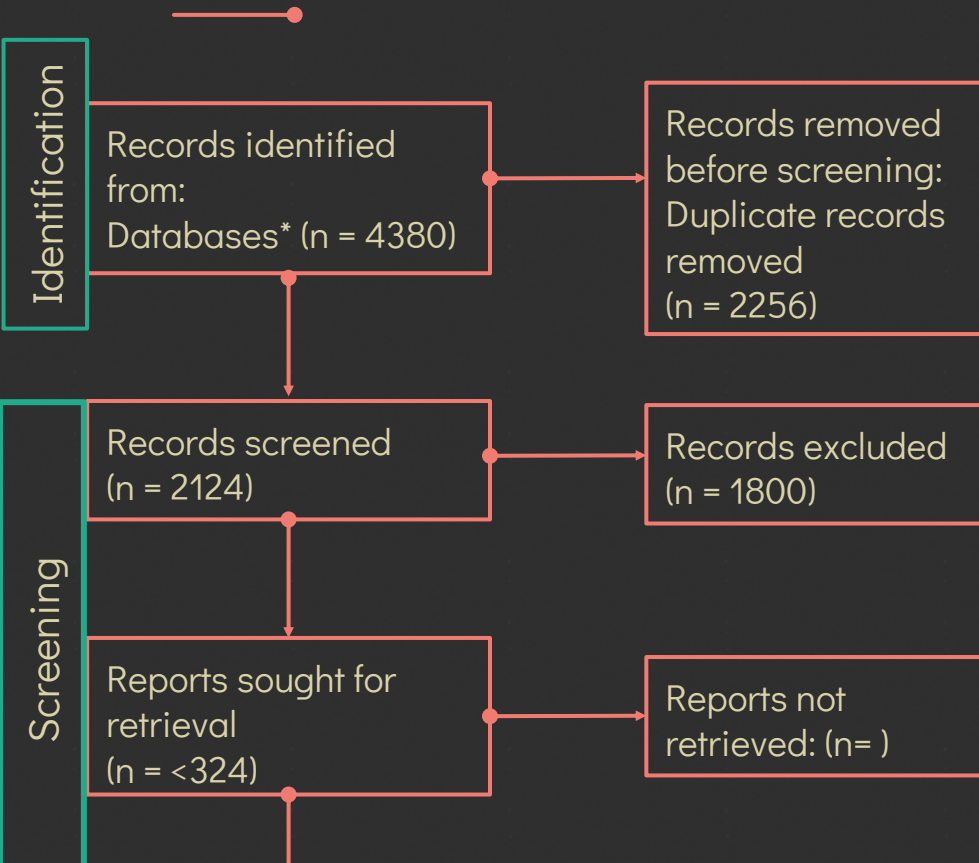
Goal:

Construct a thorough and replicable
search strategy for a review process that
addressed particular questions



**Attempt to capture a full picture
of data literacy in LIS**

PRISMA Chart



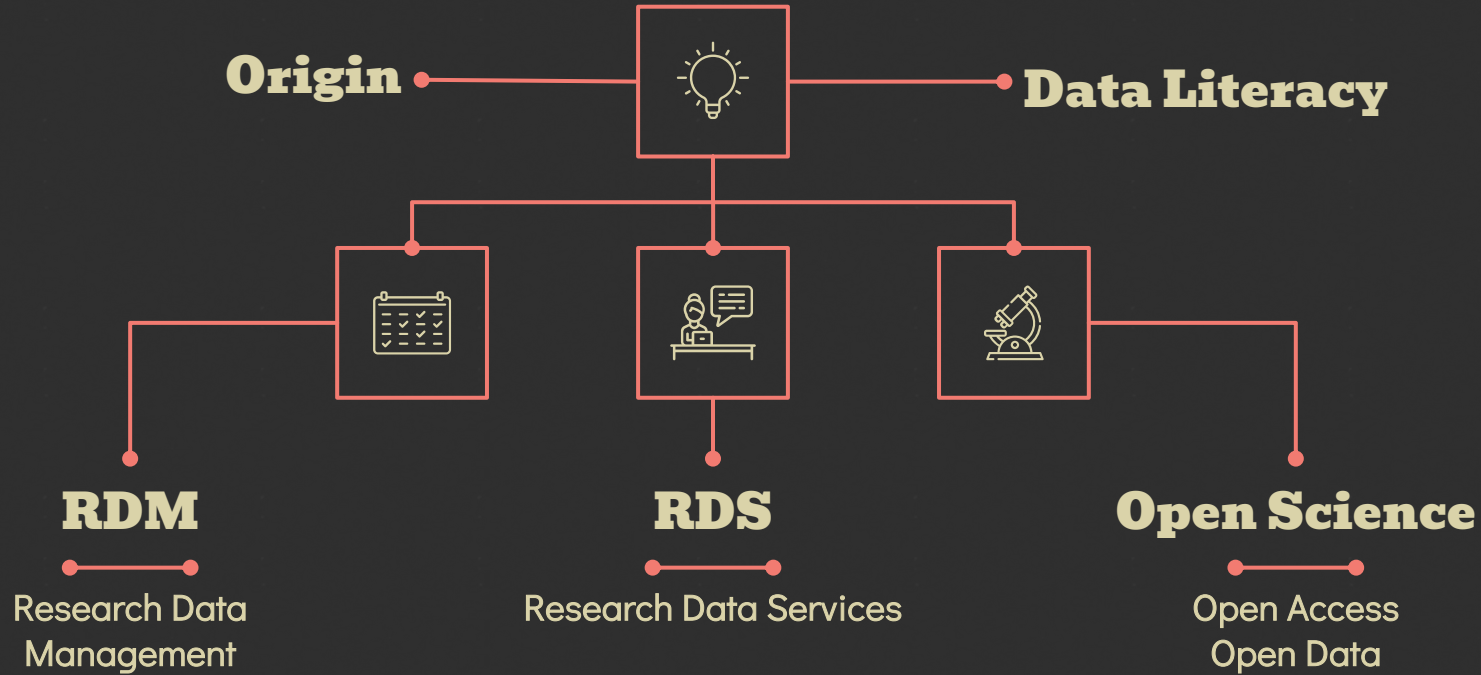
Search String:

