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**Emilie R Hancock\*** ([emilie.hancock@unco.edu](mailto:emilie.hancock@unco.edu)). *An Activity Theory Approach to Mediating the Development of Metacognitive Norms During Problem Solving.*

Metacognition has long been identified as an essential component of the problem-solving process. Research on metacognition and metacognitive training has historically adopted an acquisitionist view. This study takes a participationist lens by considering metacognition as a habit of mind or dispositional tendency. Problem-solving habits of mind can be viewed as normative ways of thinking to which students become attuned by participating in authentic problem-solving situations. This study explored one such situation, in which portfolio problem-solving sessions and write-ups were used to mediate metacognitive thinking in a first-year mathematics content course for pre-service elementary teachers. Periodically, students worked together on non-routine problems and submitted individual write-ups documenting their judgement and decision-making processes. Analysis utilized Activity Theory, which operationalizes the participation structure of a classroom, to document the nonlinear development of classroom metacognitive norms during problem solving. Micro-analysis revealed a shift from product- to process-oriented metacognitive norms. Macro-analysis situated these results, highlighting social mediators of activity and contradictions as catalysts for change. (Received September 11, 2017)