## 1077-E5-2763 **John D. McKenzie\***, Math/Science Division, Babson College, 231 Forest Street, Babson Park, MA 02457-0310. *Teaching by the Test.*

This presentation examines how one may teach students by constructing some non-standard questions for mid-semester examinations. These questions build upon the class examples and assigned paper and electronic exercises that the students are expected to have mastered. Although this approach is not new, it is rarely used today for a number of reasons such as the benefits of "teaching to the test". The presentation describes in detail two examples of such questions used in an introductory, applied statistics course for undergraduates. The first addresses the question, "Why there are two criteria (via z-scores and boxplots) for determining outliers?". It uses a data set in which the two criteria yield different results. "What is a triangular distribution?" is the second question considered. This is a distribution that the students have not seen before but will definitely see in advanced applied quantitative courses. The presentation concludes the pros and cons of using such questions. (Received September 22, 2011)