The Central Limit Theorem is one of the most important concepts that we teach in an introductory statistics course, yet it may be the least well understood by our students. Sure, our students can plug numbers into a formula and solve problems, but conceptually, do they really understand what the Central Limit Theorem is saying? In this talk, I will demonstrate a simulation that I have developed which illustrates the Central Limit Theorem under various assumptions about the shape of the population distribution. Afterwards, I’ll describe an assessment used to check the student’s understanding of this crucial concept. (Received September 17, 2013)