1067-B1-2270 **Kari F. Lock*** (`lock@stat.harvard.edu`), Statistics Department, Harvard University, Cambridge, MA 02138, **Eric F. Lock** (`lock@email.unc.edu`), Statistics Department, University of North Carolina at Chapel Hill, Chapel Hill, NC 27510, and **Dennis F. Lock** (`dennis.f.lock@gmail.com`), Statistics Department, Iowa State University, Ames, IA 50014.
Early Inference: Using Randomization to Introduce Hypothesis Tests.

Traditional ways of teaching hypothesis testing (t-tests, z-tests, etc.) require teaching students a great deal of theory before the core concepts of statistical inference can be introduced. Randomization tests free us from these confines, and allow hypothesis testing to be taught early on, giving students an understanding of the key idea of statistical inference early in the course. Also, while traditional methods lead students to focus on the mechanics of carrying out a hypothesis test, randomization-based methods lead students to understand more clearly what a p-value actually represents. We discuss how randomization methods can be used with little background knowledge to teach the idea of statistical significance, and why such an approach might yield a deeper understanding of hypothesis testing. (Received September 22, 2010)