Excel-based interactive activities in an introductory statistics course.

Although I have exclusively used SPSS or StatCrunch as the data analysis tool in my introductory statistics course, I use Excel as a way to get students to better understand the mathematics behind the statistical techniques. My goal is for students to write their own programs that can be used to analyze data, without requiring students to know procedural computer programming. I will discuss several activities I have implemented. Two of these are discovery activities used to determine reasonable formulas for the correlation coefficient as well as the F statistic for One-way Anova. I will also discuss a sequence of assignments in which students each make their own spreadsheet that can be used to do hypothesis testing and find confidence intervals for a variety of situations in which the summary statistics are known. (Received September 22, 2015)