

# Appendices for

## An Approach to Supporting Teaching with Data in the Social Sciences

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Chapter in *Academic Libraries as Partners in Data Science Ecosystems*  
Eds., Nandita Mani & Michelle Cawley

## APPENDIX 1: SEMI-STRUCTURED INTERVIEW GUIDE

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*Note regarding COVID-19 disruption* I want to begin by acknowledging that teaching and learning has been significantly disrupted in the past year due to the coronavirus pandemic. For any of the questions I'm about to ask, please feel free to answer with reference to your normal teaching practices, your teaching practices as adapted for the crisis situation, or both.

### Background

Briefly describe your experience teaching undergraduates.

- In which of the courses that you teach do students work with data?

### Getting Data

In your course(s), do your students 1) collect or generate datasets, 2) search for and select pre-existing datasets to work with, or 3) work with datasets that you provide to them?

*1) If students collect or generate datasets themselves* Describe the process students go through to collect or generate datasets in your course(s).

- Do you face any challenges related to students' abilities to find or create datasets?

*2) If students search for pre-existing datasets themselves* Describe the process students go through to locate and select datasets.

- Do you provide instruction to students in how to find and/or select appropriate datasets to work with?
- Do you face any challenges related to students' abilities to find and/or select appropriate datasets?

*3) If students work with datasets the instructor provides* Describe the process students go through to access the datasets you provide. *Examples: link through LMS, instructions for downloading from database*

- How do you find and obtain datasets to use in teaching?
- Do you face any challenges in finding or obtaining datasets for teaching?
- Do you face any challenges in preparing data for your students, e.g., cleaning, subsetting, etc.?

### Working with Data

How do students manipulate, analyze, or interpret data in your course(s)?

- What tools or software do your students use? *Examples: Excel, online platforms, analysis/visualization/statistics software*

- With what prior knowledge of tools or software do you expect students to enter your class, and what do you teach them explicitly?
- To what extent are the tools or software students use to work with data pedagogically important?
- Do you face any challenges related to students' abilities to work with data?

How do the ways in which you teach with data relate to goals for student learning in your discipline?

- Do you teach your students to think critically about the sources and uses of data they encounter in everyday life?
- Do you teach your students specific data skills that will prepare them for future careers? Such as?
- Have you observed any policies or cultural changes here at UNC that influence the ways in which you teach with data?

What ethical challenges do instructors in your field face in teaching with data?

- To what extent are these challenges pedagogically important to you?

## Training and Support

In your course(s), does anyone other than you provide instruction or support for your students in obtaining or working with data? *Examples: co-instructor, librarian, teaching assistant, labs or help-desks*

- Do you communicate with them about the instruction or support they are providing? If so, how?
  - How does their instruction or support relate to the rest of the course?

To your knowledge, are there any ways in which your students are learning to work with data outside their formal coursework? *Examples: online tutorials, library workshops or other workshops offered around campus, internships, peers*

- Do you expect or encourage this kind of extracurricular learning? Why or why not?

Have you received training in **teaching with** data other than your graduate degree? *Examples: workshops, technical support, help from peers*

- What factors have influenced your decision to receive/not to receive training or assistance?
- Do you use any datasets, assignment plans, syllabi, or other instructional resources that you received from others? Do you make your own resources available to others?

Considering evolving trends in your field, what types of training or assistance do you think would be most beneficial to instructors in teaching with data?

## Wrapping Up

Is there anything else from your experiences or perspectives as an instructor, or on the topic of teaching with data more broadly, that we should know?

### **APPENDIX 2: EMAIL INVITATION TO PARTICIPATE**

Subject Line: Interview request for UNC Libraries' study on teaching with data in the social sciences

Dear \_\_\_\_\_,

The University Libraries is conducting a study on the practices of social science instructors in order to improve support services for their work. We are recruiting instructors for this research study whose undergraduate students engage with quantitative data, such as by conducting research using quantitative methods, analyzing or visualizing datasets, or learning to use specific tools or software to work in quantitative ways with any data, whether those are text, images, numeric data, etc. Do you teach classes like this where at least half of the students are undergrads? If so, would you be willing to participate in a one-hour interview to share your unique teaching experiences and perspective? I can schedule an appointment at your convenience between now and mid-January.

Our local UNC study is part of a suite of parallel studies at 20 institutions of higher education in the U.S., coordinated by Ithaka S+R, a not-for-profit research and consulting service. The information gathered here will also be included in a landmark capstone report by Ithaka S+R and will be essential for the University Libraries to better understand how the support needs of social science instructors are evolving more broadly.

If you have any questions about the study, please don't hesitate to reach out. Thank you so much for your consideration.

Sincerely,

\_\_\_\_\_ for the Project Team:  
Michele Hayslett, Angela Bardeen, and Kayla Olson

## APPENDIX 3: CONSENT TO PARTICIPATE

*Project title.* Teaching with Data in the Social Sciences

*Reason for the study.* This study seeks to examine social science instructors' practices in teaching undergraduates with data in order to understand the resources and services that instructors at UNC at Chapel Hill need to be successful in their work. The activity involves research.

*Inclusion criteria.* Any instructor, whether staff, faculty, or graduate student, who teaches undergraduate students in the social sciences how to work with quantitative data may participate.

*What you will be asked to do.* Your participation in the study involves a 60-minute, audio-recorded interview about research practices. Identities will be removed from transcripts.

Your participation in all or part of this study is completely voluntary. You are free to withdraw consent and discontinue participation in the interview at any time for any reason. Not participating will not affect your relationship to UNC.

Interview questions will cover in what classes you teach about data; from where the data originate (whether students collect them or they come from a repository) and how they are prepared; what methods or exercises you have your students complete and in/with what software; how you prepare your students for these assignments and support them in completing them; your own background which prepared you to teach in this way; and anything else from your experience teaching with data that you would like to share with us.

*Benefits and risks.* The only known risk associated with participating in this study is that of a breach of confidentiality. (The next section addresses how we will protect your privacy.) You may experience benefit from the study in the form of increased insight and awareness into teaching practices and support needs.

*How your confidentiality will be maintained.* Interviews will be recorded and stored as digital audio files by the principal investigator(s) in OneDrive, protected by ONYEN login. Interviews recorded using the Zoom audio recording feature will be immediately downloaded and stored as specified above. Audio recordings will be transcribed by the investigator(s) listed on this protocol and/or a third-party transcription vendor bound by a non-disclosure agreement. Audio recording files will be destroyed immediately following transcription. Pseudonyms will be immediately applied to the interview transcripts and the metadata associated with the transcripts. Public reports of the research findings will invoke the participants by pseudonym and not provide demographic or contextual information that could be used to re-identify the participants.

Consent forms will in no way be linked to the collected data because there will be no key that corresponds the participants to their pseudonyms. Informed consent forms will be stored as paper copies in a locked file cabinet only accessible to the investigator(s) and/or as digital files by the investigator(s) in OneDrive, protected by ONYEN login. The informed consent forms will be destroyed three years after the completion of the research project.

*Questions?* You may contact the researchers at any time if you have additional questions about the study:

Michele Hayslett, [email address]

Angela Bardeen, [email address]

Kayla Olson, [email address]

If you have any questions about your rights as an interviewee, you may contact UNC's Office of Human Research Ethics about IRB study number 20-1885 by calling (919) 966-3113, or by email to [IRB\\_Subjects@unc.edu](mailto:IRB_Subjects@unc.edu).

I, \_\_\_\_\_, understand and consent to participate in the study as described above.

Participant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Interviewer Signature: \_\_\_\_\_ Date: \_\_\_\_\_