At the University of Maine, middle and high school teachers observed over 250 university STEM classes and collected information on the nature of instruction, including how clickers were being used. Comparisons of classes taught with (n=80) and without clickers (n=184) show that while instructional behaviors differ, the use of clickers alone does not significantly impact the time instructors spend lecturing. One possible explanation stems from the observation of three distinct modes of clicker use: Peer Discussion, in which students had the opportunity to talk with each other during clicker questions; Individual Thinking, in which no peer discussion was observed; and Alternative Collaboration, in which students had time for discussion but it was not paired with clicker questions. Investigation of these modes revealed differences in the range of behaviors, the amount of time instructors lecture, and how challenging the clicker questions were to answer. Because instructors can vary their instructional style from one clicker question to the next, we also explored differences in how individual instructors incorporated peer discussion during clicker questions. These findings provide new insights into the range of clicker implementation at a campus-wide level and how such findings can be used to inform targeted professional development for faculty.

Friday, January 15, 2016
9:00 AM
Arthur St. John Hill Auditorium