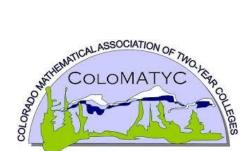


Colorado Mountain College 901 US-24, Leadville, CO 80461

April 11, 2025 8am-4pm





Keynote Speaker



Name: Hortensia Soto, Colorado State University Mathematics Department **Title:** Moving, Doing, and Learning Math

Abstract: Have you ever noticed that when we speak, we use our hands as we speak. The same is true when we speak about mathematics. Try it right now! Think about a math idea and see where your hands go. How do they mimic the mathematics? In this presentation, we will engage in some activities where your body will speak mathematical ideas. I will also share how knowing that our hands and body can speak mathematics can help us to better intentionally teach mathematics. Please bring your fun meters so we can experience some of these ideas together.

Bio: Hortensia Soto is a Professor and Graduate Director in the Department of Mathematics at Colorado State University. Her research centers on the teaching and learning of K-16 mathematics where she adopts an embodied cognition perspective. Specifically, she has used this lens in teaching and researching the learning of geometry, linear algebra, abstract algebra, and complex analysis. Hortensia has mentored young women and promoted mathematics via summer outreach programs and frequently facilitates professional development for K-16 teachers. She is currently working on a book with the working title of *Whole-Body Mathematics: Building Math Intuition for K-8 Mathematics*. Hortensia is a working member of the Mathematical Associate of America (MAA) where she has served as the Associate Treasurer, the Associate Secretary, and as an editor of the *MAA Instructional Practices Guide*. Currently, she serves as MAA President. She is a proud recipient of the MAA Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics. In her spare time, Hortensia enjoys hiking, snowshoeing, practicing yoga, meditating, and spending time with her son Miguel.

Conference Schedule

Thursday Night Social

Thursday night from 6-9pm we will be meeting at Mineral Restaurant. Feel to text me if you need help finding us 757.620.2646. Address: 700 Harrison Ave, Leadville, CO 80461

April 11 Friday Conference Schedule

Registration and breakfast 8:00 am - 9:00 am Climax Molybdenum Leadership Center Room 401		
Morning Sessions		
Room	New Discovery Academic Center Building 121	New Discovery Academic Building Room 122
9:00 am - 9:50 am	Projects to Alleviate Math Anxiety / My Life as an AMATYC ACCCESS Fellow	How Graphs Work: Cultivating Community to Transform Instruction in Introductory Mathematics
10:00 am -11:30 am	Keynote Speaker - Hortensia Soto, Colorado State University Math Department in Climax Molybdenum Leadership Building Room 401	
Lunch and Business Meeting 11:30 am - 12:50pm Climax Molybdenum Leadership Center Room 401		
Afternoon Sessions		
Room	New Discovery Academic Building Room 121	New Discovery Academic Building Room 122
1:00 pm - 1:50 pm	Building an Inclusive Classroom: Online and F2F	Creating a Multipart Student-Centered Data Analysis Project
2:00 pm - 2:50 pm	Escaping the Math Classroom	Getting Started with MyOpenMath
3:00 pm - 3:50 pm	What's Happening in the CCCS Math Discipline	Advanced MyOpenMath

Breakout Sessions

<u>9-9:50am</u>

Room 121: Projects to Alleviate Math Anxiety / My Life as an AMATYC ACCCESS

Fellow

Describe activities as an AMATYC ACCCESS Fellow (cohort 20). Describe the project working with Cristy Hanlon from West Virginia University Parksburgh and Katey Ellis from Aims Community College in Greeley.

Everyone knows that traditional assessments in math cause anxiety in our students. We will be discussing our results of how we tried alternative methods to decrease our students' math anxiety by replacing traditional quizzes with projects. For two semesters, we gave a pre-assessment at the beginning of the semester, asking students about their experiences with math anxiety in general to get a baseline and then alternated quizzes and projects throughout the semester and conducted short assessments. Finally, we had the students fill out a longer post-assessment to see how they felt about math anxiety at the end of the semester.

