Draga Vidakovic* (dvidakovic@gsu.edu), 25 Park Place, Office: 1434, Atlanta, GA 30303-3083, and Darryl Chamberlain, Aubrey Kemp and Valerie Miller. Improving undergraduate students’ proof capabilities. Preliminary report.

In an effort to improve students mathematical literacy and ability to read, understand, and write proofs, our department is implementing a particular assessment throughout the semester in the Bridge to Higher Mathematics course. In developing assessment items, mathematics faculty use a framework proposed by Mejia-Ramos, Fuller, Weber, Rhoads, & Samkoff (2012). The students’ written work on these assessment items is analyzed by multiple faculty and graduate students. The results of this analysis are discussed and used in revising a particular assessment item as well as in developing the new ones. In this presentation, we focus on a subgroup of students’ performances on these assessments. Our particular interest is in identifying students’ ‘developmental proof trajectories’ over the period of at least one semester. (Received September 26, 2017)