

Roseburg Schools Mathematics Position Paper

We are preparing students for a world where they will need to be mathematical thinkers, not just doers. The ability to think and communicate mathematically is essential to becoming a successful and productive member of our dynamic global society.

Roseburg Schools is committed to ensuring that all students have the opportunity to build a strong conceptual foundation for mathematical thinking by providing learning opportunities in a positive, safe environment in which all students can confidently explore, question, create, solidify, communicate, and apply mathematical ideas. We affirm that learning mathematics is not a spectator sport. The rigorous mathematical knowledge sought for at all levels of instruction requires deep thinking and persistent sense making from students.

To meet this challenge, we will provide all students with a rigorous, accessible, and aligned district-adopted curriculum that will develop critical thinkers and prepare them for post-secondary, career, and life success. This will require the use of multiple instructional strategies, including evidence-based intervention and extension methods to successfully reach all learners. Proficiency on learning targets, mathematical practices, and ongoing assessment of student progress will inform next steps for instruction.

Additionally, we must provide students with multiple opportunities to engage with a variety of problem-solving tasks that reflect the diverse backgrounds, abilities, and experiences of each student. Students should explore and collaborate on rich problems with multiple entry points and pathways to a solution that challenges them. Students should be able to make sense of mathematics and be encouraged to work through their thinking and computations in order for them to recognize the patterns, significance, and relevance of the true nature of mathematics.

We envision mathematics classrooms where all students and teachers:

- engage deeply in collaborative conversations and in actively learning mathematics;
- challenge, discuss, and stretch their thinking to form new connections within mathematics, across content areas and to the real world;
- think critically to solve problems, building a strong foundation for mathematical thinking and communication in multiple ways while attending to precision;
- have access to rigorous, equitable, diverse, and developmentally responsive curriculum that utilizes investigation and problem solving;
- use the tools of mathematics, including technology, flexibly and efficiently;
- show perseverance, resilience, and independence;
- are empowered to take risks and cultivate a growth mindset;

- use standards and student needs to drive instructional decisions; and
- are progressing toward college and career math readiness.