

2023 Mathematics Core Beliefs

What are Bend-La Pine Schools key recommendations?

Students' mathematics learning in elementary school not only launches students on their lifelong journey with mathematics, it also predicts later mathematics success. Mathematics education must provide a just, equitable, and inclusive system for each and every student, especially students who have been historically marginalized in our math classes.

- Each and every student will develop a deep mathematical understanding as confident and capable learners, understand and critique the world through mathematics, and experience the wonder, joy, and beauty of mathematics.
- We will create equitable policies and practices and establish mathematically powerful learning spaces by dismantling inequitable structures, including ability grouping and tracking, and challenge spaces of marginality and privilege.
- Mathematics instruction will be consistent with research-informed and equitable teaching practices that nurture student's mathematical identities and strong sense of agency.
- Build a strong foundation of deep mathematical understanding, emphasize reasoning and sense making, and ensure the highest quality of mathematics education for each and every student.

What does Bend-La Pine Schools believe are equitable and effective teaching practices in mathematics?

Teachers and their instructional practices have strong influences on students as they learn mathematics. These teaching practices create a classroom learning environment that supports ambitious and equitable mathematics instruction. We commit to...

- Establishing clear goals for the mathematics that students are learning, situate goals within the learning progressions, and use the goals to guide instructional decisions;
- Engaging students in solving and discussing tasks that promote mathematical reasoning, authentic problem solving including social justice issues to allow multiple entry points and varied solution strategies;
- Engaging students in making connections among mathematical representations, emphasizing concrete and visual, to deepen understanding of mathematical concepts and procedures;
- Facilitating equitable discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments;
- Using purposeful questions to assess and advance students' reasoning and sense making about important mathematical ideas and relationships;
- Building fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems;
- Consistently provide students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships;

What does Bend-La Pine Schools believe about student access to grade level heterogeneous Mathematics?

Just, equitable, and inclusive mathematics learning opportunities for all students demand institutional structures, teaching and learning environments, and individual beliefs and actions that support Social Emotional Competencies. We commit to...

- Organizing mathematical learning experiences to have high expectations and practices to provide access to all students, especially those historically marginalized in our math classrooms;
- Focusing on student strengths and using strengths-based language when discussing students. The labels assigned to students shape teachers' decision-making, determine students' access to high-quality rigorous mathematical experiences, and affect how students see themselves as doers of mathematics;
- Providing a common shared mathematics learning experience by leveraging human differences, languages, cultures, and abilities to promote rich and connected mathematics learning experiences;

- Providing all students access to grade-level mathematics content centered on learning mathematics with understanding, actively building new knowledge from their informal experiences and prior knowledge;
- Providing intervention that focuses on content that is connected with and promotes the grade-level curriculum through problem solving and reasoning and not be a review of low-level basic facts or procedural skills.

What does Bend-La Pine Schools believe about a powerful mathematics curriculum?

Curriculum plays a central role in the mathematics education of students and in the mathematics instruction enacted by teachers. students and teachers need access to a coherent mathematics program that supports development of deep mathematical understanding. Implementation of mathematics materials must occur with integrity that thoughtfully accommodates local conditions and contexts. We commit to...

- Implementing mathematics curriculum materials with integrity to best support deep mathematics learning of grade-level content while allowing teacher flexibility to use the materials in ways that are responsive to students' mathematical strengths and needs as well as cultural and linguistic backgrounds to optimize student's learning in mathematics;
- Ensuring all teachers have access to high-quality mathematics materials that are aligned to Oregon State Standards and to engage teachers in professional learning on using those materials effectively;
- Using the Mathematical Habits of Mind and Interactions to teach the Mathematical Practice Standards to promote mathematical thinkers and doers of mathematics;
- Using tools and technology to enhance instruction, not replace it, and to promote students' mathematical reasoning, sense-making, and problem solving.

What does Bend-La Pine Schools believe about integrated assessment systems?

All adults must make a commitment to ensuring mathematics assessments are used as part of an ongoing and collective process to support student and teacher learning and to inform instructional, school, and district decisions. We commit to...

- Ensuring the primary purpose of formal and informal assessments is to gather and use evidence of students' mathematical thinking, understanding, and reasoning to adjust instruction continually in ways that builds-on student knowledge and extends learning;
- Using multiple data sources at multiple points in time to provide an accurate portrait of student and school mathematics performance to inform instructional and school/district improvements;
- Using assessment as an ongoing process that is an integral part of instruction, providing timely feedback to support students' learning and to inform instructional and school/district decisions;
- Offering assessments in varied formats to accommodate different strategies and multiple entry points to allow for students to demonstrate knowledge in a variety of ways.

What does Bend-La Pine Schools believe about professionalism?

In an excellent mathematics program, educators hold themselves and their colleagues accountable for the mathematical success of every student, as well as for their personal and collective professional growth in effective teaching and learning of mathematics. We commit to...

- Holding ourselves and our colleagues accountable for and celebrating the mathematical success of every student;
- Ongoing teacher collaboration and professional learning grounded in the district mathematics curriculum materials, equitable teaching practices, content standards, and practice standards, Habits of Mind and Interaction, is needed to ensure coherence and consistency of mathematics instruction within and across grade levels while supporting enhancements that give students access to the mathematics;
- Providing sufficient time for purposeful planning, reflection, and sharing classroom practices, including getting into other classrooms, in order to promote effective teaching and learning.