1077-C5-50 Robert E. Burks* (reburks@nps.edu), COL Robert E. Burks, PhD., Department of Operations Research, Naval Postgraduate School, Monterey, CA 93940. The use of Pop Culture and Competition to Enhance Learning Mathematics (Survivor Math).

Traditional student success in undergraduate level mathematics, science, and engineering (MSE) courses depends on a firm understanding of pre-calculus material. Instructors at the United States Military Academy have identified a set of fundamental pre-calculus concepts that all students must possess in order to effectively understand the concepts presented in a strong MSE core academic program. However, every year a growing number of freshmen enter under-prepared for success in a MSE sequence. I will discuss a modification of the popular television game show, Survivor, as conducted in an undergraduate first semester developmental mathematics course and graduate level statistics course. The focal point of this classroom application is a group-based competitive drill and practice activity designed to increase conceptual understanding of fundamental concepts. This application takes advantage of available technology to boost instruction creativity and student interest in the classroom. The results of this activity include: increased understanding of the fundamental concepts, increased confidence in mathematics exams, and increased preparedness for the mathematics concepts presented in future MSE courses. (Received July 06, 2011)