Barbara Kaskosz* (bkaskosz@math.uri.edu) and Doug Ensley (deensley@ship.edu). Mobile Delivery vs. Paper and Pencil: A Comparison of Student Learning. Preliminary report.

Mobile Math Apps is an NSF-funded project designed to put precalculus-level learning objects on smartphones and to assess the way students interact with this material and how these interactions affect student learning. The assessment plan includes controlled experiments to test retention of material delivered via mobile device as opposed to paper-and-pencil. In the implementation of this project, we collect a rich set of usage data for a group of precalculus students, and we correlate that data with student performance on benchmark assessments within the course. This presentation will include a brief demonstration of the mobile app design, and a focused discussion of the early results of our study. (Received September 17, 2013)