

engage^{ny}

Our Students. Their Moment.

Parents & the Common Core

Daniel Webster School

in collaboration with

Southern Westchester BOCES



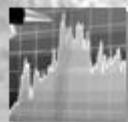
Through RTTT, New York will achieve the following reform goals:



STANDARDS AND ASSESSMENTS

New York will:

- Adopt Common Core State Standards for English Language Arts and Mathematics
- Realign high school diploma and assessment policies with college and career success
- Put in place new statewide curriculum models aligned with college- and career-readiness standards
- Create and implement new English Language Arts and Mathematics summative assessments, as a leader in a 27-state consortium
- Create new formative and interim assessments aligned to the Common Core standards
- Prepare new and existing teachers and principals to teach and design instruction aligned with the new standards and assessments



DATA SYSTEMS

New York's teachers will:

- Draw on best practices information and use data to differentiate instruction

New York's principals will:

- Use data to inform teacher recruitment, evaluation, and differentiated professional development

New York will:

- Create a statewide instructional reporting and improvement system, available through a Data Portal, so stakeholders can access and analyze data, make decisions, and take actions to improve student outcomes
- Develop an Early Warning System to help at-risk students and keep them on track to graduate.
- Launch research partnerships to identify and disseminate best practice



GREAT TEACHERS AND LEADERS

New York will:

- Provide teachers and principals with clinically-rich preparation and certify them based on clinical skills and results

- Provide highly-effective teachers and principals with career advancement opportunities and incentives to mentor colleagues and transfer to high-need schools

New York's teacher and principal evaluation system will:

- Incorporate student achievement as 40 percent of annual evaluations
- Inform differentiated professional development
- Enable expedited removal of teachers and principals who are rated "ineffective" for two consecutive years



TURN AROUND LOW-ACHIEVING SCHOOLS

New York will:

- Support LEAs in turning around persistently lowest-achieving schools, using whichever of the four intervention models is best suited to local need and capacity
- Expand Partnership Zones that empower clusters of low-performing schools to deliver dramatic gains in student achievement
- Foster innovative schools and practices, including leveraging educational partnership organizations (EPOs)
- Grow the number of high-performing charter schools

Common Core Learning Standards Background

- Aligned with college and work expectations
- Collaborative development
- Based on evidence and research
- Internationally benchmarked
- Consistent learning goals for *all* students





Our Students. Their Moment.

Common Core State Standards: Shifts for Students and Parents



Shifts for Students Demanded by the Core

6 *Shifts* in ELA/Literacy

Read as much non fiction as fiction
Learn about the world by reading
Read more challenging material closely
Discuss reading using evidence
Write non-fiction using evidence
Increase academic vocabulary

6 *Shifts* in Mathematics

Focus: learn more about fewer, key topics
Build skills within and across grades
Develop speed and accuracy
Really know it, Really do it
Use it in the real world
Think fast AND solve problems

ELA/Literacy Shift 1:

Read as much non fiction as fiction

Students must...

- Read more **non-fiction**
- Know the ways non-fiction can be put together
- **Enjoy** and discuss the details of non-fiction

Parents can...

- Supply more non-fiction text (magazine subscriptions, National Geographic, Discovery)
- Read non fiction texts **aloud or with** your child (Time for Kids)
- Have **fun** with non-fiction in front of them

ELA/Literacy Shift 2:

Learn about the world by reading

Students must...

- Get smart in Science and Social Studies **through reading**
- Handle “primary source” documents
- Get smarter *through* texts

Parents can...

- Supply series of texts on topics of interest
- **Find books that explain** (cookbooks, home repair books, Rainbow Looms)
- Discuss non-fiction texts and the ideas within

The more we read the more we can read!

- By age 3, children from affluent families have heard 30 million more words than children from parents living in poverty. (Hart and Risley, 1995)
- Children who have larger vocabularies and greater understanding of spoken language do better in school. (Whitehurst and Lonigan)
- If children aren't reading on grade level by third grade, they are four times more likely to leave high school without a diploma. (Hernandez, 2011)

ELA/Literacy Shift 3: Read more complex material carefully

Students must...	Parents can
<ul style="list-style-type: none">• Re-read• Read material at comfort level, but also work with more challenging text• Unpack text• Handle frustration and keep pushing	<ul style="list-style-type: none">• Provide more challenging texts AND provide texts they WANT to read and can read comfortably• Know what is grade level appropriate• Read challenging text <i>with</i> them• Show that challenging text is worth unpacking

Support their Reading. Read Challenging Texts Aloud.

