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Robin H Lock* (rlock@stlawu.edu), Dept. of Math, CS and Stat, St. Lawrence University, Canton, NY 13647, and Patti Frazer Lock, Dept. of Math, CS and Stat, St. Lawrence University, Canton, NY. Early Inference: Using Bootstraps to Introduce Confidence Intervals.

Is it feasible to teach important ideas of statistical inference, such as constructing and interpreting a confidence interval for a population parameter, early in an introductory course - even before students see a normal distribution? We argue that bootstrapping and randomization techniques make this possible and can facilitate students' understanding of the underlying concepts. We describe revisions to a general-audience, introductory statistics course designed to give students an early introduction to inference, starting with constructing confidence intervals based on a distribution of bootstrap statistics. These techniques are quite general - students can find a confidence interval for a standard deviation or correlation as easily as a mean - and require relatively few statistical prerequisites. We describe some of our experiences with test driving this approach in a course this fall. (Received September 22, 2010)