Course Follow-up Activities

Turning Data into Information

Note: It is recommended that participants in the video course complete follow-up activities to deepen their knowledge and skills. When these activities are completed in accordance with local staff development guidelines, participants may be able to earn additional professional development credit. Contact your local staff development office for determining how you might receive credit for completing the video program and additional credit for completing follow-up activities.

Activity 1 Class Scores

When you return to your classroom toward the end of the summer, choose a set of scores (quiz, test, standardized or teacher – prepared) and create a stem-and-leaf plot of the scores for your class.

A. What was the purpose of the quiz or test that you created the stem-and-leaf plot for? Was it to differentiate the degree to which your students have advanced through a subject, such as mathematics, or was the purpose to measure mastery of a particular curriculum objective?

B. How would you describe the shape of your stem-and-leaf plot? That is, what kind of distribution does your graph suggest?

C. In light of our discussions of distributions, does the distribution reflected in your graph correspond with the purpose of the test?

Activity 2 Disaggregating Data

When you return to your classroom toward the end of the summer, select a set of data – the scores from a test or the number of days that each student was absent during the first month of school, for example – and use a stem-and-leaf plot to disaggregate the data by gender. You may choose to used two different colors in a single graph or to use back-to-back stem-and-leaf plots to disaggregate the data (quiz, test, standardized or teacher–prepared) and create a stem-and-leaf plot of the scores for your class.

A. How would you describe the overall shape of the graph(s)?

B. Does gender seem to affect the data?

C. Are the distributions different for boys and girls?

Activity 3 Ask Your Colleagues

When you resume work, collect some data from at least thirty of your coworkers. You might, for example, ask your colleagues to estimate their commute distance to work (rounded to the nearest mile). Or, your might ask them to determine the number of years that they have lived in their current home. Create a stem-and-leaf plot from the data.

A. How would you describe the distribution?

B. What is the range of your data?

C. Would you compute a mean or a median for your data set? Compute both and compare the values. If the values differ, look for a relationship to the type of distribution that the stem-and-leaf plot suggests.