Hyunkyoung Yoon* (hyoon14@asu.edu), 1720 E. Braodway Road APT1159, Tempe, AZ 85282, and Patrick W Thompson. Teachers’ meanings for function notation in U.S.A. and Korea.

This study investigates teachers’ meanings for function notation in U.S.A. and Korea. Research has focused on students’ or teachers’ difficulties of functions, but this study focuses on teachers’ ways of thinking about function notation. We believe that teachers convey their meanings to students and teachers who have productive meanings helps students develop coherent meanings for future learning. Project ASPIRE administered a diagnostic instrument to 252 U.S. high school teachers and 264 Korean high school teachers. This study reports our analysis of teachers’ meanings for function notation as a means to examine teachers’ understanding of functions. The analyses suggest that Korean teachers’ meanings for function notation are stronger than U.S. teachers’ meanings. However, a considerable number of teachers in both countries demonstrated unproductive meanings for function notation. This presentation will discuss different spectra of teachers’ meanings for function notation in the two countries. (Received September 22, 2015)