Sherrie J Serros* (serrossj@uwec.edu), Department of Mathematics, University of Wisconsin - Eau Claire, Hibbard Hall 502, Eau Claire, WI 54702, and Kathryn T Ernie and Erick B Hofacker. Using Classroom Response Systems in Mathematics to Facilitate Discourse, Reasoning, and Representations in the Development of Mathematical Content Teacher Knowledge.

Using classroom voting in content courses and workshops for teachers provides new avenues for encouraging classroom engagement. Over the past two years, our methods of infusing classroom voting have evolved from single item concept checks with discussion about mathematics to an integrated series of questions that more deeply probe conceptual understanding and that foster reasoning and the development of student representations. Discussions of options in well-developed voting questions provides the opportunity to expand the mathematical conversation into common student misconceptions, ones that teachers may encounter in their future teaching. These experiences are developing mathematical content teacher knowledge that goes beyond the mathematics concepts themselves. Multiple series of clicker items and students’ responses will be shared during this session. (Received September 22, 2009)