

The Practices are for Kids

Nov, 2015 CMC-S #775

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The Math Projects Journal
Temecula Valley USD



In-Depth Look at the 8 Practices:
Share one new *understanding* of the SMP.

Dual Targets:
Start explicitly teaching both Content & Practices *daily*.

Materials & Model Task:
Leave with SMP Posters, Wordles and the Pig Pen Lesson.

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@MathProjects
#CMCS15, #SMPposters



COMMON CORE
STATE STANDARDS INITIATIVE

21st Century Skills
College & Career Ready

Mathematical Practices

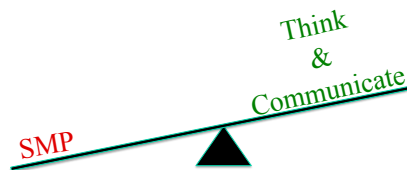
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.



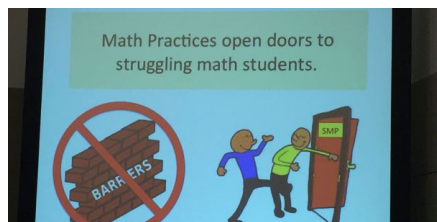
Leverage on the New Standards



Leverage on the New Standards



The Practices are for ALL Students

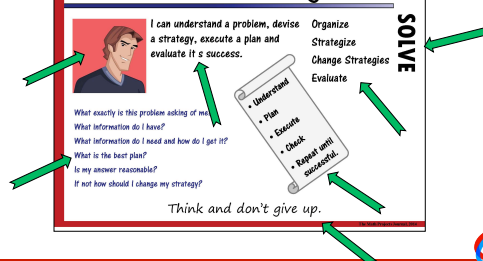


Amy Lucenta & Grace Kelemanik of the Boston Plan for Excellence,
NCTM Boston, 2015

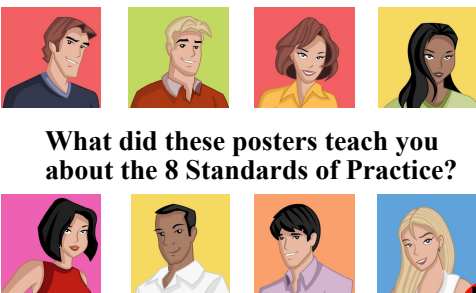


Practices Posters

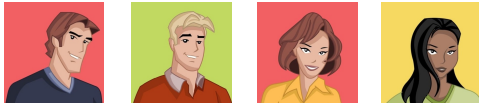

Make Sense of Problems and Persevere in Solving Them



Practices Posters



What did these posters teach you about the 8 Standards of Practice?



What did these posters teach you about the 8 Standards of Practice?



How many of the

8 SMP

do you remember?

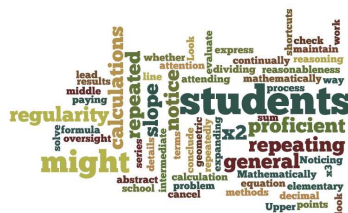


Wordle Practices

Match the *Wordle* poster to its corresponding CC Standard of Mathematical Practice?

The wordle poster contains the following words: students, proficient, repeating, general, might, regularity, calculations, repeated, slope, line, series, detail, overnight, formula, lead, results, middle, paying, whether, attention, express, continually, reasoning, dividing, mathematically, way, process, sum, x2, expanding, geometric, unrelated, cancel, problem, equation, elementary, decimal, methods, Upper, look, check, maintain, work, abstract, school, cancel, problem, equation, elementary, decimal, methods, Upper, look.

Match the *Wordle* poster to its corresponding CC Standard of Mathematical Practice?

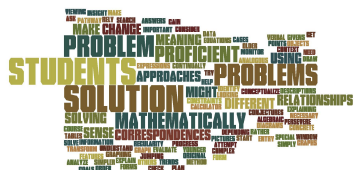


Mathematical Practices

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Wordle Practices



Dual Targets

Content Target & Practice Target



Daily!



Content Target & Practice Target



Daily!



Explicit Teaching of Thinking

HOTS

Dr. John Star

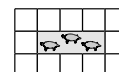
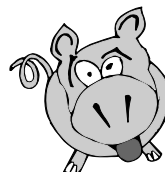


“Math does not teach Problem Solving.”

“Only the explicit teaching of thinking teaches thinking.”



Pig Pen Algebra



Evidence of the Content & Practices



Trigonometry Unit: 7 point spike
12 points above Dept.

Equation of Circles with Completing the Square: 90% Correct

At-Risk Algebra: 100% Passed

At-Risk Geometry: 100% Passing



Classroom Models

Algebra 180 Blog



Geometry 180 Blog



www.mathprojects.com



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... and take with you ...

The Common Core is all about the **Practices**.

The **Practices** are all about “Thinking & Communicating.”

The **Practices** are for All Kids.

You now have “Dual Targets” for each lesson, Both Content & **Practice**, because the **Practices** must be taught explicitly.



Teach students the practices *daily* ...



...with the faith that they can learn it,
and that we can teach it to them,

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Send your text message to this Phone Number: 37607

24959
poll code

(1 space) 0-3 0-3 0-3 (1 space)

Other comments (words)

well-prepared &
knowledgeable

engaging &
effective

Matched title &
description

Example: 24959 323 Inspiring, good content

