

1106-A1-2690 **Laura M. Singletary*** (lsingletary@leeuniversity.edu), 1120 North Ocoee Street,
Cleveland, TN 37311. *Using a Dynamic Software Program to Develop Geometrical Theorems.*

To help students engage with geometrical concepts in meaningful ways, researchers and educators have recommended the use of dynamic software programs to teach undergraduate geometry. The use of a dynamic software program in a geometry course provides students with a digital environment to test conjectures and to develop the informal understandings necessary for students to derive general conclusions and rigorous proofs. During this interactive presentation, I will share two problems I use with my geometry students. In my class, I use these problems to help my students develop the Midquad Theorem through the use of dynamic software. Using these problems with the dynamic software, students are able to construct accurate and dynamic diagrams. Students are then able to interact with these dynamic diagrams, providing a means for students to deduce general properties and relationships. Research suggests that students' uses of such programs have the potential to improve their understandings of geometric concepts. (Received September 16, 2014)