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Lauren Klamerus* (laurenaklamerus@lewisu.edu), **Christina Carlson** (christinamcarlson@lewisu.edu) and **Amanda Harsy** (harsyram@lewisu.edu). *Analyzing the Impact of Mastery-based Testing in Mathematics Courses.*

As educators, it is important to recognize that our assessment methods affect student attitudes. If we want students to learn from their mistakes and counteract a fixed-mindset of learning, perhaps we should look at what we incentivize in the classroom. One way that professors are attempting to counteract math anxiety, poor STEM retention, and a fixed-mindset of learning is through using and researching a new assessment model called “Mastery-based Testing” (MBT). In MBT, students are given problems in which they can only receive full credit for the problem after they demonstrate mastery of the concept being tested. Each test includes similar questions over the same concepts from previous tests which allows students who have not mastered an idea to retest and reevaluate old concepts. In this talk, we will present the results of qualitative and quantitative data from calculus, linear algebra, and real analysis MBT classes. We will also present the results from a two-year study comparing Mastery-based and traditional assessments in six Calculus II classes. (Received September 26, 2017)