

1086-N5-1932 **Brian Katz*** (briankatz@augustana.edu). *Teaching Mathematical Maturity through Axiomatic Geometry.*

Mathematical maturity includes the skills to communicate with precision, attend to detail, and interpret results through the epistemologies of the discipline. These themes silently suffuse our courses, but are we effecting any changes in the students? I will describe an inquiry-based course structured around an axiomatic development of Geometry, and I will analyze student products for evidence of changes in the level of mathematical maturity. The evidence will include a comparison of concept maps about mathematical truth from before and after the course as well as student reflection writings about the axiomatic method and their own development in proof construction and communication. (Received September 24, 2012)