

1077-F5-2643      **Gregory D Foley\*** (foleyg@ohio.edu), 117 McCracken Hall, Athens, OH 45701. *Advanced Teacher Capacity in Mathematics and the Common Core.*

The Advanced Teacher Capacity (ATC) project develops technological, pedagogical, and content knowledge among teachers in Grades 11-12 via two yearlong courses: Quantifying Uncertainty and Analyzing Numerical Trends (QUANT) and Modeling and Spatial Reasoning (Modspar). QUANT focuses on data analysis, probability, and statistical reasoning; selecting and enacting cognitively demanding instructional tasks; and using data collection devices, spreadsheets, and interactive statistical software. Modspar addresses discrete, continuous, and geometric modeling and spatial reasoning; creating and implementing cognitively demanding student assessments; and using graphing and geometry applications, including spherical and three-dimensional interactive geometry software. This session will describe these courses and their relationship to the Common Core State Standards for Mathematics and will present the results of the related research since 2007. The session will explain how the standards for mathematical practice are integrated into QUANT and Modspar and how these courses could be adapted to preservice teacher preparation. (Received September 22, 2011)