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Murray H. Siegel* (murray.siegel@asu.edu), Math & Science Faculty, SLS, Polytechnic Campus, Mesa, AZ 85212. *A Semester Project for Introductory Statistics.*

A meaningful introductory statistics class should include one project. This presentation describes a project that counts towards twenty percent of the semester grade. Students are required to submit a proposal for two binomial probability experiments, each using the same physical tool. One has a relatively low probability (LP) of success (15-25%). The other has a relatively high probability (HP) 55-75%. Once a proposal is accepted, the student conducts 40 samples of sample size 30 for each experiment. Thus the student is running 2400 events. When complete, a frequency distribution of the data is submitted. Once this is accepted, the student writes a report that analyzes the two experiments. The report includes a justification that each experiment was binomial; a comparison of center and spread, and an analysis of shape; an evaluation of the normality using the Empirical Rule; a 95% confidence interval for the mean number of successes for each experiment; a hypothesis test on the difference between means; and a discussion of the results. The discussion answers questions such as what causes the differences between experimental and theoretical results and a further evaluation of the underlying distribution. (Received July 18, 2013)