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Jerry F Dwyer* (jerry.dwyer@ttu.edu), MS 1042, Department of Mathematics & Statistics, Lubbock, TX 79409, and **Leah Chenault** and **Billy Duke**. *College Math in High School: Why Not?*

An intervention by college mathematics faculty in K-12 teaching is described. College level mathematics lessons were presented to high school Algebra II and Geometry classes and middle school Algebra classes. The purpose was to examine if the new material would lead to an improvement in algebra and geometry skills. Topics introduced to the students included complex variables, complex functions and transformations of the complex plane. Student interest in mathematics as well as their algebra and geometry skills were tested both before and after the introduction of the college level mathematics. There was no significant increase in student interest. From the results of the pre-test and post-test, the students' algebra and geometry skills did improve. Detailed analysis of the pre and post-intervention problem solutions show particular errors in mathematical reasoning that can be addressed in future studies. (Received September 26, 2005)