# Internet Resources For Statistics Education

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## 1. Introduction

There are many Websites that provide various forms of information for statistics education. Teachers can use internet to access such information to increase efficiency in their delivery of instruction. Kabacoff says that the internet provides a platform for the development of teaching tools that are visual interactive, user-friendly, and accessible for students.

The purpose of this paper is to direct teachers to websites that provide teaching material and various resources which are currently available via the WWW to help statistics instruction.

## 2. On-line Statistics Courses

Many teachers of statistics course maintain websites to provide course materials to their students and share with other teachers information from the courses they have developed. A few of such course follow:

- Intro to Statistics. at Colgate University.
  http://math.colgate.edu/math102/index.html.
- Introductory Probability and Statistics. at the College of Marin.
  http://www.marin.cc.ca.us/~lansing/math/Statistics_ontheNet.
- Statistical Data Analysis at the University of Baltimore.
  http://ubmail.ubalt.edu/~harsham/stat-data/opre330.htm.
- Stat 328 - Applied Business Statistics. at Iowa State University
  http://www.public.iastate.edu/~dicook/stat328.html.
- Intro to Linear Models at Dartmouth College.
  http://www.dartmouth.edu/~matc/math30/syllabus.html.
- Stat 407- Methods of Multivariate Analysis at Iowa State University.
  http://www.public.iastate.edu/~dicook/stat407.html.

## 3. On-line Statistics Textbooks

Several teachers and groups have developed statistics textbooks that can be accessed via the web. These books provide useful references material for teachers and supplementary material for students to use outside the classroom.

- Electronic Statistics Textbook, developed at the StatSoft R&D Department.
  http://www.statsoft.com/textbook/stathome.html.
- SticiGui by Philip B.Strak of UC Berkeley.
  http://www.stat.berkeley.edu/~stark/SticiGui/index.htm.
- SurfStat Australia, An Intro-level resource. Newcastle University(Australia).
  http://math.uc.edu/statistics/surfstat/surfstat-main.html.
- Multivariate Statistics  by D.W. Stockburger at SW Missouri.
  http://www.psychstat.smsu.edu/MultiBook/mlt00.htm.
- HyperStat Online by David Lane.
  http://davidmlane.com/hyperstat/index.html.

### 4. Java Demonstrations

Using the latest WWW technology, educators can now include interactive demonstrations in the form of Java applets within their WWW materials. R. west and R. Ogden (1998) indicate that with development of the Java Computing language it is now possible to add interactive components designed to aid in the understanding of a concept and also stimulate a student's interest by providing a "hand on" learning experience. Here are some Java applets:

- Histogram, Regression, Central Limit Theorems, Confidence Intervals, Power of a Hypothesis by R. West and R. Ogden.
  http://www.amstat.org/publications/jse/v6n3/westlink4.html.
- Elementary Statistics Applets. B. Lewis, Kent State University.
  http://intrepid.mcs.kent.edu/~blewis/stat/index.html.
- Java Appletes. Duke University.
  http://www.isds.duke.edu/sites/java.html.
- Probability by Surprise. Susan Holmes, Stanford University.
  http://www-stat.stanford.edu/~susan/surprise/.

### 5. Data Sets

Analyzing data is a useful and essential part of learning statistical methods and their applications. Here are some of data sets websites which can be used for teaching:

- Data and Story Library. DASAL Project, Cornell University.
  http://lib.stat.cmu.edu/DASL/.
- JSE Data Archive. Journal of Statistical Education Data Archive for teaching.
  http://www.amstat.org/publications/jse/archive.htm.
- Time Series Data Library. R. Hyndman, Monash University.
  http://www-personal.buseco.monash.edu.au/~hyndman/TSDL/.
- WWS509 Generalized linear models. Princeton University.
  http://data.princeton.edu/wws509/.
- Statistics UCLA. J. De Leeuw, University of California.
  http://www.stat.ucla.edu/data/.

### 6. Electronic Journals

- InterStat-Statistics on the Internet, published by Dept. of Statistics at Virginia University.
- Teaching Statistics, published by The Teaching Statistical Trust.
- Journal of Statistical Education , published by the American Statistical Association.

## REFERENCES

Kabacoff, R. I. (1995). Developing World Wide Web Based Tools for Statistical Education. In proceeding of the section on Statistical Association pp249-252

West, R. W. and Ogden, R. T. (1998). Interactive Demonstration for statistics Education on the World Wide Web .Journals of Statistical Education V6 no 3.

## RÉSUMÉ

*Il existe plusieurs sites web qui fournissent divers informations pour l`enseignement des statistiques . Les enseignants peuvent utiliser l`internet pour avoir acc`es a` ces donn`ees en vue de parfaire leur enseignement. Le but de cet article est d` orienter les enseignants des statistiques vers les sites web qui fournissent des outils d`enseignement et divers sources dans l`enseignement des statistiques.*