

1096-L5-126

Marilyn Reba* (mreba@clemsun.edu) and **Meredith Burr**. *Investigating Student Learning in a Hybrid Calculus I.*

Hybrid formats of college courses replace a portion of classroom time with time online. The hybrid format offers students flexibility in scheduling (fewer hours on campus), and offers the university help with space-management issues. A hybrid format may also result in students who come to class better prepared for work on more difficult topics. Does a hybrid format of Calculus I improve student learning? In Spring 2013 and Fall 2014, we transformed 5 sections of Calculus I, a four credit-hour on-campus course, into a hybrid course in which one of these four credit-hours is online. The hybrid course content is identical to the non-hybrid course, but some concepts are introduced via instructor-created video lectures posted on Blackboard and via other online resources such as interactive apps. Students watch these lectures and submit related Online-Lecture Worksheets when they come to class. In class, students are given lectures on more difficult material and participate in group work that is also submitted for a grade. Statistical analyses were performed to compare exam data for the hybrid sections with exam data for the non-hybrid sections. We will share the results of our analyses, as well as the results of several surveys. (Received August 01, 2013)