

1116-Q5-914 **Aaron Brakoniecki*** (brak@bu.edu). *The Development of Beginning Teachers' Understanding of Pythagorean Theorem from Two Internet-Based Activities.*

Teacher preparation programs' limited time with their beginning teachers make it impossible to cover all of the mathematical knowledge they will need in their career. When these teachers inevitably encounter unfamiliar content in their schools, they need to have tools available with which they can investigate this content. Many will (and already do) use the Internet as a resource to help with their understanding of mathematics.

Seven beginning teachers participated in a study where they attempted to use the Internet to help them better understand the content of the Pythagorean Theorem. Over the course of two activities, they searched for and used internet resources in an attempt to better understand how to prove the Pythagorean Theorem and its converse. Before, between, and after these two activities, the beginning teachers created concept maps that represented their understanding of the content. These concept maps were analyzed for content, structure, and the form and quality of mathematical connections that appeared in these concept maps. This presentation describes the ways in which the beginning teachers' concept maps changed over the course of the activity. Additionally this presentations describes two groupings that the participants fell into based on their concept maps. (Received September 15, 2015)