

1056-K1-150 **Joanne C Caniglia*** (jcanig11@kent.edu), Room 401 White Hall, Kent, OH 44240. *A Picture is Worth a Thousand Words in Geogebra.*

GeoGebra is dynamic mathematics software, created by Markus Hohenwarter for all levels of education that bridges arithmetic, geometry, algebra and calculus. On the one hand, GeoGebra is an interactive geometry system. You can do constructions with points, vectors, segments, lines, and conic sections as well as functions and change them dynamically afterwards. On the other hand, equations and coordinates can be entered directly. Thus, GeoGebra has the ability to deal with variables for numbers, vectors and points, finds derivatives and integrals of functions.

One feature of Geogebra that is often overlooked is the ability to show real-life applications through the insertion of pictures on the coordinate grid. Teachers can import pictures of all types of functions and mathematical concepts and join the mathematics with the application. This session will explore five such applications including: conic sections, symmetry, slope, Golden Ratio proportions, and predictions of trend lines. (Received August 04, 2009)