Matthew D. Graham* (mdgraham@math.northwestern.edu). Promoting Out-of-class Student Engagement in an Introduction to Proofs Course. Preliminary report.

Having previously converted a standard lecture course into an inverted active learning course for the introduction to proofs course at Northwestern University, we wanted to refine our structure to emphasize the communications skills (written, formal presentation, and casual math communication skills) of our students while still exposing our students to a much larger than average number of problems. To do this we assigned two in-class presentations. The first being a partner presentation and the second a solo presentation. This change takes up valuable class time. To still expose our students to the large number of problems we needed to maximize out-of-class engagement. We discuss the structural methods and technology that we used in our attempt to achieve these goals. Additionally, we present empirical and anecdotal data gathered from anonymous surveys, teaching evaluations, and observations in the classroom and office hours. (Received September 22, 2015)