# IT'S MATH...WHAT'S THERE TO TALK ABOUT? 

起$O$ Common Core Standards
$O$ More focus on mathematical reasoning \& justification rather than just the "correct answer".

O Melding of the mathematical "Super Powers"
$O$ NCTM, AMTE, NCSM, SAP, PARCC, ACT, UA, etc...
$O$ Plethora of available resources online and from across the country/globe
$O$ A desire to connect context \& "real world" to "math class"


## $O$ Communication - Instructional programs from prekindergarten through grade $\mathbf{1 2}$ should enable all students to-

$O$ Organize and consolidate their mathematical thinking through communication
$O$ communicate their mathematical thinking coherently and clearly to peers, teachers, and others
$O$ Analyze and evaluate the mathematical thinking and strategies of others;
$O$ Use the language of mathematics to express mathematical ideas precisely.

NCTM. (2000). Principles and standards for school mathematics (Vol. 1). Natl Council of Teachers of.
$O$ MP 3: Construct viable arguments and critique the reasoning of others

O MP 6: Attend to precision
Common Core State Standards Initiative. (2010). Common Core State Standards for Mathematics. Washington, DC: National Governors Association Center for Best Practices and the Council of Chief State School Officers.
$\bigcirc$ Adapt what we know works in our reading programs and apply it to mathematics instruction.
$O$ Create Language-rich classroom routines.
O Make "Why?", "How do you know?" and "Can you explain?" classroom mantras.

Leinwand, S. (2009). Accessible Mathematics. Heinemann.

## 5 Productive Talk Moves

Chapin, S. H., O'Connor, C., \& Anderson, N. C. (2003). Classroom Discussions: Using Math Talk to Help Students Learn, Grades 1-6. CA: Math Solutions.

- Revoicing
- Asking Students to Restate Someone Else's Reasoning
- Asking Students to Apply Their Own Reasoning to Someone Else's Reasoning
- Prompting Students for Further Participation
- Using Wait Time

Thank You! ©

