In early 2013, I joined a team of mathematics educators to provide professional development to sixty local elementary school math teachers. One of my initial responsibilities was to conduct pre-observations of instruction in our participants’ classrooms. We were to use an 8-item behavioral checklist, which, unbeknownst to me, corresponded to the eight Common Core State Standards for Mathematical Practice (SMP). After my first observation, I learned of the connection to the SMP and decided to explore them further. For me, an eight-item list of Mathematical Practices was unstructured and unwieldy; thus I resolved to organize and structure the SMP so that I could better internalize them. This act of structuring, though, led me to realize I did not fully understand the SMP, and our group conversations suggested varying interpretations of the SMP across our project team and teacher participants (e.g., how to distinguish between SMP #7/#8). We decided to collect data from mathematicians, mathematics educators, and K-12 teachers to better understand stakeholders’ interpretations of the SMP, and to ultimately guide the design of our professional development. We share the results of those investigations and discuss implications for policy and practice. (Received September 17, 2013)