Should you use Excel to teach Statistics?

The following articles discuss pitfalls of using Microsoft Excel® for teaching college-level or AP statistics. Links to web pages are included when possible, along with pertinent quotes from the article.

"Excel 2007, like its predecessors, fails a standard set of intermediate-level accuracy tests in three areas: statistical distributions, random number generation, and estimation…. Persons who wish to conduct statistical analyses should use some other package." McCullough & Heiser, 2008

"The journal Computational Statistics & Data Analysis recently published an article concluding that [Excel] is inadequate for substantive statistical analysis" (2000) Berkeley Lab Computing Newsletter http://www.lbl.gov/ICSD/CIS/compnews/2000/June/05_journal.html

"Teaching statistics is a big challenge, teaching statistics with Excel is an even bigger challenge." AUSTRIAN JOURNAL OF STATISTICS Volume 37 (2008), Number 2, 195–206
Example of accuracy problems in Excel: http://www.cmh.edu/stats/ask/accuracy.asp

"We find that the accuracy of various statistical functions in Excel 2007 range from unacceptably bad to acceptable but significantly inferior in comparison to alternative implementations." A.T. Yalta, 2008

"Microsoft Excel spreadsheets have become somewhat of a standard for data storage, at least for smaller data sets. This, along with the program often being packaged with new computers, naturally encourages its use for statistical analyses. This is unfortunate, since Excel is most decidedly **not** a statistical package." http://pages.stern.nyu.edu/~jsimonof/classes/1305/pdf/excelreg.pdf
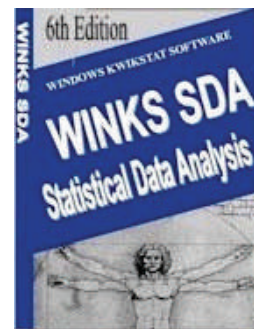
"Enterprises should advise their scientists and professional statisticians not to use Microsoft Excel for substantive statistical analysis." - The Gartner Group, at http://www.lbl.gov/ICSD/CIS/compnews/2000/June/05_journal.html

"Friends don't let friends use Excel for Statistics," 2001 Joint Statistical Meetings, "Problems with using Microsoft Excel for Statistics," Jonathan Cryer, University of Iowa, http://www.cs.uiowa.edu/~jcryer/JSMTalk2001.pdf

Is Microsoft Excel an Adequate Statistics Package? "It depends on what you want to do, but for many tasks, the answer is 'No'." http://www.practicalstats.com/xlsstats/excelstats.html

Teach Statistics with WINKS SDA

We recommend that you try WINKS SDA Statistical Data Analysis from TexaSoft in your next Intro to Statistics course because it provides more standard and thorough statistical data analysis experience for your students than Excel. This inexpensive, yet powerful, program can read Excel data files, includes many more analysis options than Excel, and is simple to introduce to students. WINKS SDA has been used in the classroom by thousands of students for more than 20 years, and is continually updated to reflect ideas and suggestions from numerous instructors. See more about WINKS SDA at **http://www.texasoft.com.**

This document with live links to the resources cited can be found at: www.texasoft.com/excel