("data literac*" OR "data manag*" OR "data curat*" OR "data visualization" OR "research data")) AND ((libraries OR library OR librarian OR "information professional" OR archivist)) AND ((training OR education OR school OR "continuing education" OR course* OR class* OR Skill* OR competenc* OR standard*))

Databases used:

- Web of Science: Core Collection
- ERIC (EBSCO)
- Academic Search Complete
- Library Information Science & Technology Abstracts (LISTA)
- Library & Information Science Source
- Information Science & Technology Abstracts (ISTA)
- Dissertations & Theses Global
- Google Scholar

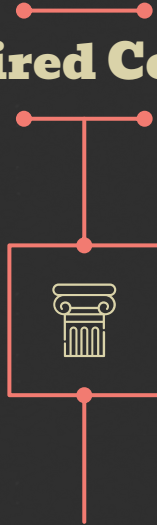
Our Process



iSchool Curricula



Required Courses



Reference
Cataloging
Research Methods
Electives according to specialty

New Requirement?



Data Course
Data Literacy
Open Science/Scholarship



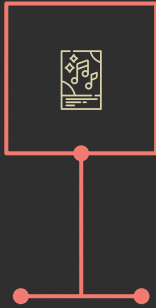


02

Skills & Competencies

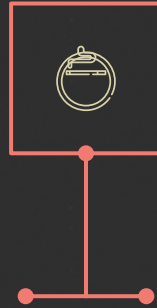


Informational/Consultative Competencies



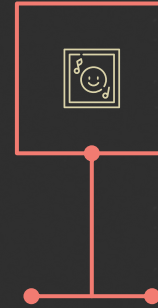
Communication

Research consults for finding and citing data, data mgt. plans, depositing data



Training

Conducting workshops, Creating libguides & videos & instructional materials



Collaboration & Library Engagement

Outreach, working with other depts on campus on policies for technology that supports research data services

Technical/Hands-On Research Data Competencies



Data Literacy

This could have a more undergraduate focus



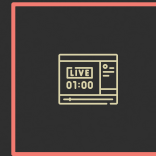
Data Management

This relates to the Research Data Lifecycle



Data Curation

This relates to work with repositories



Technology, Tools & Software

This relates to data analysis, visualization, big data , GIS

Data Skills

Data Literacy	Data Management	Data Curation
Determine if data is needed	Data management plan	Use repository
Find data	Data documentation	Data security
Assess data	Copyright/License	Data preservation
Cite data	Confidentiality	Metadata
Use data ethically	Repository Selection	Data governance



Tools, Technology, Software

Skill	Examples
Data cleaning tools	Open Refine
Data visualization tools	Tableau, R
Text mining tools	NVivo
Statistical analysis	SPSS, SAS, R, Python
Tech infrastructure	Support a data lab, GIS collections, or manage a repository



Data Librarian Job Ads

Top Skills Required & Preferred



1. Research Data
Curation and
Management

2. Software

3. Technologies &
Standards

4. Research &
Support

5. Data Sources

6. Data Lifecycle

7. Digital
Repositories

8. Subject
Expertise

9. Scholarly
Communication

Scoping Review



The scoping review
continues...



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THANKS!

meryl.brodsky@austin.utexas.edu
hchapmantripp@austin.utexas.edu



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