

Advanced Teacher Capacity Project

Building the Capacity of Ohio's High School Mathematics Teachers in Data Analysis, Probability, and Statistics and in Advanced Topics in Geometry


The Advanced Teacher Capacity project develops content knowledge and pedagogical expertise in the areas of Data Analysis, Probability, Statistics, and Advanced Topics in Geometry among teachers in Grades 9-12. The project comprises two professional development programs for high school mathematics teachers: *Quantifying Uncertainty and Analyzing Numerical Trends (QUANT)* and *Advanced Quantitative Reasoning (AQR)*.



Quantifying
Uncertainty &
Analyzing
Numerical
Trends

Quantifying Uncertainty and Analyzing Numerical Trends begins with a 2-week (60 contact hour) institute focusing on Data Analysis, Probability, and Statistics. Participants explore these concepts in depth using graphing calculators and related technology as tools for teaching and learning. The *QUANT* Institute will take place at three locations during summer 2009:

- John Carroll University in Cleveland, 20-31 July 2009
- Ohio Resource Center in Columbus, 15-26 June 2009
- Wright State University in Dayton, 15-26 June 2009



Advanced
Quantitative
Reasoning

Advanced Quantitative Reasoning begins with a 2-week (60 contact hour) institute for teachers who wish to become leaders in the implementation of the new Ohio Core Curriculum. *AQR* will address Numerical Reasoning, Statistical Reasoning, Discrete and Continuous Modeling, Geometric Modeling, and Spatial Reasoning. Applicants develop a plan to use and disseminate what they learn and as participants refine and carry out their plan. This institute is offered at Ohio University in Athens, 27 July – 7 August 2009.

Each institute will be followed by on-line support and two workshops (Ohio Resource Center in Columbus, 3 October 2009 and 13 March 2010,) to support classroom implementation of the ideas and methods learned during the corresponding summer institute. A teacher may attend one or both of these 72-contact-hour professional development programs.