962-G1-516 William F. Straley* (wstraley@oglethorpe.edu), Dr. William F. Straley, Director, MBA Program, Oglethorpe University, 4484 Peachtree Road, Atlanta, GA 30319, and Margaret E. Cole (ColeMeg@worldnet.att.net). Using Mathematics in a Business Simulation: Broadening the Options. Preliminary report.

We have developed a computer simulation game for use in graduate and undergraduate business courses. Classes are divided into teams and compete in a production-oriented environment. Teams make production, scheduling, purchasing, marketing and financing decisions. These decisions are mingled with the decision of other teams and the game algorithm, and the published results form the basis for subsequent rounds of decisions. Successful teams will demonstrate appropriate use of mathematical models such as MR, LP, and EOQ. Superior teams will display ability to interpret and assimilate results of these models in business decision making environments, e.g. choose prices that optimize profit based on COGS, and coordinate those results with LP so as to maximize contribution to corporate overhead. Games have been available in business schools and courses for several years. However, we want to create a simulated environment in which teams coordinate their use of models and not treat them as separate, unconnected topics. Also, we widened the variety of decisions that are available to the student-teams while maintaining focus on the basic models taught in the course. Teams are continually required to defend their use, and their nonuse, of the models mentioned above. (Received September 15, 2000)