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Richard S. Millman* (millman@ms.uky.edu), Dept of Mathematics, POT 715, University of Kentucky, Lexington, KY 40506. *The Algebra Cubed GK12 program of the University of Kentucky in Bath and Powell counties.*

A brief description of goals of the GK12 program of NSF as relevant to ALG3 will be given and the ALG3 program discussed in detail. The ALG3 program has 7 math graduate students as well as two statistics and one engineering student working 15 hours a week, 10 of which are in a middle or high school in two poor, rural counties of Kentucky. The graduate students work with the teachers in the middle and high schools in subjects focusing on algebra. The immediate goals are for the graduate students to learn about the culture and pedagogy of middle and high school and the teachers to increase their content knowledge of algebra related topics. The ultimate goal is for the students of Bath and Powell counties to learn algebra well and continue their education to the best of their ability. The prime philosophical principle of the project is the need for students to have a conceptual knowledge of mathematics. The program evaluation mechanisms are targeted to these goals. (Received August 05, 2007)