1014-H1-906 **Linda McGuire*** (lmcguire@muhlenberg.edu), Department of Mathematical Sciences, Allentown, PA 18104. *What Makes a Given Proof the Best Proof?* Preliminary report.

The series of assignments that I would like to share in this session has been designed to assist liberal arts students heading to grad school in learning crucial skills regarding the reading, analysis, and presentation of information found in journal articles. In particular, they ask students to think carefully about different proofs of the same result and to determine the merits of each argument examined.

Students would work in groups of 3 to 4 on these projects. They were given articles to read and discuss that presented different proofs of the same result. Detailed discussions ensued (particularly in my office) on which proof was "best" and what they believed made a proof good. Groups would share their analyses with the class in the form of an extended oral presentation. Another component of their project was producing a paper that gave an analysis of the various proofs, as well as a summary of which proof techniques they believed, as the readers, to be most effective.

I would construct my presentation to highlight the papers given, to show several samples of student work, and to share with the audience the positive evidence that these assignments helped students to improve students technical reading and problem-solving skills. (Received September 26, 2005)