

1109-97-319

Tyler L Turner* (turnert@apsu.edu), Mathematics and Statistics, P.O. Box 4626, Clarksville, TN 37044. *Combining Flipped-Classroom and Traditional Techniques in Teaching Algebraic Concepts.*

Most students that enter our Math 1110 (Algebraic Problem Solving) course are unprepared for college-level mathematics; they have weak algebraic skills and minimal knowledge of graphing calculators. In many cases, their understanding of mathematics is not sufficient to relate mathematical content to real life. This course traditionally consists of teaching algebra from a problem-solving perspective by providing the students with handouts taken from various sources. For our pilot study, an interactive eBook was created to create more connections between the mathematical content and real life problems in order to help the students gain a better understanding of both. Conceptual questions were assigned as homework before each class. Links to other educational technologies, like Khan Academy, were provided to give students more support outside of the classroom. Additionally, a calculator tutorial was made to enhance student learning. (Received February 04, 2015)