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**Comparison of Exams for Active Learning Technologies vs. Traditional Lectures** ANDREW HORNSTRA, BRANISLAV DJORDJEVIC, MARIA DWORZECKA, George Mason Univ — George Mason University has first semester (PHYS-160) and second semester (PHYS-260) physics course which consist of two sections. One is a traditional lecture style format (TRAD) and the other is a newer format which is a take on the flipped classroom. This newer style is referred to as Active Learning with Technologies (ALT). This course style has been in place for several years and has been studied before within George Mason University for final grade differences. These studies suggested that the ALT sections performed better, but grade weighting consistency, test time, and test content were not strictly controlled. The purpose of this study is to cross-examine the performance of students in these different class formats during Fall 2016 (PHYS-260) and Spring 2015 (PHYS-160) on very nearly identical exams over identical test times while controlling for almost every variable.

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