Instituting a Flipped Classroom Design into an Emergency Medicine Residency Conference

House H, Van Heukelom J/University of Iowa, Iowa City, IA

**Background:** The “Flipped Classroom” design has been implemented extensively at the high school and college levels, but its use in Graduate Medical Education (GME) is limited. We instituted a flipped classroom design for an Emergency Medicine (EM) Residency conference.

**Educational Objectives:** The objective of this intervention was to increase the satisfaction, participation, and effectiveness of required residency conference time within an EM residency.

**Curricular Design:** Prior to September 2013, the EM conference consisted mostly of didactic lectures with occasional simulation. In September, residents were given required reading or listening assignments prior to conference days. The conference began with a quiz, followed by small group discussions or projects. One hour each day was reserved for a grand rounds lecture. The residents were also taken aside throughout the month for solo simulations. Evaluations were collected weekly followed by a comprehensive survey at the end of the month.

**Impact/ Effectiveness:** Overall, the residents rated the curriculum a 5.9/10. The residents found the pre-assignments, quiz, and small group sessions helpful. The solo simulations were the highest rated experience of the month. Respondents did not agree that limiting “traditional” lecture is an improvement. Residents were asked if the conference “increased their knowledge” of a subject, was found to be “interesting and engaging”, and if they intend to change their practice based on content from the conference. On all of these measures the “flipped” design performed significantly worse than the “traditional” model. The flipped classroom can be effective in GME, but it requires a significant culture change for adoption. The greatest challenges we faced in creating this curriculum was getting the faculty to avoid giving a traditional lecture and finding material to use for the pre-assignments.