

Mean or Median? – The Great Box-and-Whisker Plot

An activity to introduce students to box-and-whisker plots.

Goals/Objectives:

Data Analysis and Probability Standard

Benchmarks grade 5-7

- A. Read, create and use line graphs, histograms, circle graphs, box-and-whisker plots, stem-and-leaf plots, and other representations when appropriate.
- E. Collect, organize, display and interpret data for a specific purpose or need.
- F. Determine and use the range, mean, median and mode to analyze and compare data, and explain what each indicates about the data.

Indicators grade 7

- 1. Read, create and interpret box-and-whisker plots, stem-and-leaf plots, and other types of graphs when appropriate.
- 3. Analyze a set of data by using and comparing combinations of measures of center (mean, mode, median) and measures of spread (range, quartile, interquartile range), and describe how the inclusion or exclusion of outliers affects those measures.

Benchmarks grade level 8-10

- A. Create, interpret and use graphical displays and statistical measures to describe data; e.g., box-and-whisker plots, histograms, scatterplots, measures of center and variability.
- C. Compare the characteristics of the mean, median and mode for a given set of