

1023-J5-509

Kris H, Green* (kgreen@sjfc.edu), 3690 East Ave, Rochester, NY 14618. *Using Boxplots and Histograms to Draw Inferences.*

I plan to share two examples from our mathematics course for business majors using box-and-whisker plots and histograms. In one assignment, students use side-by-side boxplots of salary data at several companies to make recommendations to managers looking for a change of job. Students start with a vague description of the managers and create an argument regarding the placement of the managers, with reasoning for the choices (first and second) and counter-arguments for the companies not selected. In the second memo, students make use of histograms to explore service times at different venues in a fast-food restaurant. By comparing these service times, students construct an argument concerning the recent rise in customer complaints, providing ideas for how to collect further data to help us make decisions. I will illustrate the depth in these problems that can be revealed by using simple graphical tools in combination. I will also share our process for evaluating such open-ended problems in a way that provides valuable feedback to students, while respecting the variety of approaches they pursue. This assessment process has been especially important to us allowing us to make use of assignments that are substantially different from those students expect. (Received September 15, 2006)