**Class Activities**

Chapter Three: Graphic Presentation

Activity #1 (Group)

Working in small groups, conduct a search of a local or national newspaper. Find an article that uses one or more of the graphic devices discussed in Chapter Three. Discuss how well each of the graphs is constructed, considering such features as appropriate labels, axes, statistics, footnotes, color (if applicable), and the type of graph chosen. Remember that a well-constructed graph should be able to stand on its own, without accompanying text. If some of the graphs seem unsatisfactory, suggest modifications that would improve their functionality.

Activity #2 (Group)

Statistical software packages such as SPSS offer many options when constructing charts and graphs. Working in small groups, select one or two variables from the SPSS modules and create a chart or a graph using these variables. Work together to perform an inventory of each of the graphic options that are available in SPSS. Be creative when creating your chart or graph. Present your work to the class and be sure to include a brief explanation or tutorial that outlines where your classmates can find these graphic features available to them.

Activity #3 (Group or individual)

In Chapter One we discussed how interval/ratio level variables can be recoded into ordinal and nominal level variables. Select an interval/ratio variable from any of the SPSS modules and discuss the properties associated with its level of measurement. Ask each student or group to do the following:

a) Graph the variable as an interval/ratio level variable using an appropriate graphic device.

b) Recode the variable into an ordinal level variable. Graph this variable, again using the appropriate graphic device.

c) Again, recode the above variable, this time into a nominal level variable. Graph this variable, again using the appropriate graphic device.

d) Present the results to the class. On the basis of the work above, does each of the graphs tell a consistent story? Why or why not? What accounts for this?

Activity #4 (Group)

This is a fun small group exercise to help students learn about incorrect ways to draw tables and graphs. Have students get together in groups of two or three students. Assign each group a pie chart, bar graph, statistical map, histogram, frequency polygon, or time series chart. Ask them to construct their assigned chart or graph in an incorrect manner. Offer students an incentive (e.g., leaving class 5 minutes early or 1 extra credit point on a quiz) for the most incorrect drawing. Allow the students 10-15 minutes to construct an incorrect picture, then have students share their drawings with the rest of the class.

Activity #5 (Group or individual)

Have the students go through all the charts in Chapter Three and record the independent and dependent variable are for each chart. Then, have the students record the level of measurement for each variable. Ask the students if they notice any pattern in which variables are used for specific types of charts (i.e., scale for polygon).