1106-R1-2296 J.C. Price* (jprice12@ggc.edu), 2252 Chateau Dr., Lawrenceville, GA 30043. Flipping Calculus: A Paradigm Shift. Preliminary report.

In this talk we will discuss our three semesters of experience with flipping a calculus class. In particular, we will review how Camtasia, YouTube, and Google have been utilized to create screencast lectures at www.youtube.com/user/drprice765. Our emphasis will be on our innovative instructional and classroom design, where students collaborate in small groups, along with two students working at a whiteboard, to solve problems. These solutions are then compared and contrasted to each other, and to the instructor's solution, in order to make light of common mistakes and serve as a platform to discuss related topics. The overall outcome to this design is an active learning environment that encourages students to openly discuss mathematics, form learning communities, compare and contrast ideas, and work together to solve problems. (Received September 16, 2014)