



Northwest Mathematics Conference 2025 Bringing Math to the Surface

October 9-11, 2025

Tacoma, WA

Learn more and register (coming April 2025) at bit.ly/NWMath2025

The NWMC will feature keynotes and sessions delivered by skilled and passionate speakers, who will focus on five strands that support educators in cultivating students' learning in mathematics.

- Friday and Saturday will include 60 minute sessions or 90 minute workshops covering all strands and grade bands, featuring **NCTM President Latrenda Knighten as the Opening Keynote on Thursday Evening** and **Crystal Waston as the Closing Keynote on the Saturday afternoon**.
- **Friday Evening** we invite attendees to join us for **Math Game Night!** Attendees will engage in a variety of games and activities that foster a love of mathematics and build connection through mathematics.
- A variety of exhibitors will be available in the exhibit hall to provide information on current resources available
- Attendees may also add 3 hour workshops on Thursday for an in-depth experience to learn strategies to support all learners
- **Robert Kaplisky** will be delivering the **Breakfast Keynote on Saturday** morning with a limited number of tickets available at registration.

Developing Conceptual Understanding and Fluency

This strand emphasizes the importance of understanding and developing fluency as a key aspect of equitable teaching practices. Participants will explore what fluency in various mathematical content entails and how its components—efficiency, flexibility, and accuracy—can enhance student agency. Sessions will focus on strategies to enhance mathematical fluency in the classroom at all grade levels, aiming to promote reasoning and decision-making skills. Topics might include:

- Using the 5 practices for orchestrating productive mathematical discussions to share students' thinking.
- Implementing Reasoning strategies to promote fluency.
- Creating a Strength-based classroom
- Developing Asset-based perspectives
- Building mathematical fluency from conceptual understanding
- Using games and routines to develop fluency

Bringing Relevance to Mathematics

This strand focuses on infusing real-world relevance into mathematics instruction to boost student engagement and understanding. Participants will explore strategies for connecting mathematical concepts to everyday experiences, building on students' strengths and honoring differences. Sessions will focus on ways to create mathematics learning opportunities that highlight the importance of math in students' lives and empowers all learners to succeed. Topics might include:

- Highlighting relevance through Mathematical and Statistical Modeling
- STEM/STEAM
- Integration with other content areas
- Infusing Art in the mathematics classroom
- Data Literacy, Data Science, and Statistics
- Purposefully using Technology to enhance understanding

Instructional Routines and Strategies

This strand focuses on the use of structured instructional routines and strategies that promote student engagement and deepen mathematical understanding. Presenters will share evidence-based practices that support diverse learners, foster mathematical thinking, and build a classroom culture of collaboration. Sessions will highlight strategies that are adaptable across grade levels and mathematical concepts, with an emphasis on how routines can be used to differentiate instruction, enhance problem-solving, and improve student discourse. Topics might include:

- Implementing high-leverage instructional routines (e.g., Number Talks, Notice/Wonder, Which One Doesn't Belong, and more)
- Strategies for differentiating instruction to meet the needs of all learners
- Fostering mathematical discourse and reasoning
- Utilizing the Building Thinking Classrooms framework at all grade levels
- Developing a classroom culture that supports productive struggle and perseverance
- Leveraging the 8 effective teaching practices and/or the equitable teaching practices from NCTM

Leading and Coaching for Equity

This strand emphasizes the critical role of coaching in fostering equitable practices within mathematics education. Participants will explore strategies for supporting educators in creating inclusive environments that address the diverse needs of all students. Sessions will provide opportunities to discover effective coaching techniques that promote equity, enhance student outcomes, and empower teachers to facilitate meaningful mathematical learning for every learner. Topics might include:

- Coaching for Systemic Change
- Facilitating Equity-Focused Coaching Cycles
- Capitalizing on Data-Informed Coaching
- Co-teaching Models That Work
- Convincing the Unconvinced Teacher
- Assisting teachers in planning for diverse student needs

Culturally Responsive and Sustaining Mathematics

This strand emphasizes the importance of incorporating culturally responsive and sustaining practices into mathematics education to ensure that all students see themselves reflected in the content and processes of learning. Presenters will share strategies for integrating students' cultural backgrounds, experiences, and communities into math instruction, making learning more relevant and engaging. Sessions will explore ways to create equitable classrooms that value diverse perspectives and empower students as mathematicians, while also addressing systemic barriers in education. Topics might include:

- Designing math lessons that honor students' cultural and linguistic backgrounds
- Strategies for creating inclusive, equitable math learning environments
- Using real-world, culturally relevant contexts in math problems and discussions
- Addressing and disrupting systemic inequities through mathematics instruction
- Teaching grade level content as well as supporting language development
- Leveraging community assets to support math learning