The early grades group from the Modeling Across the Curriculum workshop focused on the question, “What can mathematical modeling look like in the K-6 curriculum?” The new Common Core State Standards for Mathematics indicate that Modeling with Mathematics is an important mathematical practice, but the practice could be implemented many ways within the curriculum. This session will focus on some issues that are particular to the early grades and describe a new NSF funded program focused on work with Elementary School teachers on mathematical modeling. (Received September 11, 2014)