Grades	Example of Complexity: Nonfiction	Example of Complexity: Fiction
K-1	A Tree is a Plant Read Aloud: Fire, Fire!	Are you My Mother? Read Aloud: The Owl & the Pussycat
2-3	Martin Luther King and the March on Washington Read Aloud: What the World Eats	Fire Cat Read Aloud: Charlotte's Web
4-5	Hurricanes: Earth's Mightiest Storms The Kids' Guide to Money	Bud, Not Buddy The Secret Garden

ELA/Literacy Shift 4:

Discuss reading using evidence

Students Must...	Parents Can...
<ul style="list-style-type: none">• Find evidence to support their arguments.• Form judgments.• Discuss the author's purpose, central message, and theme while using text evidence.	<ul style="list-style-type: none">• Talk about text.• Demand evidence in every day discussions/ disagreements.• Ask children to make inferences.• Require children to support their inferences with evidence from the text.

ELA/Literacy Shift 5: Writing from Sources

Students Must...	Parents can...
<ul style="list-style-type: none">• Make arguments in writing using evidence.• Compare multiple texts in writing.• Use voice.• Use conventions of writing.	<ul style="list-style-type: none">• Encourage writing at home.• Write “books” together and use evidence/details.

ELA/Literacy Shift 6: Academic Vocabulary

Students Must...

- Learn the words that they can use in college and career.
- Build academic vocabulary.
- Build Tier II and Tier III vocabulary.

Parents Can...

- **Read often** and constantly with babies, toddlers, preschoolers, and children.
- Read multiple books about the same topic.
- Let your children see you reading.
- With your children, read, listen, sing, play games, make-up rhymes.

Marylin Jager Adams

Advancing Our Students' Language and Literacy: The Challenge of Complex Texts (American Educator, Winter 2010-2011)

- What is written is much more complex than what we say.
- The more children read about a topic, the more they can read about that topic.

Mathematics Shift 1:

