Rebecca Metcalf* (rmetcalf@bridgew.edu) and Sandra Ciocci. *Math Language: A First Look at Understanding the Complexities in Elementary Mathematics Curriculum. Preliminary report.

Mathematics educators maintain math language must be precise (accurate and consistent) and some assert that learning math language can be equated with learning a second language, implying a language that is not learned in the home, but at school. Specifically, it contains three distinct language elements: Symbolic language, content vocabulary, and academic language. To understand mathematics at a deeper conceptual level, students need to develop a strong understanding of these three elements. This is particularly true of pre-service elementary teachers. This session will focus on collaboration with a faculty member in the field of communication sciences and disorders and the subsequent language analysis of mathematics for elementary teachers’ textbooks. Topics will include discussion of a rubric designed to analyze mathematical language, symbolism, and visual representations; findings from the analysis of top-selling textbooks in elementary mathematics; and implications for pedagogy. (Received August 12, 2017)