Presenter: Melvin Cacayorin, RRCC

Room 122: How Graphs Work: Cultivating Community to Transform Instruction in

Introductory Mathematics

Think answer finding has too much status in introductory mathematics? Want to promote students' mathematical reasoning? Learn about research-based Desmos activities that work across introductory mathematics courses. Become part of a community to help students learn how graphs work.

Presenter: Heather Lynn Johnson, CU Denver

10 am - 11:30 am - Keynote Speaker

11:30 am - 12:50 pm - Lunch and Business Meeting

1:00 pm - 1:50 pm - Breakout Sessions

Room 121: Building an Inclusive Classroom: Online and F2F

Building an inclusive classroom and creating a sense of belonging among students leads to higher persistence in the class, improved student success, and increased help-seeking behavior from students. We'll discuss more effective ways to build an inclusive classroom whether online or f2f, what students feel helps them the most, and how to implement strategies without creating too much extra work for you. Share strategies you have found helpful, as well.

Presenter: Johanna Debrecht, RRCC

Room 122: Creating a Multipart Student Centered Data Analysis Project

COVID and social distancing interrupted the popular "have students create a survey, poll their peers in person, then analyze the data" project and caused many schools to have their students attempt to collect polled data online ... a technique which suffered from increased bias and (in many cases) an insignificant sample size. Instead, the author suggests creating an online poll and distributing it to students across several sections of introductory statistics. Questions are asked on a variety of topics allowing students great creativity in crafting their hypotheses. Gathering the data across multiple sections of statistics results in increased anonymity of participants, the chance to ask more meaningful questions, a large sample size, realistic data cleaning, and a meaningful bias for students to explore.

Presenter: Kathleen Gatliffe, FRCC

<u>2:00 pm - 2:50 pm</u>

Room 121: Escaping the Math Classroom

Session participants will experience a math escape room as an alternative form of student engagement. Faculty at Colorado Mountain College offer these escape room activities to students during Math Awareness Week.

Presenter: Axelle Faughn, CMC

Room 122: Getting Started with MyOpenMath

In this introduction to MyOpenMath (MOM), participants will learn all the basic processes for implementation in their courses. Topics include: Creating a class, integration into LMS, modifying assessments, searching for questions, tips for beginners. Bring a device and have an instructor account with MOM to fully participate. **Presenter**: Matthew Watts, RRCC

<u>3:00 pm - 3:50 pm</u>

Room 121: What's Happening in the CCCS Math Discipline

Come and get your questions answered about current trends and topics of interest for the CCCS Math Discipline! We'll touch on the current state of proctoring and answer any questions on how to proctor. We'll also touch on the self-guided assessments for placement, CO Online, and any other topics you want to discuss! **Presenters**: Johanna Debrecht, RRCC

Room 122: Advanced Use of MyOpenMath

In this intermediate training for MyOpenMath (MOM), participants will learn more advanced techniques. Topics include: Modifying and writing questions, advanced assessment settings, and tips for improving your productivity. Bring a device and have an instructor account with MOM to fully participate. **Presenter**: Matthew Watts, RRCC

<u>4:00 pm - ?</u>

If you would like to explore Leadville a bit more, get pizza at the famous High Mountain Pies, and get a drink from a haunted brothel, meet us at the registration table and we'll come up with a game plan. You can stay as long as you'd like, so if you just want to grab pizza and head home, that's fine.



Colorado Mountain College Leadville - Campus Map

Driving Directions and Parking:

From the west take I-70W to CO-91 S in Cooper Mountain exit 195. Continue on CO-91S to the college. Park anywhere.

Wi-Fi Information

• Open network

Thank you!

ColoMATYC would like to thank:

- Hortensia Soto for coming all the way to us for the keynote.
- All of our presenters. Without you, we wouldn't have a conference.
- All of our attendees for taking the time to join and participate.
- Darren Brungardt and CMC Leadville for hosting. Thank you Darren for volunteering to have the conference at your college and for all your help with the logistics.

ColoMATYC Executive Board 2024-25

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51st AMATYC Annual Conference

Reno, NV

Peppermint Resort November 13-16, 2025 https://amatyc.org/page/2025ConfHome