

Meeting: 1003, Atlanta, Georgia, MAA CP L1, MAA Session on Using Real-World Data to Illustrate Statistical Concepts, I

1003-L1-216 **Daniel J. O’Loughlin***, Department of Mathematical Sciences, College of St. Catherine, 2004 Randolph Avenue, St. Paul, MN 55105. *Two Student Projects which Promote the Exploration of Experimental Design and Inference.*

Most introductory Statistics textbooks provide many examples of small, often contrived, data sets which students can use as they learn the basics of summarizing data and data analysis, including inference. However, it is difficult to convey the messier aspects of real data through textbook examples. To illustrate some of these messier aspects, I assign two projects in my introductory Statistics courses. In the first project, which I call “Experiment Day”, the students design their own experiment and collect their own data, using their classmates as subjects. In the second project the students read a detailed statistical study, and they analyze the design and conclusions of the study. In my paper (presentation) I will emphasize how these projects are implemented in my classes, and the topics in the course that are emphasized through these activities. (Received August 30, 2004)