Michael T. Marsh* (mtmars@ship.edu), John L. Grove College of Business, Grove Hall 336, Shippensburg, PA 17257. Using Dynamic, Interactive Models to Teach Statistical Concepts.

Animated Java and Flash graphics are opening new presentation methodologies for students to learn statistical concepts beyond simply solving end-of-the-chapter problems. Many textbooks and websites include interactive examples that illustrate a wide range of quantitative concepts typically covered in statistics courses. However, existing demonstrations may be difficult to modify for specific situations that individual instructors wish to demonstrate. While knowledgeable instructors can use Java, Flash, or specialized computer software to create individualized interactive graphics, many instructors would like to include dynamic examples in classroom or business presentations without having to learn programming, new languages, or additional software. With moderate Excel knowledge, it is possible to create interactive models using standard Excel functions and some creative or innovative spreadsheet development techniques. The goal of this paper is to present some hands-on tools and techniques that instructors can use to develop dynamic, interactive models to enhance students’ understanding of important concepts and the interaction among scenario parameters. (Received September 18, 2006)