Perspectives on teaching with data in the social sciences
Our session plan

◆ Project Overview
◆ Our 5 institutions & key takeaways
◆ Activity - Reflecting on data literacy education and your stakeholders
◆ Our top recommendations
◆ Activity - Next steps for you and your context
◆ Q&A

Slides: bit.ly/teachdata22
Ithaka S+R Project

- Included 20 universities from across the United States
- Focused on supporting teaching with and about data social science contexts
- Launching Two Projects on Supporting Data Work - Ithaka S+R

Study Details

- Identified stakeholders
- Performed semi-structured interviews
- Coded interviews
- Summarized findings in individual reports
- Ithaka S+R summarized the findings from all of the universities into a report (due in March)

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Institutional Context
◆ Private 4-year university
◆ 14,500 undergraduate and graduate students
◆ R1 classification
◆ Heavily interdisciplinary
◆ Social sciences appear in a wide diversity of colleges
◆ Top rated program in Computer Science

Key Takeaways
◆ Assess data competencies of students, including foundational coding
◆ Develop a formal program for data literacy
◆ Supplement instruction for data literacy with asynchronous modules and materials from the Carpentries

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Institutional Context
◆ 38,630 degree-seeking students
◆ 26,339 degree-seeking undergraduates
◆ 24% of undergrads first-generation students
◆ R1, 4-year public university
◆ Main campus located in Fairfax, VA

Key Takeaways
◆ Improve outreach & marketing focusing on library support for teaching with data.
◆ Work with campus stakeholders on data literacy initiatives.
◆ Address lack of basic computer skills needed to work with data.

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Grand Valley State University

Institutional Context
◆ Comprehensive, public university
◆ 19,739 undergraduate and 3,027 graduate students
◆ 38% first-generation students
◆ Main campus, four area and regional campuses
◆ 245 social science faculty use data in instruction

Key Takeaways
◆ Students need basic skill building for data-heavy courses
◆ Peer consultation services to include data skills, especially for large-enrollment courses and non-majors
◆ Better integration of data literacy into curriculum needed
◆ Increased professional development needed

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Institutional Context

◆ Private 4-year liberal arts university (with an MBA program and Law School)
◆ 3,147 undergraduate students
◆ Social sciences faculty situated across 5 schools
◆ Several new data analytics/data science initiatives

Key Takeaways

◆ Design support for students & faculty “on the margins”
◆ Provide support for teaching data ethics
◆ Encourage better curriculum sequencing & alignment
◆ Design library support using a data lifecycle model

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Virginia Tech

Institutional Context
◆ Public Land-grant
◆ R1, 4-year university
◆ Over 37,000 undergraduate and graduate students
◆ Programs to support First-Year Experience courses
◆ Pathways to General Education curriculum

Key Takeaways
◆ We can’t assume a certain level of data literacy with our learners
◆ Shared needs for modular course content
◆ Importance of peer learning for both students and instructors
◆ Higher-level skills require program-level coordination

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How can libraries, various types of campus support offices, and academic departments impact the future of data literacy education?
How can libraries, various types of campus support offices, and academic departments impact the future of data literacy education?
Who has a stake on your campus?
Who has a stake on your campus?
Our top recommendations

◆ Create / support / promote foundational data literacy offerings for learners
◆ Seek out existing open source resources that you can adapt or reuse at your own institution
◆ Find stakeholders that are willing to partner to create, support, or promote these resources
◆ Look for opportunities and resources for instructor professional development in teaching with data
Which of these recommendations may be helpful on your campus?
Which of these recommendations may be helpful on your campus?
What might you be able to do at the personal level, department level, or institutional level to better support students’ development of data literacy?
What might you be able to do at the personal level, department level, or institutional level to better support students' development of data literacy?
Thanks!

Any questions?

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Q&A

Top
Contact Us (Alphabetical by institution)

Melanie Gainey
◆ Librarian for Biological Sciences, Biomedical Engineering, & Neuroscience
◆ Carnegie Mellon University
◆ mgainey@andrew.cmu.edu

Emma Slayton
◆ Data Curation, Visualization, & GIS specialist; Co-lead, Data Education
◆ Carnegie Mellon University
◆ eslayton@andrew.cmu.edu

Wendy Mann
◆ Director, Digital Scholarship Center
◆ George Mason University
◆ wmann@gmu.edu

Samantha Minnis
◆ Social Science Liaison Librarian
◆ Grand Valley State University
◆ minniss@gvsu.edu

Gayle Schaub
◆ Education Liaison Librarian
◆ Grand Valley State University
◆ schaubg@gvsu.edu

Samantha Guss
◆ Social Sciences Librarian for Data, Statistics, & Government Information
◆ University of Richmond
◆ sguss@richmond.edu
Contact Us @ Virginia Tech

Liesl Baum
◆ Associate Director of Strategic Initiatives and Educational Research
◆ Center for Excellence in Teaching & Learning
◆ lmbaum@vt.edu

Nathaniel Porter
◆ Social Science Data Consultant & Data Education Coordinator
◆ University Libraries
◆ ndporter@vt.edu

Julia Feerrar
◆ Head of Digital Literacy Initiatives
◆ University Libraries
◆ feerrar@vt.edu

Kayla B. McNabb
◆ Interim Director of Teaching & Learning Engagement and Head of Instructional Content & Design
◆ University Libraries
◆ kmcnabb@vt.edu
Ithaka S+R Project Participating Institutions

- American University
- Boston University
- Carnegie Mellon University
- Florida State University
- George Mason University
- George Washington University
- Grand Valley State University
- Kansas State University
- Michigan State University
- North Carolina State University
- Purdue University
- Rice University
- University of California Santa Barbara
- University of Chicago
- University of Massachusetts-Amherst
- University of New Hampshire
- University of North Carolina at Chapel Hill
- University of Richmond
- Virginia Tech
- Washington University in St. Louis


Resources for Teaching with Data

- **PIDLit**: Public Interest Data Literacy, Georgia State University, [https://pidlit.gsu.edu](https://pidlit.gsu.edu)
  - PIDLit Data Ready Videos: [https://www.youtube.com/playlist?list=PLQNlafbQZBQkgcho3_i_mYaQYPpf2Ckzr](https://www.youtube.com/playlist?list=PLQNlafbQZBQkgcho3_i_mYaQYPpf2Ckzr)
- **ICPSR Resources for Teachers**: [https://www.icpsr.umich.edu/web/pages/instructors/teacher-resources.html](https://www.icpsr.umich.edu/web/pages/instructors/teacher-resources.html)
  - Includes videos from ICPSR and selected resources for professors teaching undergraduates.
- **Resources at each institution**
  - DL Toolkit at Virginia Tech
  - Working with Data, George Mason University, [https://infoguides.gmu.edu/data-work](https://infoguides.gmu.edu/data-work)
- **Open-source lesson plans on foundational coding from the non-profit, The Carpentries**
  - Data Carpentry
  - Software Carpentries
Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by SlidesCarnival
- Photographs by Unsplash