

Collaborative Research: Adaptation & Implementation of Activity & Web-Based Materials Into Post-Calculus Introductory Probability and Statistics Courses

Principle Investigators:

Tracy Goodson-Espy, The University of Alabama in Huntsville

M. Leigh Lunsford, The University of Alabama in Huntsville

Ginger Holmes Rowell, Middle Tennessee State University

Project Objectives: To improve post-calculus students learning of probability & statistics. To provide students with better preparation for their future careers in math & statistics, math education, & computer science.

Materials Used:

• “*A Data-Oriented, Active Learning, Post-Calculus Introduction to Statistical Concepts, Methods, and Theory (SCMT)*”, A. Rossman, B. Chance, K. Ballman, NSF DUE-9950476, <http://www.rossmanchance.com/scmt.html>

• “*Virtual Laboratories in Probability and Statistics (VLPS)*”, K. Siegrist, NSF DUE-9652870, <http://www.math.uah.edu/stat/>

Project Website: Here you will find activities that you can download, info on the NCTM standards for teaching probability and statistics, and cool links with great resources for teaching probability and statistics:

http://www.mathspace.com/NSF_ProbStat/index.htm

Resources for Teachers: In addition to the websites given above, below we list a few additional resources for teachers. These and others are also on our project website.

Resource/Web Address	Information
http://www.collegeboard.com/student/testing/ap/sub_stats.html	Complete course and exam information for the AP Statistics Exam (with a downloadable pdf file containing the course description).
http://statweb.calpoly.edu/chance/applets/applets.html	The Rossman/Chance Applet collection. Contains the Reeses Pieces Applet we will use today.
http://www.wku.edu/~david.neal/statistics/basicstats.html	This site has READABLE directions on how to use the TI-82, 83, 83+, 86, or 89 calculators to do typical statistical computations including descriptive statistics, confidence intervals, and p-values. These materials were developed by Dr. David K. Neal, Department of Mathematics, Western Kentucky University.
http://it.stlawu.edu/~rlock/	Robin Locke’s Site with many great links for teaching statistics including data sources, JAVA Applets, and other instructor resources.

If you have a great resource that you use to teach statistics, please let us know and we will put it on our website!