

1035-I1-1470

**J. Alfredo Jimenez\*** (jaj4@psu.edu), Penn State Hazleton, 76 University Drive, Hazleton, PA 18202. *Interactive Modules (Produce with Flash) to Facilitate the Construction of Knowledge in Finite Mathematics for Liberal Arts Students.*

An interactive module will be presented that is designed (using Flash) to for liberal arts students, to understand the concepts of permutations and combinations, and their applications to binomial and multinomial probability models. The module is designed in such a way to help students construct their knowledge starting with basic definitions, and their use in simple contexts, working first on their own, outside of class. Class time is then used to work on more complex problems. After class, students work on additional complex problems. Technology plays a crucial role in coordinating out-of-class and in-class activities, and in providing immediate feedback both to the students and the instructor. In this way, students come well prepared to class allowing for more interactive learning. In addition, students have greater control on their own learning process. In terms of assessment, students are able to answer a variety of problems using these probabilistic models. Considering that the course is for liberal arts students, this represents a great progress in the students' ability not just to understand basic concepts, but also to see how they are used to produce complex models. (Received September 19, 2007)