Andrew Hoffman* (hoffma45@purdue.edu), 100 N University St, West Lafayette, IN 47907, and Jia He and Leonardo Medel. Teacher as Learner: Reflections from Pre-service Mathematics Teachers.

This session describes pre-service teachers’ (PSTs’) reflections on learning algebra at the end of their teacher education programs. Data comes from two focus group interviews at each of four purposefully chosen secondary mathematics teacher education programs and we report on emergent themes identified through qualitative analysis. For example, reasoning and proof were emphasized across universities, but PSTs reported that the practices played different roles at different universities. In some cases, proof was used as an assessment and PSTs were supposed to reproduce memorized proofs. In other cases, reasoning and proof were considered tools for learning, granting access to important mathematical truths. This dichotomy about reasoning and proof led us to consider university characteristics. Only two of the case study sites had mathematics educators involved in their mathematics departments. PSTs from these sites more often connected content from their mathematics courses to K-12 learning and commented about taking ownership of their mathematical knowledge. This session presents ideas about teaching mathematics to PSTs and fostering collaboration between mathematics educators and mathematicians. (Received September 16, 2014)