1014-H1-487 **Penelope H Dunham*** (pdunham@muhlenberg.edu), Muhlenberg College, 2400 Chew Street, Allentown, PA 18104. *Using Peer Review to Improve Students' Mathematical Writing.*

A mathematician must be able to read critically, construct valid arguments, and present those arguments in a clear manner. To help students develop these skills, I borrowed a pedagogical device from the humanities: in-class peer review. Having students read, discuss, and critique each other's work was so successful in an introductory proof-writing course that I now also use it in Abstract Algebra.

I'll describe the logistics of peer review (e.g., introducing and managing the process; students' participation as reviewers and subjects; differentiating the level of review for a course) for two math classes. In the introductory course, individual students present one proof and the entire class participates in the discussion, critiquing the argument's validity, analyzing the proof style, and offering alternate proofs. In algebra, a pair of students reads all classmates' work on one problem. They grade and rank the proofs for accuracy, terminology use, style, clarity, conciseness, and effective writing; the next day, the pair presents two "best" proofs to the class, notes any unique approaches, and summarizes common errors found in the rest.

The talk concludes with effects of peer review on students' writing, benefits for preservice teachers, and student reactions. (Received September 18, 2005)