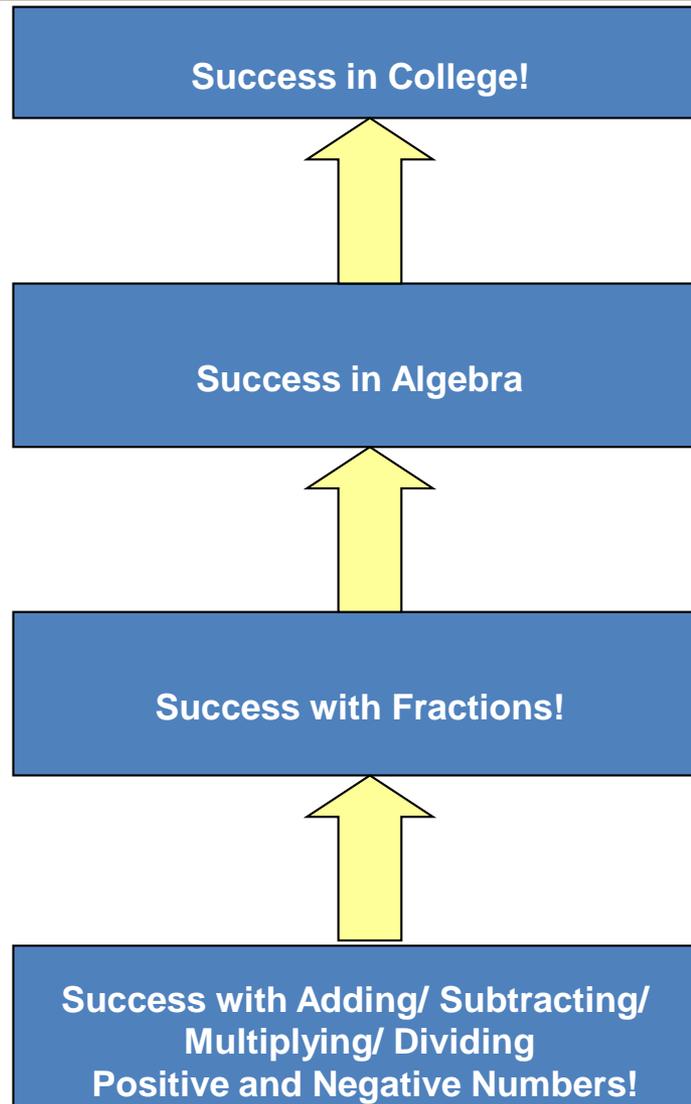
Focus: learn more about less

Students Must...	Parents Can...
<ul style="list-style-type: none">• Spend more time on fewer concepts.	<ul style="list-style-type: none">• Know what the priority work is for your child for his/her grade level.• Spend time with your child on priority work.• Ask your child's teacher about his/her progress on priority work.

Mathematics Shift 2: Skills Across Grades

Students Must...	Parents Can...
<ul style="list-style-type: none">• Keep building on learning year after year.	<ul style="list-style-type: none">• Be aware of what your child struggled with last year and how that will affect learning this year.• Advocate for your child and ensure that support is given for “gap” skills.

The National Mathematics Advisory Panel's Final Report (2008)



Mathematics Shift 3: Speed and Accuracy

Students Must...

- Spend time **practicing** lots of problems on the same idea.

Parents Can...

- **Push children** to know/memorize basic math facts.
- Know all of the fluencies your child should have, and prioritize learning.

Key Fluencies

Grade	Required Fluency
K	Add/subtract within 5
1	Add/subtract within 10
2	Add/subtract within 20 Add/subtract within 100 (pencil and paper)
3	Multiply/divide within 100 Add/subtract within 1000
4	Add/subtract within 1,000,000
5	Multi-digit multiplication
6	Multi-digit division Multi-digit decimal operations

Mathematics Shift 4: Know it/Do it!

Students Must...

- **UNDERSTAND** why the math works. **MAKE** the math work.
- **TALK** about why the math works.
- **PROVE** that they know why and how the math works.

Parents Can...

- Notice whether your child **REALLY** knows why the answer is what it is.
- Provide **TIME** for your child to work hard with math at home.
- Understand the math your child needs to know.

Mathematics Shift 5: Real World

Students Must...

- Apply math in **real world** situations.
- Know **which math** to use for which situation.

Parents Can...

- Ask your child to **DO** the math that comes up in his/her daily life.

Mathematics Shift 6: Think Fast/ Solve Problems

Students Must...

- Be able to use **core math facts** FAST.

AND

- Be able to apply math in the real world.

Parents Can...

- Know where your child needs support.
- Make sure your child is **PRACTICING** the math facts he/she struggles with.
- Make sure your child is thinking about math in real life.

NY State Test Item 5th Grade Math (2005)

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Pierre is making an apple crumb pie using the items below.

APPLE CRUMB PIE 	
Crumb	Filling
$\frac{3}{4}$ cup flour	4 cups sliced apples
$\frac{1}{3}$ cup sugar	$\frac{1}{3}$ cup sugar
$\frac{1}{4}$ cup butter	$\frac{1}{2}$ cup raisins

How much total sugar must Pierre use to make the pie crumb and filling?

F $\frac{7}{12}$ cup

G $\frac{2}{6}$ cup

H $\frac{3}{4}$ cup

J $\frac{2}{3}$ cup

Example Common Core Performance Task 5th Grade Math

Stuffed with Pizza

Tito and Luis are stuffed with pizza! Tito ate one-fourth of a cheese pizza. Tito ate three-eighths of a pepperoni pizza. Tito ate one-half of a mushroom pizza. Luis ate five-eighths of a cheese pizza. Luis ate the other half of the mushroom pizza. All the pizzas were the same size. Tito says he ate more pizza than Luis because Luis did not eat any pepperoni pizza. Luis says they each ate the same amount of pizza. Who is correct? Show all your mathematical thinking.

