



Yet More Resources for the Iowa Core Mathematics

Spring Edition

Iowa Core Investigations in Mathematics

One hallmark of mathematical understanding is the ability to justify, in a way appropriate to the student's mathematical maturity, why a particular mathematical statement is true or where a mathematical rule comes from.

Inside This Issue:

Videos of classroom implementation of the common core

Sources for lessons

Sources for integration of technology

Support for teacher learning of the Concepts of the Iowa Core content

INSIDE MATHEMATICS

<http://insidemathematics.org/>

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MATHEMATICS**

The Inside Mathematics site features classroom examples of innovative teaching methods, insights into student learning, and tools for mathematics instruction. The site has information for classroom teachers, math coaches and principals.

At the **Tools for Educators** link, you will find:

- Tasks and Assessments aligned with the Common Core State Standards
- Problems of the Month
- Tools for Coaches
- Tools for Principals

At the **Classroom Video Visits** link, you will find:

- Classroom Lessons
- Problems of the Month
- Number Talks

At the **Common Core Standards** link, you will find:

- Mathematical Practice Standards
- Exemplary Lessons Integrating Practice Standards
- Mathematical Content Standards



http://secc.sedl.org/common_core_videos/index.php

At this website you will find videos explaining the big ideas of content for each grade. Each video from the Southeast Comprehensive Center is an audiovisual resource that focuses on one or more specific standards and usually includes examples/illustrations geared to en-

hancing understanding. The intent of each content-focused video is to clarify the meaning of the individual standard rather than to be a guide on how to teach each standard, although the examples can be adapted for instructional use.

Elementary Resources

For elementary classroom video clips illustrating the Standards of Mathematical Practice, visit **Annenberg's Learner Express**.



http://www.learner.org/series/modules/express/videos/video_clips.html?type=1&subject=math&Lim=Al

Visit the **Teaching Channel** for more videos at:



<https://www.teachingchannel.org/videos?default=1>

For those of you interested in adopting new math materials, the authors of the Common Core Math Standards have created a valuable document called the **K-8 Publisher's Criteria for the CCSS for Math**. Find it online:

http://www.corestandards.org/assets/Math_Publishers_Criteria_K-8_Summer%202012_FINAL.pdf

Pages 1-4 give an overview of what the Common Core State Standards are trying to achieve in mathematics. They describe the need for focus, coherence, and rigor. There is also a curriculum review form on pages 22-24 for evaluating materials. The bulk of the document then describes the criteria in more detail. Check it out—it can be a useful resource!

"The common core standards finally make real the promise of American public education to expect the best of all our schoolchildren."

-Michael Casserly,
Executive Director,
Council of the Great City
Schools

"Common education standards are essential for producing the educated work force America needs to remain globally competitive. This voluntary state-lead effort will help to ensure that all students can receive the college- and career-ready, world-class education they deserve, no matter where they live."

-Craig Barrett,
Former CEO and
Chairman of the Board,
Intel Corporation

Middle School Resources

Where do students come face to face with the most important mathematics that any non-mathematician will need to master in order to successfully navigate in today's world? According to Phil Daro, CCSS author, it is in the middle grades. Sense Making in Mathematics is devoted to helping teachers use problems to understand mathematics, use their teaching as a way to diagnose student needs,



<http://math.serpmedia.org/>

and developing specialized teacher knowledge. Find lesson plans and videos of those plans in use at this site.

High School Resources

HS Math Tasks: An example of a HS Mathematical Task that is designed to integrate the mathematical practices:

<http://mathpractices.edc.org/content/proof-parallelogram-vertices>

Core Math Tools:

Technology at your fingertips to help students grapple with Vertex-edge graphs, Voting, Data sets, Linear Programming, Distributions: <http://www.nctm.org/resources/>



[content.aspx?id=32702](http://www.learner.org/content.aspx?id=32702)

Check out **Annenberg Learner** to view videos of teachers using innovative strategies to imbed mathematical practices into classrooms.

<http://www.learner.org/workshops/alaebra/>
**ANNENBERG
LEARNER**



iTunes U app

<https://itunes.apple.com/us/itunes-u/hunt-institute-ccss-series/id461816983>

Video Vignettes: To further aid states as they continue to implement the Common Core State Standards (Standards), the Hunt Institute and the Council of Chief State School

The Hunt Institute

have commissioned a series of video vignettes that explain the Standards in far greater depth.

These videos were developed to help diverse groups – educators, policy-makers, parents – better understand the breadth and depth of the Standards and how they will improve teaching, make classrooms better, create shared expectations, and cultivate lifelong learning for all students. The segments are organized into separate Mathematics and ELA sections, and demonstrate critical concepts related to each.

The Hunt Institute bases its work on its core beliefs:

- Education is the cornerstone of American democracy and must be available to all citizens.
- A free PreK-12 education is the birthright of every child and should be of sufficient rigor and relevance to ensure high school graduates are prepared for citizenship, college and work.
- Access to higher education should be available to all citizens at the most affordable price.
- Leaders who are endowed with the public trust have a responsibility to make informed decisions that create and maintain educational standards that are second to none in the world.
- Opportunities for lifelong learning are critical to sustain the nation's economic health and the prosperity of individuals.

TECHNOLOGY TOOLS FOR IOWA CORE MATHEMATICS

Tech-Matrix is a website devoted to providing assistive technology tools to support learning for students with disabilities and their classmates.

Use the advanced search features to target your search for technology tools.

Tools all come with a description and details to help you decide what to use.



<http://techmatrix.org>



<http://nlvm.usu.edu/>

The National Library of Virtual Manipulatives is a set of resources from the National Science Foundation and Utah State University. The site is organized by grade span and NCTM content strand.

Use this site to access manipulatives you may not have in the classroom or have enough of, use them on an interactive white board or have students use them on their laptops or iPads.

Interactivate from Shodor Use the jump feature to find activities, discussions and/or lessons, tools, assessments, dictionary, textbooks, or standards. Find tech tools for kids under activities.



<http://www.shodor.org/interactivate/>



<http://illuminations.nctm.org/>

You have probably used Illuminations to find lessons, but you can sharpen your search to lessons with tech tools only by checking that box during your lesson search.

Many lessons with online applets are available.

Advanced Options

☐ Show only lessons with associated online activities



Doing What Works—CCSS Mathematics Transition Project

<https://sites.google.com/site/dwwemst/>

The purpose of the **Doing What Works** (DWW) - Common Core State Standards Mathematics (CCSSM) Transition Project uses Doing What Works materials to provide opportunities for school professional development activities related to the Standards of Mathematical Practice and the Content Domains for the Grades K-8 Common Core State Standards (CCSS) for Mathematics.



Materials include rubric instruments and inventories, video segments, downloadable print materials, and more.

Find Developing Effective Fraction Instruction for K-8 plus Improving Mathematical Problem Solving in grades 4-8.

Coming soon to the Doing What Works site are these resources:

- Critical Foundations for Algebra from the National Math Panel
- Response to Intervention resources for elementary and middle school.



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

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WE'RE ON THE WEB!

MATHAEA8.WEBLY.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.

