Brian D. Darrow, Jr.* (bd2499@tc.columbia.edu). Moving Beyond Conversations and Anecdotes: A Pilot Study of Academic Self-Concept, Word Problem Solving, and Having an Effective “Game Plan” in Introductory College Mathematics.

A study was conducted in introductory mathematics courses at a four-year public university to analyze students’ sentiments about learning and doing mathematics. Students indicated that they have considerable difficulty reading, understanding, and solving word problems and many cited this as their biggest difficulty in mathematics. To investigate these sentiments and their origins, a sample of students responded to writing prompts and took a psychoeducational survey to measure their learning, development, and academic habits of mind. The results suggest that students’ academic self-concept in mathematics is closely related to students’ future orientation outcomes and propensity to seek help when experiencing difficulty. Also, students seem to identify with the phrase of “having a game plan” for tackling homework, studying, solving word problems, and self-regulating, and that this is related to several mathematics education outcomes. Authentic student responses also indicated that the most difficult part of solving word problems for many students might have more to do with reading and understanding language than the use of the mathematical facts themselves. These and other results are presented as well as implications for teaching, curriculum, policy, and future research. (Received September 23, 2018)