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Erin D Glover*, erin.glover@pcc.edu, OR. *Managing Conditions, Assumptions, and Properties: Explicating a Disciplinary Practice of Mathematics.*

Educators and policymakers have called attention to mathematics disciplinary practices (MDPs) in the last decade because they are a fundamental aspect of learning and doing mathematics. Much of this work is focused in K12 and there is a need to articulate these practices in the post-secondary context. MDP describe the mathematical activity that mathematics is done across mathematical content. These practices include conjecturing, proving, and modeling. Much of the research in undergraduate mathematics education has focused on student cognition across a variety of content and highlight issues related to teaching and learning of this content. With the exception of the MDP of rigorous proof, only a handful of studies explicitly view mathematical practices as the focal object of interest. Few national documents outline the mathematical disciplinary practices undergraduate students should be learning to engage in (i.e., cognitive recommendations 2015 CUPM Guidelines). In this talk I will articulate the Conditions, Assumptions, and Properties (CAPs) MDP which emerged in an interview study with pure and applied mathematicians. I will briefly describe the relationship between CAPs and other MPDs and offer a framework for the CAPs so support the teaching and learning of this practice. (Received September 17, 2019)