962-N1-546 **Teresa D Magnus*** (tmagnus@rivier.edu), Mathematics and Computer Science Department, Rivier College, 420 S. Main Street, Nashua, NH 03060. Sketchpad Explorations that Help Students Read, Discover, and Understand Euclidean Theorems and Proofs.

Geometer's Sketchpad was used extensively in my Geometric Models course not merely for discovering relationships, but also for deeper understanding of the theory. During the Euclidean portion of the course, I transformed about half of each night's course notes into guided Sketchpad labs in which students worked through the definitions of new terms, made conjectures, and proved theorems. Sketchpad provided visual clues as to relationships that might exist, yet students became aware that pictures alone were not sufficient justification. In addition to acquainting future teachers with geometric software, these labs added variety to the long 2.5-hour class, encouraged visualization and experimentation, and tied concepts together. In the labs, the students created for themselves the theorems and proofs that I would have covered in a traditional geometry class. (Received September 15, 2000)