



Dr. Hyunkyung Yoon
Arizona State University

Meanings for Slope Matter in K-12 and COVID-19

Abstract: In this talk, I present how a teacher's meanings for slope influenced her instructional decisions and the meanings she conveyed to students. I share results from a study in which I observed 15 lessons taught by a calculus teacher. Then, I share data from a study in which I conducted interviews with U.S. and South Korean citizens during the COVID-19 pandemic. I discuss how United States and Korean citizens' meanings for slope supported or hindered their interpretations of COVID-19 quantitative data representations. The results provide insights into the importance of teaching productive meanings for slope. I discuss the implications of these insights for K-12 mathematics education.

Keywords: Mathematical meanings, Slope, Quantitative data representations.