

AMERICAN STATISTICAL ASSOCIATION

Promoting the Practice and Profession of Statistics®

This community provides a toolkit for instructors of Introductory Statistics courses.

Overview

<https://community.amstat.org/stats101/home>

A Series of Case Studies

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December 14, 2015

Introduction: Many teachers of introductory statistics courses, whether at the high school, 2 year or 4 year college or university level are trained in mathematics, with little or no training or experience with statistics. At the request of the 2015 President of the American Statistical Association, David Morganstein, we have written a series of case studies, designed to show statistics in action, rather than showing it as a branch of mathematics. Each case starts with a real world problem and leads the reader through the steps taken to explore the problem, illustrating the techniques used in introductory or AP statistics classes. Sometimes the analysis goes slightly past the methods taught in such an intro course. The analysis is meant to build on simpler techniques and to provide examples of real analyses, typical of the kind of analysis a professional statistician might perform. Our hope is that these case studies can both provide context and motivation for the instructor so that the methods in the intro course come alive, rather than seem a list of cookbook formulas. They can be used as examples in class, or just as guides for what a statistical analysis might entail.

Each case is presented in 2 versions:

- An R version, written in R Markdown, showing all the R code used to make the plots and the analysis. This version is available in the [public library](#) on this site.
- A version using the package JMP from SAS. This version will be housed on the [JMP User Community](#) site.

Please share your feedback. Use this [link](#) to ask questions and share your comments about the case studies. Your feedback will help us improve!

WE WANT YOU

