

7

Creating Effective Charts

SUGGESTED COURSE EXTENSIONS

■ A. REVIEWING

1. Find a pie, simple bar, or line chart in a newspaper or magazine article. Critique it using the criteria in chapter 7 of *Writing about Numbers*.
2. Use a professional journal in your field to perform the following tasks.
 - a. Find a chart that presents patterns for several different variables. Use table 7.1 in *Writing about Numbers* to assess whether that type of chart is appropriate for the types of variables involved.
 - b. Evaluate whether you can understand the meaning of the numbers in the chart based only on the information in the chart. Suggest ways to improve labeling and layout.
 - c. Using information in the article, revise the table to correct those errors.
 - d. Consider whether a different chart format would be more effective.
 - e. Pick a table from the article. Draft a chart to present the same information, including complete title, axis labels, legend, and notes.
3. Find data on time trends for two or three subgroups (e.g., trends in unemployment rates for men and for women, or values of two different stocks over a few weeks). Create a chart to depict those patterns, complete with a good title, axis labels, legend, and notes.

■ B. APPLYING STATISTICS

1. Using information from a frequency distribution on one of your variables, create a chart. See table 7.1 in *Writing about Numbers* to decide on the best format of chart for the type of variable.
2. Run a cross-tabulation of two categorical variables in your data set, choosing an outcome that has only two possible values. Create a chart to present the results.
3. Estimate a difference in means for a continuous variable according to values of a categorical predictor. Create a chart to present the results.
4. Identify a topic for a hypothetical research paper. Make a list of three or four simple (e.g., no more than three-way relationships) charts that would pertain to that topic. Write individualized titles for each chart.

■ C. WRITING AND REVISING

1. Evaluate a chart you have previously made for your paper, using the checklist for chapter 7 in *Writing about Numbers*.
2. Peer-edit another student's charts after he or she has revised them, again using the checklist.
3. Read through the results section of your paper and identify topics or statistics for which to create additional charts that pertain to your research question. Draft them using pencil and paper including complete title, labels, legend, and notes.
4. Identify a table in your paper that would be more effective as a chart. Draft and create that chart including complete title, labels, legend, and notes.