Hyunkyoung Yoon\* (hyunkyoung.yoon@asu.edu), 1720 E Broadway Rd Apt 1165, Tempe, AZ 85282. Relationships Between What a Teacher Knows, What a Teacher Does in Classroom, and What His or Her Students Learn.

This study is designed to investigate the relationships between teachers' meanings for the ideas they teach, the ways they express these meanings in instruction, and how students' meanings are affected by their attempts to understand what the teacher intends. I observed three teachers' lessons about slope, and interviewed them and six students. My analysis shows that teachers' meanings and their assumptions about what students already understood influenced the ways they expressed their meanings in instruction. Then, students developed their meanings in trying to understand what the teacher said and did. The results demonstrated that conveyed meanings from a teacher to students were not always the same as either teachers' meanings or what the teacher intends when the teacher had no image of how students might understand his or her statements or actions. This study could inform instructional design for pre-service teacher preparation. (Received September 06, 2017)