

PROMESAS SSC: Collegiate Instructors' Experiences with Professional Development

Hortensia Soto, *Colorado State University*

Andrea Alt, *University of Northern Colorado*, now at *Western Governors University*

Ciera Street, *Colorado State University*

Selenne Bañuelos and **Cynthia Wyels**, *California State University Channel Islands*

We describe collegiate mathematics instructors' experiences with professional development. Our results suggest that the participants began to transform their pedagogical practices, to reflect on their teaching as a scholarly endeavor, and to create a shared vision of teaching. As a result of this program, participants felt an obligation to attend to students' needs as part of student-centered instruction, found rich tasks useful to connect students' prior knowledge with new content, recognized the value of creating a sense of community in the classroom, and established a community among themselves. We provide examples of materials created by the participants to support our findings.

Keywords: collegiate mathematics, professional development, transformation, pedagogical practices



Hortensia Soto is a professor of mathematics at Colorado State University. Her work centers on teaching and training K–16 teachers, using an embodied cognition lens. As an undergraduate, she studied at Chadron State College in Nebraska and completed her graduate training at the University of Arizona and the University of Northern Colorado. She has served as the Associate Treasurer and Associate Secretary of the MAA and is currently the MAA President Elect.

Andrea Alt received her PhD at the University of Northern Colorado in educational mathematics. She is currently a faculty member at Western Governors University, where she works with a team to enhance the learning experiences of asynchronous learners by incorporating live student-centered activities.





Ciera Street is a mathematics doctoral candidate at Colorado State University. She earned her BS in mathematics from The College of William and Mary and a Master's in mathematics from the University of Northern Colorado. Her research focuses on gender and racial equity in undergraduate mathematics through the exploration of students' mathematical identity.

Sellenne Bañuelos is an associate professor of mathematics at California State University Channel Islands and currently serves as Associate Director at the Institute for Pure and Applied Mathematics located at UCLA. She earned her BS in mathematics from UC Santa Barbara and her PhD in Applied Mathematics from the University of Southern California. Her research centers on mathematical models of biological systems. She was a campus lead for the PD described in this work.



Cynthia Wyels is a mathematics professor at California State University Channel Islands. A graduate of Pomona College who earned her PhD at the UC Santa Barbara, her work at CSUCI has focused on improving the campus' capacity to offer meaningful educational opportunities for students, particularly those from nontraditional backgrounds. She coauthored *PROMESAS* and two other HSI STEM grants along with multiple NSF grants. Her research centers on environmental conservation issues. She recently started her role as the MAA Secretary.