

1035-97-326

Hortensia Soto-Johnson* (hortensia.soto@unco.edu), Ross Hall 2240 A, School of Mathematical Sciences, Greeley, CO 80639. *Communicating Mathematically by Presenting and Validating Proofs.*

The mathematics education community recognizes students' struggles with constructing proofs, especially in an abstract algebra course. Research shows the use of proof presentations in abstract algebra engages students and allows them to receive feedback in a safe environment. Students also value these experiences because it is an opportunity to showcase their best work. In larger classes it is difficult to ensure all students are engaged in the proof presentations and thus the presentations may not be as effective. In this research I describe how I incorporated small group presentations into an abstract algebra course. Using a list of frequently found errors and misconceptions in a proof, students provided feedback to others in their group. I will illustrate how this activity helped students develop their communication, validation, and proof skills. (Received September 02, 2007)