

1135-K5-1803 **Barb Bennie*** (bbennie@uwlax.edu), 1725 State Street, LaCrosse, WI 54601, and **Erick Hofacker** (erick.b.hofacker@uwrf.edu), 214C North Hall, River Falls, WI 54022. *Teaching Statistics through Simulation.*

Simulation is a method that is regularly referred to and suggested in the Common Core State Standards (K-12) and the Collegiate GAISE report for teaching statistics and probability. Our presentation will emphasize the use of simulation to assist in the teaching and learning of topics in the areas of Sampling Distributions, the Law of Large Numbers, the Central Limit Theorem, Confidence Intervals, and Hypothesis Testing. We will share how we use the StatKey app in order to teach inferential statistical concepts through the bootstrapping method and randomization. Through a visual representation, students are exposed to a deeper understanding of the meaning of a p-value or the construction of a confidence interval. A series of tasks and activities will provide an understanding of how to implement this in the classroom, as well as the power of this method on constructing conceptual understanding during the early stages of an introductory statistics course. (Received September 24, 2017)