

1096-C1-1787 **Robert C. Moore*** (moorer@andrews.edu), Department of Mathematics, Andrews University,
Berrien Springs, MI 49104. *Mathematics Professors' Evaluation of Students' Proofs.*

This study examined mathematicians' beliefs and practices in evaluating students' proofs and teaching students to write proofs. Four mathematicians were interviewed in the fall of 2012. In the first part of the interview, they evaluated five or six proofs of elementary theorems written by students in a discrete mathematics or geometry course. The professors talked aloud as they wrote marks and comments on the proofs and assigned a score out of 10 points to each proof. In the second part of the interview, they responded to questions about the characteristics of a well-written proof and how they communicate these characteristics to students. The results indicated that these mathematicians agreed that the most important characteristics of a well-written proof are (a) correct logic and (b) clarity. Although these mathematicians differed in the attention they gave to layout, grammar, punctuation, and mathematical notation, they agreed in giving these characteristics relatively little weight in the overall score. They said that they communicate the characteristics of a well-written proof to students primarily by (a) modeling good proof writing in class and (b) writing comments on students' papers. (Received September 16, 2013)