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Thomas B Fox* (fox@uhcl.edu), 2700 Bay Area Blvd, Houston, TX 77058. *Fully Integrating the Use of a Dynamic Geometry Software to teach College Geometry for Preservice Secondary Mathematics Teachers-Emphasis on Discovery, Conjecture, and Proof.* Preliminary report.

Mathematics educators advocate the use of dynamic geometry software as one means to more effectively teach high school geometry, yet rarely have preservice secondary mathematics teachers themselves had an extended, in-depth experience learning geometry using such software. Research documents that teachers are more likely to implement reform methods of teaching mathematics into their instruction if they themselves have learned mathematics using such methods. I will discuss my use of a newly available college geometry curriculum that fully integrates the use of a dynamic geometry program, Geometer's Sketchpad (available for use on the TI-Voyage). The goal of this curriculum, developed as a part of a National Science Foundation grant, is to develop the content of a college geometry course via a dynamic geometry software package. Its emphasis is on discovery, formulation of conjectures related to important geometry content (both Euclidean and Non-Euclidean geometry) and the proof of such conjectures. (Received September 29, 2005)