



### Materials Selection Study Group- Guiding Principles

**Equity:** Tacoma Public Schools will provide a meaningful mathematics program for every student who enters our classrooms.

- Equal access for all students to meaningful mathematics. We use the NCTM definition of "meaningful mathematics" found in *Professional Standards for Teaching Mathematics*, NCTM (1991), p.32. "The tasks in which students engage must encourage them to reason about mathematical ideas, to make connections, and to formulate, grapple with, and solve problems. Students also need skills. Good tasks nest skill development in the context of problem solving." In addition, tasks should engage students in communicating about mathematics.
- We must address the educational needs of all students, regardless of their mathematical background, attitude about learning, support from outside school, or other forces which effect student achievement.
- We must promote equal access to technology by all students.

**Research and Standards:** Instructional materials must align with the NCTM Standards and the Washington Essential Academic Learning Requirements, and include instructional support for strategies that reflect current research into how students learn mathematics.

- Materials will embed the Problem Solving, Reasoning, Communication and Connections Essential Learnings as core components of its organization, content, and philosophy.
- Materials will embed skill development in a context of Problem Solving, Reasoning, Communication and Connections.
- Materials will favor increased depth of mathematical concepts rather than breadth.

**Learning Styles:** Learning tasks and instructional methods used in the mathematics program will provide access to suitable learning activities for students with a wide variety of learning styles.

- Materials will incorporate a broad variety of instructional techniques such as manipulatives, technology, individual as well as small and large group work, writing, direct instruction, projects, etc.

**Professional Development:** Professional development will be organized and designed to enable teachers to make the transition to, and maintain the effectiveness of, such a program. Successful implementation of a mathematics program that meets the needs of students as described by the NCTM Standards and the EALRs requires a significant effort on the part of teachers to:

- Use new instructional strategies, new technologies and new assessment techniques
- Refresh or acquire content knowledge required by the program
- Collaborate with other teachers

**Assessment:** Instructional materials must incorporate many opportunities, both formative and summative, for students to engage in a variety of assessment activities such as:

- The type of assessment activities required of them on the WASL
- Peer and self assessments
- Open-ended assessments
- Projects and portfolios
- Other appropriate assessment activities