

## 109 A Flipped Classroom Approach to an Emergency Medicine Clerkship

*Jauregui J, Strote J, Shandro J/University of Washington Division of Emergency Medicine, Seattle, WA*

**Background:** Educating medical students in emergency medicine concepts with limited time is challenging. Research has shown that engaging students in active learning during class time enhances outcomes, as students in a lecture setting have limited attention spans and information retention. We describe an educational innovation to flip the classroom by transforming the passive learning environment of a lecture-based curriculum to an active learning environment.

**Educational Objective:** Develop a meaningful learning environment by flipping the classroom through a combination of prerecorded online lectures and active learning during classroom time.

**Curricular Design:** After reviewing student feedback and the growing body of literature calling educators to rethink the classroom, directors of a fourth year emergency medicine clerkship developed a flipped classroom approach for allotted didactic time. Prior to this approach the clerkship curriculum consisted of a total of 12 hours of classroom time. To flip the classroom, lectures on key topics were taped and made available online for students to watch prior to class sessions. Time was consolidated to eight hours of faculty-facilitated active learning consisting of three hours of simulation, two hours of problem-based learning and three hours of skills labs. Curriculum success was measured through student evaluations.

**Impact/Effectiveness:** Data from student evaluations demonstrate that the flipped classroom approach enhanced the student educational experience. In the 8 months prior to the change, 46% of the “Areas for Improvement” comments were focused on lectures. In the ten months after the change, 20% of these comments were focused on lectures. “The series is very hands-on, and that is a great way to learn,” and “I really enjoyed having online lectures – gave me the freedom to watch them when I had time” were common themes. In addition, faculty time was decreased by four hours per month.