Remodeling Statistics Education

The statistical pioneers of the 19th and early 20th century would be astounded by the success of the enterprise they started. They might also be astounded by the extent to which the statistics taught today is the same they developed more than a century ago. This despite the fact that the techniques taught in introductory courses are not very current professionally. The usual explanation for this situation is that the contemporary techniques are too advanced for students; it's necessary to gradually build up concepts and skills, following the historical path. I'll argue that it's better to jump right in to contemporary technique. Start university-level statistics with multivariate modeling, covariates, bootstrapping, and logistic regression, rather than chi-square, z-, and p-, and t-tests, etc. By orienting basic statistics around modeling and regression rather than around basic statistics such as mean, count, and proportion, students see statistics in a way that is better aligned with contemporary applied research. I'll outline the approach we take to teaching this material at Macalester College, a liberal arts college where approximately 1/3 of the student body take our introductory statistics course based on multivariate regression.

Thursday, November 10, 2011
4:00 p.m. — 203 TMCB

A reception for faculty and graduate students to meet Dr. Kaplan will be held prior to the seminar at 3:30 PM in 235 TMCB.