

Shoreline School District Mathematics Philosophy and Guiding Principles

Fall 2008

Students will master rigorous mathematical content tied to Washington State Math Standards leading to success in algebra and beyond.

Curricular Content:

- Mastery of whole numbers, fractions, geometry, and measurement, the critical foundations of algebra
- Access to an authentic algebra class, no later than 9th grade
- Curriculum that is focused, coherent, and aligned to state standards

Learning Processes:

- Conceptual understanding, computational fluency, and problem solving skills, jointly supporting one another
- The belief that success in learning math is largely a result of effort, not inherent ability or talent. Support and strategies for communicating this belief is provided for students, parents, and teachers.
- An understanding that readiness to learn is a concept that is dependent on students' prior learning, not age.

Instructional Practices:

- A balance of student-centered and teacher-directed instruction
- Explicit instruction for students with math difficulties
- Systematic interventions that address social, affective, and motivational factors on a small and large scale, including extra time and support during the same course to pre-teach or re-teach content

Instructional Materials:

- A common curriculum that is coherent, accurate, and easily aligned to the state standards.

Teaching and Teacher Education:

- On-going professional development for teachers that includes math content and supports the math standards
- Highly qualified teachers that are motivated to teach math
- Instruction using high quality research-based best practices, with training provided by the district

Assessment:

- Tools that measure growth in mathematical understanding
- Common district assessments to reinforce shared expectations of learning for all
- Valid instruments of high quality
- A balance between formative and summative assessments, in a variety of formats (paper, pencil, observations, nonverbal, verbal)
- Assessments aligned with larger state/college expectations