

1125-O1-1352 **Michael Weingart*** (weingart@math.rutgers.edu) and **Alice W Seneres**
(alice.seneres@echo.rutgers.edu). *Flipping the liberal arts math classroom: improving
learning, increasing verbal discourse.*

In Spring 2015, Rutgers implemented the flipped classroom model by introducing its first hybrid mathematics course. The professor created original materials for the hybrid course in the form of weekly videos and in-class scaffolding activities. The course was the primary liberal arts mathematics course offered at Rutgers; a traditional section was run in parallel to the hybrid section, with the same professor teaching both sections and administering comparable assessments. This enabled a comparative analysis of measurable differences in verbal discourse, student-instructor interaction, and overall learning results. Quantifying the verbal discourse that took place in the classroom showed a significantly higher amount of student discourse in the hybrid section. A sample excerpt from the hybrid course will illustrate both how students assist each other with the material and how the professor successfully becomes the ‘guide on the side’ to student learning. Finally, overall performance data were stronger in the hybrid section. This talk blends together the researcher’s results with a first person account from the professor’s point of view. (Received September 16, 2016)