

1106-51-1382

James J. Madden* (jamesjmadden@gmail.com), 222 Prescott Hall, Baton Rouge, LA
70803-4918. *Geometry By and For High-School Geometry Teachers*.

The geometry course that is offered for future and practicing high-school teachers at Louisiana State University has been evolving for over two decades. Early on, after experimenting with many texts, we found that students reacted very favorably to Euclid's *Elements*, especially Books I, V and VI, and became more actively engaged in studying this work than any of the numerous alternatives we tried. Many graduates have reported, after several years as geometry teachers, that studying Euclid was memorable, useful and influential in their work in a positive way. The latest version of the course is strongly influenced by the Common Core Standards and devotes significant attention to transformations, but Euclid (in the original) still serves as a foundation. Students in the course have contributed actively and extensively to the design and development of the EngageNY/Eureka-Math geometry curriculum. The college course looks "under the hood" of the high-school course, revealing the deep ideas that give high-school geometry its structure, coherence, usefulness and beauty. In this talk, I will provide a conceptual outline of the course and display and distribute several typical assignments. I will also respond to the objections to Euclid that are occasionally made. (Received September 12, 2014)