1086-C5-2134 **Sarah K. Bleiler*** (sarah.bleiler@mtsu.edu), **Denisse R. Thompson** (denisse@usf.edu) and **Mile Krajcevski** (mile@mail.usf.edu). *Lessons Learned from a Teaching Experiment Focused on Proof Validation.*

Mathematics education researchers have called for the design of explicit instructional sequences devoted to teaching the process of proof validation. Following this recommendation, we designed and implemented a structured set of activities for prospective secondary mathematics teachers (PSMTs) enrolled in a mathematics methods course with the intent of improving their proof validation skills. The instructional sequence was developed based on research literature that has shown undergraduates often (1) hold an empirical proof scheme, meaning they employ or accept "proof by example" and (2) focus on (local) specifics of an argument rather than the (global) logical structure of an argument.

In this session we share a subset of the activities used to engage PSMTs in proof validation, present data collected from three implementations of the instructional sequence, and discuss the value of such activities and potential improvements/modifications to the instructional sequence. We hope participants will leave our session with a greater awareness and appreciation of major obstacles to undergraduates' validation of mathematical arguments, and with potential strategies they can use at their institutions to help students improve in this area. (Received September 24, 2012)