

10

Writing about Data and Methods

SUGGESTED COURSE EXTENSIONS

■ A. REVIEWING

1. In a one- or two-page article in the health or science section of a newspaper or magazine, mark the information on data and methods.
 - a. Critique the presentation of that information, using the guidelines for content of data and methods for general interest articles for a lay audience in chapter 10 of *Writing about Numbers*.
 - b. Assess whether additional information would be helpful for people seeking information to compare with data from another study.
 - c. Evaluate the discussion of how the data and methods affect interpretation of the findings.

2. Find a short article in a journal from your field, and mark the information on data and methods.
 - a. Critique the presentation of that information, using the checklist in chapter 10 and the guidelines for content of data and methods for scientific articles.
 - b. List additional information needed by researchers seeking to replicate the data collection.
 - c. List additional information needed by researchers seeking to replicate the statistical analysis.
 - d. Assess how well the article discusses how the data and methods affect interpretation of the findings.
 - e. Indicate whether the authors suggest directions for future research.
 - f. Pick one aspect of data and methods in the discussion and rewrite it to improve the presentation.

3. Go to a data Web site such as the U.S. Census Bureau, National Center for Health Statistics, or the Bureau of Labor Statistics and identify a topic of interest involving two or three variables. Evaluate the Web site in terms of how easy it is to find information about
 - a. the type of study design (e.g., cross-sectional sample survey, retrospective, prospective);
 - b. the data sources (e.g., vital registration forms, questionnaires, administrative records).
 - c. the wording of questions used to collect the variables of interest to you;
 - d. the units or coding of those variables;
 - e. sampling weights, if applicable.

■ B. WRITING

1. Outline the data section for your analysis for a scientific paper, using the checklist in chapter 10 of *Writing about Numbers*.
2. Write a one-paragraph description of the data and methods for the same analysis for a lay audience.
3. Write a discussion of the strengths and limitations of your data and methods for a scientific audience.
4. Exchange your answers to questions B.1 through B.3 with someone studying a different topic or data. Peer-edit each other's work.

■ C. REVISING

1. Critique your data and methods section, using the criteria in chapter 10 for a scientific paper.
 - a. Identify elements you have omitted.
 - b. Track down that information in data documentation or other publications on the same data.
 - c. Rewrite your data and methods to incorporate that information.
2. Identify strengths or limitations of the pertaining data or methods that need additional discussion. Revise the discussion to correct those weaknesses, writing for a scientific audience.
3. Rewrite the corrected discussion section for a lay audience.
4. Exchange your answers to questions C.1 through C.3 with someone studying a different topic or data. Peer-edit each other's work, comparing the initial drafts with the revisions.