Meeting: 1003, Atlanta, Georgia, MAA CP B1, MAA Session on My Favorite Demo: Innovative Strategies for Mathematics Instructors, I

## 1003-B1-225 Melanie B. Butler\* (mbutler@math.wvu.edu), West Virginia University, PO Box 6310, Department of Mathematics, Morgantown, WV 26506-6310, and Frederick M. Butler. Understanding Your Class Using a Personal Response System.

Engaging students, judging student understanding, and interacting with students in large lectures is extremely difficult. This talk will examine the use of Personal Response System (PRS) technology to combat these problems. The presenters will discuss the PRS system they used in College Algebra and Liberal Arts Math classrooms of 200 students, as well as other similar options and technological requirements. Examples of classroom situations, grading options, and a short demonstration will be given. In particular, examples of concept questions posed in College Algebra, Liberal Arts Math, and Trigonometry classes and answered with the PRS system will be provided. The ability to incorporate PRS questions into a lecture and to deliver PRS questions spontaneously will be discussed. The presenters will discuss individual student versus collaborative student use of the PRS system. The ability of students to express their confidence levels about their answers and, thus, to communicate more effectively with their instructor will be analyzed. Student reactions, as well as comparisons with classes where PRS was not used, will be given. The techniques described, while used in large lectures, will be applicable to smaller classroom settings. (Received August 31, 2004)