Technology, Projects, and Elementary Statistics

T. W. Judson
Department of Mathematics and Computer Science
University of Portland
judson@up.edu

February 17, 1998

Abstract

Students can use technology to complete projects that unify the ideas and concepts taught in an elementary statistics course. Courses in elementary statistics enjoy a wide clientele, including students from the natural sciences, education, the humanities, and the social sciences. In addition to those students fulfilling requirements for their major field of study, many students elect to study statistics as a means of satisfying university core curriculum requirements for mathematics. Students who are majoring in disciplines such as biology or the social sciences often take more advanced courses that build on what they have encountered in a first course. On the other hand, elementary statistics is often the only university level mathematics course that many students will take. It is often the case that students in an elementary statistics course have a weak background in mathematics with little or no knowledge of calculus. Software such as Minitab or Excel can be employed as a pedagogical tool to aid the weaker student yet allow the better prepared student the opportunity to undertake more advanced projects.