

Junior Achievement \$ave, USA

Analyzing Career Choices

High School

When analyzing career choices, annual salary is often an important factor in the decision-making process. What salary range do you desire? What salary is required for the location you wish to live? The directions below will guide you through the process of analyzing salaries for career choices.

Family Directions

- 1) Collect salary data from entry-level professionals for your top two career choices. A minimum sample size of 25 is preferable. Collect the samples by the means you deem most appropriate. A researcher may decide to collect using a random sampling process. Record the data.
- 2) Compare the salaries of the two careers by creating graphical displays, such as boxplots and histograms. Describe the shape of the data and explain what can be inferred from the shape. Analyze each representation, according to measures of center and spread. Discuss the differences between mean and median while deciding which is most appropriate in this case. Explain what the range, interquartile range, and standard deviation indicate.
- 3) Perform a two-sample t-test to determine if there is a statistically significant difference between the salaries for the two groups.
- 4) Check various websites with purported salary averages for different career types and determine if their claims should be accepted or rejected. Compute a one-sample t-test. In other words, based on a random sample, "test" a claim to see if it is true. All of this lends itself to showing you the importance of independent research and statistical analysis.
- 5) Prepare a short slide show using presentation software that describes what you learned and how it influenced your ideas about the salaries of each profession. Discuss the center and spread of the data, their significance, and any new revelations about purported claims for career salaries.

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