

ACTIONS NEEDED TO IMPROVE MATHEMATICS AND RECOMMENDATIONS ON MATHEMATICS GRADUATION REQUIREMENTS

The Washington State Mathematics Council (WSMC) is a professional organization dedicated to promoting and influencing mathematics education. The membership is committed to developing and supporting opportunities that lead to quality mathematics instruction using effective curricula. WSMC promotes high professional standards and serves as a communication network for anyone interested in mathematics education.

As an affiliate of the National Council of Teachers of Mathematics (NCTM), the WSMC is encouraged by the state's efforts to align Washington's state standards with the NCTM standards. WSMC believes that the Washington Assessment of Student Learning (WASL) is an appropriate instrument with which to measure students' mathematical proficiency and should continue to be maintained.

We believe in a balanced curriculum that enables students to gain conceptual understanding and computational fluency. Appropriately used technology enhances the teaching and learning of mathematics and helps to prepare students for today's world.

We strongly believe that sustained professional development is vital for our teachers. Mathematics educators need and should be encouraged to share and discuss research-based best practices through conferences, workshops, and professional learning communities.

Our recommendations include:

1. **Maintaining** the focus on **current state standards** with a clear definition of what fluency means.
2. **Keeping** in place the **graduation requirements** for passing the WASL, especially the mathematics portion, for the class of 2008. We do not favor postponing this requirement.
3. **Offering remediation at all levels** as soon as the need is apparent based on the use of a variety of assessment tools.
4. **Requiring three or four years** of mathematics **to graduate** starting with algebra and continuing through levels appropriate to

each student's mathematics' plans (which may or may not include pre-calculus or calculus). Fourth year options might include statistics or applications of higher-level mathematics models.

5. **Promoting** programs to recruit, train, and retain highly qualified mathematics teachers with **sustained professional development**.
6. Conducting a **Public Relations** campaign that stresses the theme "**math is important**" **at home**. It is accepted and expected that families encourage students to *read* at home. A similar focus could be emphasized on doing and talking about mathematics.
7. **Developing parent workshops** at all levels of mathematics so that parents have an informed idea of what the objectives and expectations are for standards-based curricula.

Considering all of the above we also strongly recommend that **mathematics coaches** should be available for every school K -12 in our state. To maximize their effectiveness, mathematics coaches would need to be trained and provided ongoing professional development. Mathematics coaches would support teachers in:

- building their mathematical knowledge, skills, and confidence in teaching mathematics
- implementing effective instructional strategies
- being more intentional and reflective in their teaching

These mathematics coaches and teachers would form **professional learning teams** whose main goal is to **improve student success** in learning mathematics.

