Aviva Halani* (ahalani@exeter.edu). Critiquing Activities in a Discussion-Based Introductory Proof Class.

While studying mathematical notation and wrestling with increasingly abstract concepts, students in Introductory Proof classes focus on strategies for formulating and communicating mathematical arguments. In a discussion-based classroom, it is essential that these students are both willing to entertain proof techniques different than their own and able to identify flaws in logic. In this presentation, we discuss three types of activities where students were asked to analyze and critique proofs previously produced by others: 1) proofs written by a mathematician, 2) proofs written by previous students from the same course, and 3) proofs written by their peers in the course. We report on the implementation and the perceived impact of this instructional exercise. (Received September 24, 2018)