## 1116-F5-2525 **Daniel J Teague\*** (teague@ncssm.edu), NCSSM, 1219 Broad Street, Durham, NC 27705. Agent Based Models in the Social and Biological Sciences.

Many students who are quite good in mathematics leave the subject early because they see no reason to continue. They often do not view themselves as future engineers or physicists, and what other reason is there to continue in mathematics? Many have deep interests in the social and biological sciences which have historically be a-mathematical. Mathematical modeling change can correct these misunderstandings. Agent based models, in particular, have an extraordinary ability to capture student interest in mathematics and to illustrate the importance of continuing in mathematics regardless of their career interests. In this presentation, we highlight the Schelling Segregation Model and demonstrate some models created by advanced high school students. (Received September 22, 2015)