Over the course of the past year the Department of Mathematics and Statistics at Missouri University of Science and Technology has undertaken a redesign of our three semester calculus sequence. During the Fall 2014 semester we pilot tested elements of this redesign in one section of our Calculus I course with an enrollment of approximately 120 students. One of the components of the redesign is to dramatically increase student engagement during their lab (recitation) section through the use of inquiry-based techniques. This talk will provide an overview of observations and results from the pilot, as well as future plans. (Received September 12, 2014)