Matthew S. Benander, Casey Gregory Monday, Josh Roberts and Daniel J. Wells* (dwells@ms.uky.edu), Department of Mathematics, University of Mathmatics, Lexington, KY 40506. Algebra Cubed - An NSF Graduate K-12 Project. Preliminary report.

Algebra Cubed was a three year educational outreach Graduate K-12 project of the University of Kentucky, sponsored by the National Science Foundation. The project was designed for many purposes including increasing the mathematical conceptual understanding and procedural fluency of Middle and High school students in Bath and Powell counties, developing and utilizing lessons for algebra that stress the use and applications of algebra in the context of the Kentucky Core Content. The "cubes" (fellows) from the STEM disciplines will discuss lessons created and interactions that aided in achieving these expected outcomes as well as some unexpected outcomes. (Received January 26, 2010)