Example Annotated Student Work

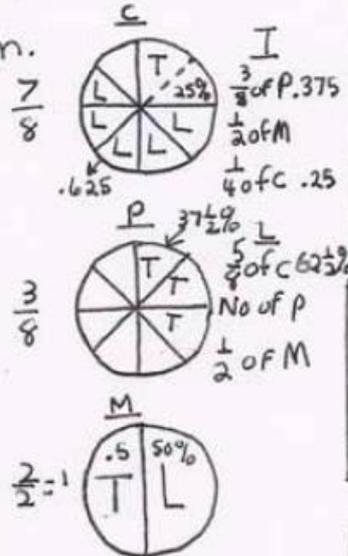
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I will find who is correct, Tito or Luis.

I will make a diagram.

Key	
T	Tito
L	Luis
C	cheese
P	Pepperoni
M	mushroom
↑ pizzas	



Tito ate

$$\frac{3}{8} + \frac{1}{2} + \frac{1}{4} = ?$$

$$\frac{3}{8} + \frac{4}{8} + \frac{2}{8} = \frac{9}{8} = \boxed{\frac{1}{8}}$$

Luis ate

$$\frac{5}{8} + \frac{1}{2} = ?$$

$$\frac{5}{8} + \frac{4}{8} = \frac{9}{8} = \boxed{\frac{1}{8}}$$

you have to find how to have 8 in the denominator so you add equivalent fractions

Answer: Luis was right because they both ate $\frac{1}{8}$ pizza

The student is able to make sense and persevere in solving the problem. The student demonstrates correct reasoning of proportional parts of a whole, correctly assigns each boy pizza pieces, and finds the correct equivalent fractions to state a correct answer. The student verifies her/his answer with decimals and percents and brings prior knowledge of statistics to the solution.

The student models with mathematics. The area model/diagram of the pizzas is accurate, labeled, and a key defines Tito, Luis, and the types of pizzas. The student uses the diagram to record some of her/his extended thinking to percents and decimals.

Kindergarten Mathematics

Counting and Cardinality

- Name numbers and count in sequence
- Compare Numbers
- Count to tell the number of objects

Operations and Algebraic Thinking

- Addition and Subtraction within 5
- Work with numbers 11-19 to gain a foundation for place value

Measurement and Data

- Describe and compare
- Classify objects and count the number of objects in categories.

Geometry

- Identify and describe shapes
- Compare, create, compose and analyze shapes

First Grade

Operations and Algebraic Thinking

- Add and Subtract within 20
- Work with addition and subtraction equations and problems

Number and Operations in Base Ten

- Extend the counting sequence
- Place value
- Use place value to add and subtract

Measurement and Data

- Tell and write time
- Represent and interpret data

Geometry

- Reason with shapes and their attributes

Second Grade

Operations and Algebraic Thinking

- Solve addition and subtraction problems
- Add and subtract within 20
- Work with equal groups of objects to support multiplication

Number and Operations in Base Ten

- Understand place value
- Use place to add and subtract

Measurement and Data

- Measure in standard units
- Work with time and money
- Represent and interpret data

Mathematical Practices

- Word problems (analyze, critique, models)

Third Grade

Operations and Algebraic Thinking

- Multiplication and Division within 100

Number and Operations in Base Ten

- Use place value to solve problems

Number and Operations Fractions

- Develop understanding of fractions

Measurement and Data

- Solve problems (time, volume, mass)
- Represent and interpret data
- Area and perimeter

Geometry

- Reason with shapes and their attributes

Grade 4

Operations and Algebraic Thinking

- Solve Problems
- Factors and Multiples
- Analyze patterns

Number and Operations in Base Ten

- Place Value

Number and Operations - Fractions

- Equivalent fractions, ordering, and four operations
- Decimal notation of fractions

Measurement and Data

- Solve problems including conversion of measurement
- Represent and interpret data
- Measure angles

Geometry

- Classify shapes by properties of lines and angles

Grade 5

Operations and Algebraic Thinking

- Write and interpret numerical thinking
- Analyze patterns and relationships

Number and Operation in Base Ten

- Place value
- Perform operations with whole numbers and decimals

Fractions

- Add, subtract, multiply and divide fractions

Measurement and Data

- Convert measurement
- Represent and interpret data
- Volume

Geometry

- Graph
- Classify two-dimensional figures into categories