



# Helping Your Child Succeed in Math: What Research Says

Improving math achievement starts with building confidence. Creating opportunities for students to talk about math and work together helps them feel capable and leads to better performance.

## What is Math Self-Efficacy?



Math self-efficacy is a student's belief in their ability to succeed in math tasks like solving specific equations or problems. Math self-efficacy impacts not only how students feel about math, but also how they approach math tasks that are new or challenging.

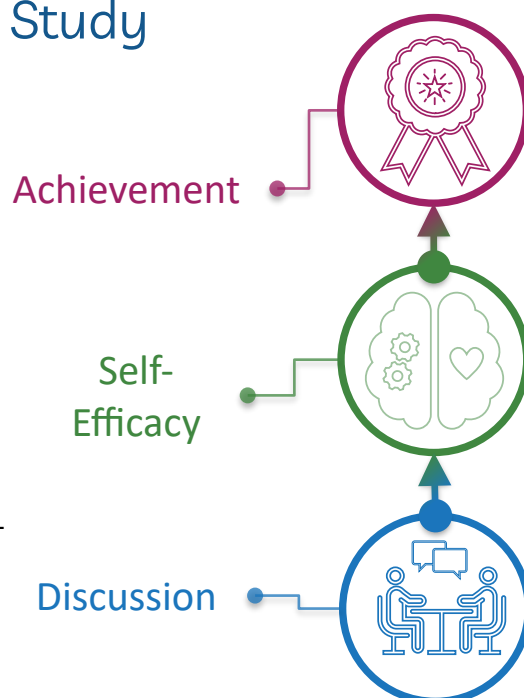
## Key Findings from a 2025 ODE Study

**Confidence Matters!** 4<sup>th</sup> grade students who feel confident in their math abilities tend to score higher on state math tests.

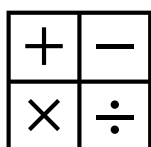
### Classroom Talk and Group Work Boosts

**Confidence** When students regularly discuss math with teachers and classmates, they show greater confidence – much more than from just receiving help or feedback.

**Better Confidence = Better Achievement** Students who talk about math more often build stronger self-efficacy, which is linked with better test scores.



## What Can Parents Do?



**Encourage Math Talk at Home:** Ask your child to explain how they solved a problem

**Celebrate Efforts and Progress:** Praise persistence and strategies, not just correct answers

**Support Group Learning:** Encourage your child to work with peers or siblings on math problems

# Learn More!



Scan to access these resources

## Oregon Math Project

The four cornerstones of the Oregon Math Project (OMP), Focus, Engagement, Pathways, and Belonging, align with findings from the ODE self-efficacy study. The OMP framework envisions a mathematics education experience where students are encouraged to explore multiple problem-solving strategies, engage in meaningful mathematical conversations with peers, and reflect on their successes. Together, these practices work together to create learning environments that foster student confidence and a joyful connection to mathematics.

## Transformative Social and Emotional Learning

Oregon's Social and Emotional Learning framework presents research-based evidence of increased positive social behavior and reduced emotional distress. This includes a focus on self-efficacy and developing tools to reduce stress and anxiety.

## Formative Assessment Practices

Formative assessment is an approach to instruction that gives students different ways to show their learning during instruction. Formative assessment practices include regular feedback from teachers and other students. One way that students can show their learning and receive feedback is through discussions.

## Oregon Statewide Assessment System

Oregon's State Assessment System (OSAS) provides equity-centered tools and resources that help inform instructional decisions from the classroom to the state level. Educators and administrators use state tests, performance assessments, and other forms of assessments to measure how well the education system is serving students and determine how best to support them moving forward.

## Student Educational Equity Development Survey

The SEED Survey is a questionnaire that is offered annually to all students in grades 3-11 across Oregon. The survey asks about students' schooling experiences and are meant to be used with other data to provide a holistic picture of public education systems in Oregon.

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To read the full study mentioned in this handout, go to:

Formative Instructional Practices, Self-Efficacy, and Math Achievement in 4<sup>th</sup> Grade.  
Oregon Department of Education, 2025.