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Kimberly J Presser* (kjpres@ship.edu), Shippensburg University, Department of Mathematics, Shippensburg, PA 17257. JavaScript Simulations for a Probability Course for Middle and High School Teachers. Preliminary report.

When teaching probability concepts to students, it is important to be able to simulate chance experiments. Such simulations serve to motivate student interest in the topic, demonstrate long-run behavior of phenomenon and illuminate chance situations that are difficult to resolve theoretically. This presentation will discuss how JavaScript was used for simulating probabilistic concepts in a course for in-service middle and high school teachers. Additionally, we want to present a 4-tiered structure which was used for the simulation assignments which allowed students with a wide range of computing abilities to use the JavaScript simulations for exploration. (Received September 10, 2007)