In this session we will present the results of a recent project to implement a “flipping” pedagogy in some sections of Calculus I at the University of Hartford. In the flipped sections presentation of content was moved outside of class, via online videos produced by the department, while problem solving and applications, was shifted into the classroom. Class time consisted of quick check quizzes, short mini-lectures, small group problem solving and whole group discussions. The other sections of Calculus were largely taught via lecture. We will discuss the technology and logistics involved in this project as well as the benefits and challenge of this pedagogy. Preliminary data from pre/post tests and student and instructor surveys will be shared. (Received September 21, 2012)