

1125-L5-2976

Cynthia O. Anhalt* (canhalt@math.arizona.edu), Mathematics Department, 617 N. Santa Rita Ave., Tucson, AZ 85750, and **Ricardo Cortez** (rcortez@tulane.edu), Mathematics Department, 6823 St. Charles Ave., New Orleans, LA 70118. *Mathematical Modeling in the Middle Grades (M^3): A Professional Development Project for Grades 5-8 Teachers in Rural School Districts near the Southern US Border.*

We designed a year-long professional development project, Mathematical Modeling in the Middle Grades (M^3), for teachers in rural communities with diverse student populations. The goal was to prepare teachers for implementing modeling tasks in their classrooms that focus on students' mathematics knowledge and leverage community contexts, resulting in successful student-created models. Participants of the M^3 learned the modeling process and the value of engaging in modeling activities. Teachers revised their views of curriculum development by incorporating modeling activities that advantageously use their students' background knowledge as part of the solution process. This session will present a brief background on the M^3 Project, the geographic region of the participating school districts, and its community contexts as settings for mathematical modeling tasks with which the teachers engaged. We will showcase sample modeling tasks, associated content standards and mathematical practices from the Common Core, the work of teachers and students in grades 5-8, and the benefits derived from the contexts of the tasks. We will share teacher reflections of their professional growth and student learning in mathematical modeling. (Received September 20, 2016)