Choosing Effective Examples and Analogies

SUGGESTED COURSE EXTENSIONS

8

A. REVIEWING

- Find a one-to-three-page article in the popular press or a journal or book in your field.
 - a. Circle all analogies or metaphors used to illustrate quantitative patterns or relationships.
 - i. Does the author explicitly or implicitly convey the purpose in each example, or is it left unclear?
 - ii. Is it easy to understand the analogy and the pattern or relationship it is intended to illustrate?
 - b. Are there other places in the article where an analogy or metaphor would be helpful? Identify the purpose of the analogy or metaphor for each such situation.
 - c. Choose two analogies that are unclear or where you have suggested adding an analogy or metaphor, and revise them using the principles in chapter 8.
 - d. Identify the intended audience for the article. Choose a different audience (e.g., more quantitatively sophisticated; younger) and rewrite one analogy to suit them.
- 2. In an article in the popular press or a journal or book in your field, circle all numeric examples where a single number is reported (e.g., not a comparison of two or more numbers). For each indicate whether the author conveys the purpose of the example (e.g., whether it is a typical or unusual value).
- In the same article, circle all numeric contrasts.
 - a. Indicate whether in each instance the author provides enough information for you to assess whether it is a realistic difference or change for the research question.
 - b. Evaluate whether different or additional size contrasts would be useful for the intended audience, considering
 - i. plausibility;
 - ii. real-world application;
 - iii. measurement issues.
 - c. Identify an audience that would be interested in different applications than the audience for whom the article is currently written. Describe how you would select numeric contrasts to meet their interests.

■ B. APPLYING STATISTICS

- 1. Choose an audience to whom you want to explain results of a statistical analysis.
 - a. Devise an analogy to describe one of the main numeric patterns or relationships in your results using the principles described in chapter 8 of *Writing about Numbers*.
 - b. Select numeric contrasts within your data using the principles in chapter 8.
 - c. Review the literature in your field to determine whether standards or cutoffs are commonly used. If so, calculate and describe a contrast between your data and that standard.

C. WRITING AND REVISING

1. Critique your paper using the guidelines in questions A.1 through A.3 and B.1.