

1056-E1-1759 **Kim Roth*** (roth@juniata.edu), Brumbaugh Academic Center, 1700 Moore Street, Huntindon, PA 16652, and **Lynn Cockett**, Brumbaugh Academic Center, 1700 Moore Street, Huntingdon, PA 16652. *Clicker examples versus board examples in Calculus: how are they different?*

We examined videotaped Calculus 1 lectures and examined how clicker examples differ from board examples in length, wait-time length, and teacher immediacy behaviors.

In the fall of 2008 Kim taught two sections of Calculus I. Each section used clickers daily, always for a warm-up question and usually for several questions during lecture. The students see the warm-up question when they arrive in the classroom and the question is discussed after 10 to 15 minutes of homework questions. The clicker questions during lecture follow the format of answer, pair and share, answer again, and the discuss as a whole.

For each exam Kim picked two topics that had clicker questions associated with them. In one section clicker questions were used for those examples and in the other section board examples were done except for the warm-up clicker question on the previous day's material. The sections were reversed for the other topic. Each particular class day was videotaped and had related questions on the in-class exams and the final. We will look specifically at the videotapes and what they tell us about clicker and board examples effectiveness. (Received September 22, 2009)