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

1003-L1-260 Lorrie L Hoffman* (hoffmalo@mail.armstrong.edu), Department of Mathematics, Armstrong Atlantic State University, 11935 Abercorn St., Savannah, GA 31419-1997. Being One's Own Experimental Unit in the Classroom.

When a Statistics professor says he uses real world data in the classroom, he often has acquired numbers from the Fedstats website (http://www.fedstats.gov/) or perhaps uses something available locally that exists in the public domain (see http://www.math.armstrong.edu/faculty/hoffman/salxls.xls for a Florida university's salaries). A potentially engaging dataset is the one that is both real world and personally meaningful for the entire class. Relying on students to create a dataset by participating in either surveys or in experiments produces readily useful and interesting numbers. This approach has been successfully applied in many classroom situations and particularly so in a Design of Experiments course (http://www.math.armstrong.edu/faculty/hoffman). During the first meeting a simplified scenario involving a business plan to sell jewelry in the form of bead rings is presented. The economic query is built around the speed at which employees can string three different bead sizes. The students act as "stringers" in order to generate times associated with assembling 10 small or 10 medium or 10 large bead rings. This paper describes the experiment, the data collected and some of the analysis conducted on that data. (Received September 03, 2004)