

1096-E1-1149 **Randall E Cone*** (conere10@vmi.edu), 439 Mallory Hall, Virginia Military Institute, Letcher Avenue, Lexington, VA 24450. *The Mathematics Laboratory and Student Presentations in Pre-Calculus.*

One simple mechanism by which we may include Active Learning (AL) and Inquiry-Based Learning (IBL) into an undergraduate pre-calculus course is the student presentation. In addition, reconfiguring classroom activities to resemble a more laboratory-style setting brings additional opportunities for IBL, and forms a strong variation of the flipped classroom. Over the last three years we have developed a series of Pre-Calculus laboratory worksheets which blend traditional procedural practice with AL and IBL activities. At our institution, combining regular classroom student presentations, a semi-traditional worksheet series, and a laboratory-style classroom environment has had a positive impact on student perception of mathematics as well as resulting in higher success rates in later calculus classes. In this talk, we discuss the history and development of our Mathematics Laboratory Pre-Calculus course, its positive aspects, pitfalls, and possible future changes. (Received September 13, 2013)