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David P Ely* (e1y.65@osu.edu). *A Study in Using Computer Programming to Simulate Classic Probability Problems*. Preliminary report.

Teaching traditional probability theory results in most students unable to apply the theory to classic probability problems with any confidence. So was the conclusion of a study conducted in 2015 at a large Pacific Northwest university. After completing a term on introductory probability theory using Minitab, secondary mathematics teachers struggled to solve classic probability problems. Yet, when presented with a second term showing ways to simulate probabilities and verify models using computer programming, the teachers excelled. Simulation packages inside of software such as Minitab, Tinkerplots and calculators are limited; yet, teachers programming their own simulations in C were not. This new “as-needed” pedagogy on blending introductory computer programming with introductory probability theory was found to be highly effective. (Received September 22, 2015)