

Lesson 29: Drawing a Conclusion from an Experiment

Classwork

In this lesson, you will develop a comprehensive poster summarizing your experiments.

Characteristics of a Good Poster

Your instructor will provide you with specific instructions and a rubric for assessing your poster (taken from “Poster Judging Rubric” at the “Poster Competition and Project Competition” page of the American Statistical Association, www.amstat.org/education/posterprojects/pdfs/PosterJudgingRubric.pdf).

Generally speaking, the presentation of a statistical analysis and/or an experiment should clearly state the question or purpose. The presentation should lead to the conclusion on a path that is easy to follow. The results of the study should be immediately obvious to the viewer. Any graphs included should be relevant to the question of interest and appropriate for the type of data collected.

Exploratory Challenge: Explaining the Experiment and Results

Your classwork will involve developing your poster. Your instructor will provide guidance as to groups, amount of time to spend, the rubric to be used for evaluation, etc. Your poster should address the results of both Experiments 1 and 2 regarding the effects of both body width and wing length.

In addition to the general concerns of colors, fonts to use, etc., in preparation for creating your poster, consider (and answer) these classwork questions.

- What was the objective of the experiment?
- How did you collect your data?
- What summary values and graphs should you present?
- How will you develop and present a summary of the experiment in a way that it is easy to follow and effortlessly leads the viewer to the conclusion?
- How will you explain *statistical significance*?