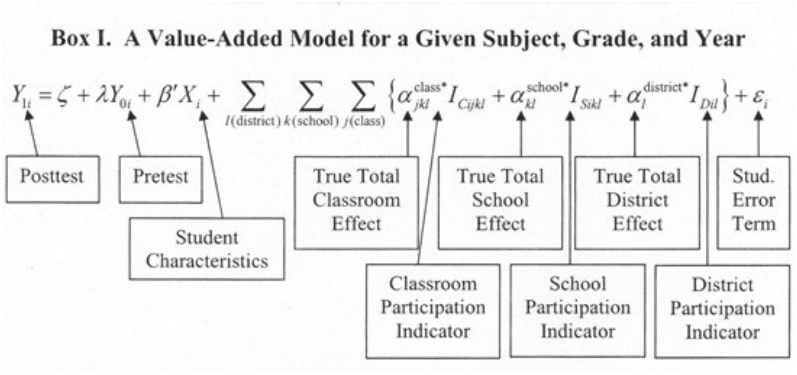
Prairie Lakes Area Education Agency

Summer Edition

Still More Resources for Iowa Core Mathematics



Volume 1, Issue 3

Modeling!

Modeling is a conceptual category unto itself in high school plus one of the standards for mathematical practice for all grades, which make it a focus for all of us.

The California Mathematics Project presents resources focused on modeling and linked to the content standards. http://caccssm.cmpso.org/k-8-modeling-task-force/k-8-modeling-resources-by-standards

Indiana University has put together resources for modeling in middle and high schools. Lesson resources are organized by topic such as T-shirts, the wedding and oil pipeline so you'll need to dig into the find the link to the content standards. http://www.indiana.edu/~iucme/mathmodeling/lessons.htm

These projects are best suited for students who are new to mathematical modeling.

Seeing the Progression

The Common Core State Standards in mathematics were built on progressions: narrative documents describing the progression of a topic across a number of grade levels, informed both by research on children's cognitive development and by the logical structure of mathematics. These documents were spliced together and then sliced into grade level standards. See the progressions at: http://ime.math.arizona.edu/progressions/#about

Inside this issue:

Elementary Mathematics

Middle School Mathematics

Get the Math **mixes video and web interactivity to help middle and high school students develop algebraic thinking skills for solving real-world problems.**

Get the Math is about algebra in the real world. See how professionals use math in music, fashion, videogames, restaurants, basketball, and special effects. Then take on interactive challenges related to those careers.

http://www.thirteen.org/get-the-math/

High School Mathematics

Focusing on the Standards for Mathematical Practice

Lessons and video examples are organized in 4 categories: Problem Solving & Precision, Reasoning & Explaining, Modeling & Using Tools, and Seeing Structure & Generalizing.

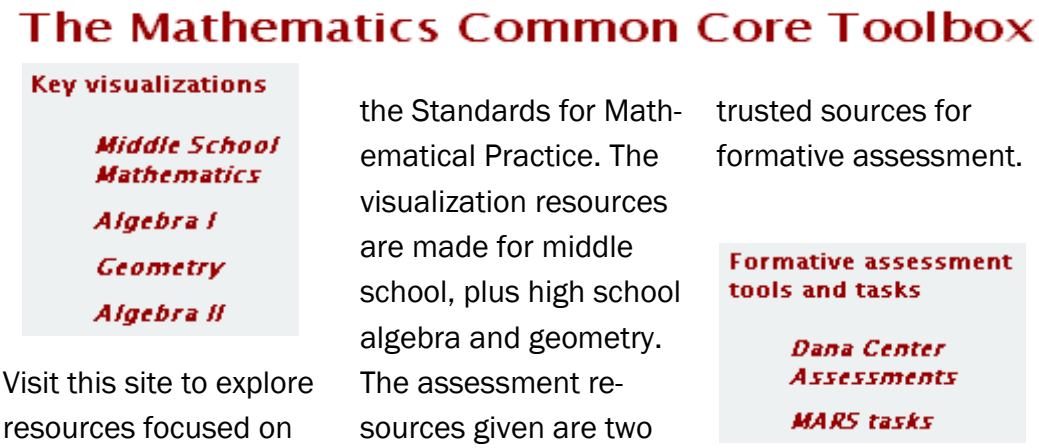
http://www.mathedleadership.org/index.html

Find the resources under the CCSS and Illustrating the Standards tabs.

There are additional resources under the Great Tasks tab which are collections of problems and ideas which have been presented by educators at conferences.

Explore the related links at this site to find more trusted sources for lessons and problems.

CCSS Toolbox http://www.ccsstoolbox.org/



Visit this site to explore resources focused on the Standards for Mathematical Practice. The visualization resources are made for middle school, plus high school algebra and geometry. The assessment resources given are two trusted sources for formative assessment.

What processes and proficiencies do these standards ask us to develop in our students, and how can we do so?

Putting the Standards for Mathematical Practice into Action

Each Illustration of the Mathematical Practices (MPs) consists of a mathematics task; a student dialogue based on that task; information about grade level, standards, and the context for the dialogue; teacher reflection questions; a mathematical overview; and optional student materials. While the primary use of Illustrations is for teacher learning about the MPs, some components are designed for classroom use with students.

http://mathpractices.edc.org/

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Prairie Lakes Area Education Agency

WE'RE ON THE WEB!

MATHAEA8.WEEBLY.COM

We believe...

- **Consistent, system-wide, open communication creates a positive organization.**
- **Prairie Lakes AEA must be an innovative, research-based, data-driven agency collaborating with all partners to achieve excellence.**
- **We will serve children, families, schools and communities with integrity based on their unique needs.**
- **All people thrive in an atmosphere of trust, respect, excellence and recognition.**
- **Through shared knowledge, skills and collaborative partnerships, we can support the needs of all learners.**
- **Learning must be differentiated in order to meet the needs of agency, the district and the individual to build upon strengths and skills.**
- **Flexibility and support are needed in order to balance job responsibilities, teaming, training and application of new skills.**

Our mission is to ensure success for all learners through collaborative partnerships.

Going to the Source for CCSS Information

http://www.corestandards.org/

COMMON CORE STATE STANDARDS INITIATIVE
PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER

At the Common Core State Standards site, you can find the standards themselves arranged by grade levels or domains in Kindergarten through 8th grade, or by conceptual category for high school.
Under the Resources section, find a document called Key Points of the Math Standards to read about 8 big ideas of the math standards. Also see the Myths vs. Facts document.

CCSS Mission Statement: The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy.