1086-F5-2213   **Sarah L Mabrouk*** (`smabrouk@framingham.edu`), Framingham State University, Mathematics Department, 100 State Street, PO Box 9101, Framingham, MA 01701-9101. *A Wiki, Some Geometry, and the Parallel Postulate.*

In the study of geometry, consideration of the parallel postulate provides a wonderful example of the questioning, exploration, and development of mathematical ideas. Consideration of Euclid's avoiding using his fifth postulate until his examination of the twenty-ninth proposition in the *Elements*, the belief of various mathematicians including Legendre that this statement was not a true postulate and their spending numerous years trying to prove it, Klügel's analysis of twenty-eight alleged proofs of the parallel postulate in his 1763 dissertation, and the development of equivalent statements to the parallel postulate add depth to the study of Euclidean geometry and naturally lead to the study of other geometries in which this postulate holds or does not hold. In this presentation, I will discuss my use of a wiki to facilitate my students' exploration of the development of Euclidean geometry and its history as well as the how the consideration of the parallel postulate lead to investigation of non-Euclidean geometries. I will share student reaction to the use of the wiki as well as some aspects of their consideration of the history of geometry and the examination of the parallel postulate that students found to be particularly fascinating or inspiring. (Received September 25, 2012)