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**Cassie Williams\***, willi5cl@jmu.edu, and **John (Zig) Siegfried**. *Effecting Student Learning Gains in Calculus I via the Flipped Classroom Model*. Preliminary report.

The flipped classroom has garnered attention in post-secondary mathematics in the past few years, but much of the research on this model has been on student perceptions rather than its effect on the attainment of learning goals. Instead of comparing to a “traditional” model, in this study we investigate student learning gains in two flipped sections of Calculus I. Specifically, we consider best practices in constructing videos and in-class activities, examine student learning gains on first encounter with new material via videos or activities, and explore what types of learning goals may be best suited to this kind of classroom structure. We will share preliminary qualitative data from our exploratory teaching experiment, including student artifacts, video analysis, and survey feedback. In addition, we will share aggregate exam data from the two classrooms, along with anecdotal evidence from three semesters of flipping. (Received September 11, 2014)