Jennifer R. Galovich* (jgalovich@csbsju.edu). Agent Based Modeling Across the Curriculum.

When individuals (human or not) act autonomously, interesting collective behavior may develop. For example, individual choices may affect how neighborhoods become racially segregated. Agent based modelling examines such emergent behavior and can be an especially effective way to teach students how to ask the "what if..." questions that lead to deeper understanding. I will present examples from a course in mathematical modeling in biology and ideas for use in mathematics courses as well as courses outside our discipline. This is a pedagogical (and research) tool that can be used successfully, even if you are not an expert programmer! (Received September 19, 2015)