Judith Lynn Gieger* (lgieger@oglethorpe.edu), Oglethorpe University, 4484 Peachtree Rd. NE, Atlanta, GA 30319. Algebra in the K-5 Mathematics Curriculum: Keeping the Promise of Algebra for Every Age.

The National Council of Teachers of Mathematics recommends viewing algebra as a content strand from kindergarten on. Even though algebra often does not receive explicit treatment until middle school or high school, much of the symbolic and structural emphasis in algebra can build on students' extensive experiences with number in the early grades. The Curricular Focal Points (also produced by NCTM), however, indicate that state curricular prescribe only a nominal treatment of algebra, either explicitly or implicity, in the early grades. When the algebra strand is addressed, the focus is almost exclusively on the development of patterns, with little attention paid to the other ways in which students' extensive experience with number and operations can support the development of algebraic competency. In this presentation, we will discuss how mathematicians involved in the education of K-5 teachers can address this gap by making explicit the connections between predominant K-5 number and operations concepts and the algebraic skills they support. (Received September 22, 2009)