

1096-E1-1008 **Rachel Levy*** (levy@hmc.edu) and **Darryl Yong**. *Probing the Inverted Classroom: A Multi-year Multi-department Controlled Study.*

We have launched a study of the inverted classroom in Mathematics, Engineering and Chemistry courses. The goal of this quasi-experimental study is to measure the effect of instructional method (inverted or active lecture) on student learning and attitudes, while controlling for as many other variables as possible. In this talk we will describe the study protocol: our modes of instruction, how we measure learning and affective gains, and how we track student outcomes in downstream courses. In addition, we will share preliminary analysis based on data from the first year of our study and how we will use this data to improve instruction. This work is financially supported by our college and the National Science Foundation TUES program. (Received September 12, 2013)