

1116-E1-2636 **Stephen Wang*** (sswang@rice.edu), Department of Mathematics MS-136, Rice University, Houston, TX 77005. *Doubly Active Learning: Flipping Calculus using the edX Platform*. Preliminary report.

The author will present a preliminary report on the results of an experimental Fall 2015 section of Calculus I at Rice University. Before each class, students were provided with an online learning sequence on a server running the edX platform consisting of a series of questions, text blocks, and short videos. These sequences required students to actively participate in the discovery of new material; students would review previously learned ideas, draw on real-world intuition, and make logical deductions in order to make connections to the new topic. In-class activities then allowed them to discuss the material in groups, apply it to problems, and explore deeper aspects of calculus. (Received September 22, 2015)